Introduction to UNFC and the Expert Group on Resource Classification, its Activities and Standing Committees

Charlotte Griffiths, UNECE

Interregional Workshop on Uranium, Coal and Oil & Gas Classification
Ulaanbaatar, Mongolia
16–19 August 2016
Outline

- UN Regional Commissions and UNECE
- Why UN is involved in resource classification?
- Mandate
  - ECOSOC Decision 2004/233
- Expert Group on Resource Classification
- UNFC: a tool for investors
- History/development of UNFC
UN Regions

UNECE
UNECE
ECA
ECA
ESCWA
ESCWA
ESCAP
ESCAP
ECLAC
ECLAC

Map showing the regions of the United Nations:
- UNECE
- ECA
- ESCWA
- ESCAP
- ECLAC
Who is UNECE?

- 56 countries in North America, Europe, FSU, Central Asia, Israel and Turkey
- Produce 40% of world’s energy, consume 45%
- Home to important energy industries
- Produce nearly 50% of global economic output
- Fossil fuels 60% of primary fuel in region
- UNECE region accounts for half of global emissions
- Region is diverse: comprised of high and low income countries, energy rich and energy poor and economies in transition
- Sustainable Energy Division: resource classification, CMM, gas, cleaner electricity from fossil fuels, energy efficiency and renewables

www.unece.org
On 25 September 2015, the 193-member United Nations General Assembly formally adopted the 2030 Agenda for Sustainable Development, along with a set of bold new Global Goals.

At COP21 in December 2015, 196 countries adopted the first-ever universal, legally binding global climate deal.
UN and Resource Classification

- **SDGs, SE4ALL, climate change**
- UNECE provides a regional forum for Governments to develop conventions, regulations, norms and standards
- **Neutral platform, all stakeholders involved**
- **Convening power – no comparable forum exists**
- **Open and transparent process**
- **UNFC is a voluntary system, not mandated by UN. Developed by consensus**
- **UNFC is global** *(ECOSOC Decision 2004/233)*
UNFC and ECOSOC

ECOSOC Decision 2004/233

“At its 42nd plenary meeting, on 16 July 2004, the Economic and Social Council, recalling its decision 1997/226 of 18 July 1997, welcomed the endorsement by the Economic Commission for Europe of the United Nations Framework Classification for Fossil Energy and Mineral Resources and decides to invite the Member States of the United Nations, international organizations and regional commissions to consider taking appropriate measures for ensuring worldwide application of the Framework Classification. The Council notes that this new classification for fossil energy and mineral resources, which now includes energy commodities (for example, natural gas, oil and uranium), is an extension of the earlier framework developed for solid fuels and mineral commodities, on which the Council took similar action in 1997 upon endorsement and recommendation by the Economic Commission for Europe.”
Where does the Expert Group on Resource Classification fit in the UN system?

United Nations

General Assembly, Security Council, International Court of Justice, Secretariat

Economic and Social Council (ECOSOC)

UN Regional Commissions

UNECE

Committee on Sustainable Energy

Expert Group on Resource Classification (EGRC)
EGRC

- Inclusive - open to all stakeholders worldwide

- Five year mandate, reports to Committee on Sustainable Energy – annual meeting in Geneva
Focus and Work Plan 2016-2017

EGRC Bureau (21)

- Technical Advisory Group
- Geothermal
- Renewables
- Injection projects
- G-axis for renewables
- Resourcing
- Project definition
- Nuclear fuels
- Communications
- Bioenergy
- Competent person

Environmental & social guidance
Focus and Work Plan 2016-2017

New focus:
• Solar, wind and hydro
• Anthropogenic resources
• Ground water

And also . . .

