



55th CCOP Annual Session: 5-6 November 2019, Chiang Mai, Thailand

Workshop Description: CCOP- PTTEP-SCG-PETRAD-UNECE "Application of the UNFC for Resource Classification and Management"

Date: 5 – 6 November 2019

Venue: Doi Suthep 2, Kantary Hills Hotel, Chiang Mai, Thailand

Resource Persons: Mr. Per Blystad & Mr. Sigurd Heiberg

Classification of resource inventories is the core basis on which policies are formulated. Governments manage their resources and provide the enabling conditions; 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 a radical transformation that will affect these activities. None of the Sustainable Development Goals can be reached without the assured supply of energy and raw materials, yet we know that environmental consequences result from the production and use of these resources regardless of how it is done. As a consequence, the efficient use of resources becomes increasingly important. We, therefore, need to focus on the mechanisms in resource management that give the efficiencies required to create the future we want. The UN Economic Commission for Europe (UNECE) has charged the Expert Group on Resource Management to develop a United Nations Resource Management System, UNRMS, based upon the United Nations Framework Classification for Resources (UNFC), to assist in prudent resource management. The Cooperating Committee for Geoscience Programmes in East and Southeast Asia (CCOP) has continued its support on the use and application of the UNFC in the region for more than ten years.

PETRAD, together with the UNECE, CCOP, the PTT Exploration and Production Public Company Limited (PTTEP), and the Siam Cement Group Company Limited (SCG) co-organize this workshop through this course on resource management and the application of UNFC. UNFC Has direct justification links to Sustainable Development Goal No. 7 on access to clean and affordable energy. UNFC is used in many countries for effective management of national resource endowments and socio-economically efficient development of the energy resource contributing to sustainable development. It allows a direct comparison of projects that extract primary energy fuels, such as oil, gas, coal and uranium with renewable energy projects.

In this two-day course, we focus on Resource Management and the application of UNFC. It is a classification of “what we get” as opposed to a classification of “what we found” where it all started in the early 1990s. UNFC is not just a classification of geological resources, but also of the projects producing sales and non-sales products from them – and it need not be only from geological resources. It works as well for other products related to the investments. We are therefore witnessing a further development of UNFC to renewable energy resources, underground storage projects, anthropogenic resources and groundwater. The workshop will address how UNFC works for petroleum, minerals, renewable energy with a focus on geothermal resources and underground storage of CO₂, gas, and groundwater resources, etc. This will be demonstrated by several case studies and exercises.

PROGRAMME	Workshop on CCOP-PTTEP-PETRAD-UNECE “Application of UNFC for Resource Classification and Management”, 5-6 November 2019, Chiang Mai, Thailand
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Day	Time	duration	Item	Lecturer
Tuesday				
5 November	08:30	00:30	Registration	
	09:00	00:10	Welcome and introductions	
			<ol style="list-style-type: none"> 1. A Welcome Message (VDO) by Mr Scot Foster, UNECE’s Director of Sustainable Energy 2. A Welcome Speech by Mr Kanok Intharawijitr, Executive Vice President, Geoscience, Subsurface and Exploration Group, PTTEP. 3. Opening Address by Dr Young Joo Lee, Director of CCOP TS 	
	09:10	00:10	Group Photo	
	09:20	00:20	Classification background	Sigurd
	09:40	00:20	National Resource Management Principles I	Per, Sigurd
	10:00	00:20	Discussion	
	10:20	00:20	<i>Coffee or tea</i>	Per, Sigurd
	10:40	00:20	National Resource Management Principles II	Per, Sigurd
	11:00	00:20	National Resource Management Principles III	
	11:20	00:20	Discussion	
	11:40	00:20	UNFC Explained	Per
	12:00	01:20	<i>Lunch</i>	
	13:20	00:20	Quality assurance, aggregation, accounting and disclosure	Sigurd
	13:40	00:20	Relationship between UNFC and classifications bridged to it	Per
	14:00	01:20	Discussion	
	14:20	00:20	Applications in Policy formulation	Sigurd
	14:40	00:20	Applications in Government Resource Management	Per
	15:00	00:20	Discussion	
	15:20	00:20	<i>Coffee or tea</i>	
	15:40	00:20	Applications in corporate business process management, financial reporting and capital allocations	Sigurd
	16:00	00:20	Application to renewable energy, geothermal energy, CCS, anthropogenic resources	Per
	16:30	00:30	Discussion	
	17:00		End of day 1	

Day	Time	duration	Item	Lecturer
Wednesday 6 November			Case studies, exercises and discussion	
	08:30	00:30	Introduction to case studies	Per, Sigurd
	09:00	00:30	Case 1: Petroleum	Per, Sigurd
	09:30	00:20	Discussion	
	09:50	00:30	Case 2: Minerals/Raw Materials	Per, Sigurd
	10:20	00:20	<i>Coffee or tea</i>	
	10:40	00:20	Discussion	
	11:00	01:00	Group Excercise 1, Petroleum	Per, Sigurd
	12:00	00:30	<i>Lunch</i>	
	12:30	01:30	Discussion	
	14:00	01:00	Group Excercise 2, Minerals/Raw Materials	Per, Sigurd
	15:00	00:20	Discussion	
	15:00	00:30	Case 3: Geothermal / Groundwater	Per, Sigurd
	15:30	00:20	<i>Coffee or tea, Discussion</i>	
	15:50	00:30	Case 4: Injection Projects	Per, Sigurd
	16:20	00:20	Discussion	
	16:40	00:20	Summing up, Closing Remarks	Per, Sigurd
	17:00		End of workshop	

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“Application of UNFC for Resource Classification and Management”,
5-6 November 2019, Chiang Mai, Thailand**

Resource Persons



Mr Sigurd Heiberg and Mr Per Blystad of PETRAD

Sigurd Heiberg, Project Director, PETRAD	Per Blystad, Project Director, PETRAD
<p>Sigurd holds a BSc from the University of California and a SM degree in Geotechnology from the Massachusetts Institute of Technology. He has also received formal management training at IMD, Switzerland on international management and High Performance Boards.</p> <p>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 the UNECE Expert group on resource classification when the UNFC-2009 classification was developed. He has also chaired the Bureau of the UNECE Intergovernmental Committee on Sustainable Energy. Sigurd has engaged in education by helping to form and build PETRAD.</p> <p>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.</p> <p>He joined Petrad as a Project Director in 2017.</p>	<p>Per holds a Master (Cand. Real) 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, he joined the Norwegian Petroleum Directorate (NPD) for more than 30 years working on petroleum resource management and project management.</p> <p>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.</p> <p>For six years Per coordinated the international project in NPD to assist countries in Asia and Africa in developing their national petroleum resource management systems and capacities. He 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.</p> <p>In 2001 he joined the UNECE Expert group on resource classification (EGRC).</p> <p>Per retired from NPD in 2016 and is a Project Director at Petrad.</p>