Technical Advisory Group
Environmental & social guidance
Nuclear fuels
Communications
Bioenergy
Competent person
Project definition

Resourcing
G-axis for renewables
Injection projects
UNFC Stakeholders

- **Governments**
  - management resources
  - to facilitate formulation of consistent and far-sighted policies

- **Creators of energy & mineral studies**
  - to provide information necessary to allocate capital appropriately so reducing costs

- **UNFC**

- **Industry**
  - to provide data and information necessary to deploy technology, management and finance in order to serve their host countries, shareholders and stakeholders

- **Financial Community**
Expert Group - global constituency representing all users of resource information

EGRC

Academia

Governments (UNECE & non-UNECE)

International organizations

Industry

Financial Sector
Incl. standard setters

Professional Societies & Associations
Comparing energy projects

Which project to choose?
How can investor compare projects?

Investor will want to know …

**Economic and social viability**
To establish commercial viability of the project, including consideration of market prices and relevant legal, regulatory, environmental and contractual conditions

**Field project status and feasibility**
Maturity of studies and commitments necessary to implement mining plans or development projects e.g. early exploration/investigations through to a project already extracting and selling or producing energy

**General level of physical confidence**
Regarding the size of the resource, the potential recoverability of the quantities and how much energy will be produced

Source: Jeremy Webb, Chair EGRC Solar Working Group
Comparing energy projects cont’d

wants to compare coal and oil project….

• Minerals reporting standard
• Oil reporting standard

UNFC – United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources

Many different classification systems!
Comparing energy projects cont’d

UNFC - an umbrella framework that breaks down different reporting standards in terms of

- **Socio-economic viability (E)**
- **Project Feasibility (F)**
- **Geological knowledge (G)**

allowing comparison of coal and oil estimates using standard terminology and categories

<table>
<thead>
<tr>
<th>Extracted</th>
<th>Sales Production</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-sales Production</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Class</strong></td>
<td><strong>Categories</strong></td>
</tr>
<tr>
<td>Future recovery by commercial development projects or mining operations</td>
<td>Commercial Projects</td>
<td>1</td>
</tr>
<tr>
<td>Potential future recovery by contingent development projects or mining operations</td>
<td>Potentially Commercial Projects</td>
<td>2</td>
</tr>
<tr>
<td>Non-Commercial Projects</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Additional quantities in place associated with known deposits</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Potential future recovery by successful exploration activities</td>
<td>Exploration Projects</td>
<td>3</td>
</tr>
<tr>
<td>Additional quantities in place associated with potential deposits</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Investor can compare coal and oil project using UNFC

Source: Jeremy Webb, Chair EGRC Solar Working Group
Comparing renewable energy projects

Source: Jeremy Webb, Chair EGRC Solar Working Group
Comparing energy projects cont’d

Renewables specifications

Source: Jeremy Webb, Chair EGRC Solar Working Group
UNFC History

1992 • Started development of system

1997 • UNFC for solid fuels and mineral commodities published

2004 • UNFC extended to cover oil, natural gas & uranium

2009 • UNFC-2009 published
UNFC History (continued)

- UNFC-2009 incorporating Specifications (ECE Energy Series No. 42)

2013

- Red Book and UNFC Bridging Document published

2014

- Application to renewables started

2014

- Guidelines for application to nuclear fuels and case studies

2015
UNFC History (continued)

- 2016 • Injection Project Specifications
- 2016 • Renewable Specifications
- 2016 • Geothermal Specifications public comment
- 2016 • Bridging document to Russian Federation Oil & Gas Classification public comment
Delivering on SDGs and SE4ALL

- Securing affordable and sustainable energy for the future requires a common standard for:
  - Global communications about energy
  - Recognition of environmental and social considerations
  - Developing long-sighted policies for global markets
  - Government resources management for security and efficiency
  - Cost effective allocation of financial resources
  - Industry processes to ensure common understanding of impact of new technologies and optimization of project management decisions
Thank you for your attention!

Join the next meeting
of the Expert Group on Resource Classification:
Palais des Nations, Geneva, Switzerland
25–28 April 2017

reserves.energy@unece.org
www.unece.org/energy/se/reserves.html
Any Questions?
Thank You