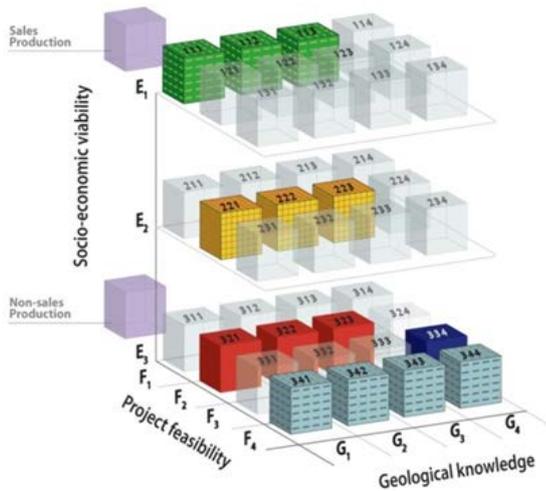


# Project Proposal

## United Nations Framework Classification (UNFC)



### Objective

Further development, deployment, and maintenance of the United Nations Framework Classification (UNFC) for effective management of national resource endowments and socio-economically efficient development of the energy resources needed for sustainable development.

## Outcomes

- Comprehensive oversight of UNFC processes, programmes, and activities, and management of Secretariat.
- Broadened application of UNFC to encompass renewable energy and geological storage of CO<sub>2</sub> for CCS projects.
- Maintenance of the classification system, development of case studies of UNFC application, and support for educators
- Dissemination of UNFC through workshops, websites, publications, presentations, and educational courses.
- Capacity-building through training courses, certification procedures, and qualification of competent persons.

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## Total budget

- The project budget amounts 1.900.000 USD annually to be requested from donors. The project can be scaled up with improved outcomes with additional contributions.

## Project period:

- 2016–2019

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# United Nations Framework Classification (UNFC)

## Project Summary

The objective of this project is the further development, deployment, and maintenance of the United Nations Framework Classification (UNFC) for effective management of national resource endowments and socio-economically efficient development of the energy resources needed for sustainable development.

Securing reliable and affordable supplies of energy to support sustainable development is a challenge. Achieving this goal in an environmentally responsible manner is an even bigger challenge. UNFC provides countries with a tool for managing national natural endowments and for ensuring that the resources are developed transparently and sustainably in a socially acceptable manner. For the many countries now entering the field of resource management in a systematic manner for the first time, typically as part of national development plans, it offers the double benefit of a classification and resource progression system that is easy to use and has the endorsement of the United Nations. This combination of attributes generates trust and confidence in the user community.

UNFC meets the needs of: (1) governments when managing their natural resources with a long-term view; (2) industry for information while deploying technology, management and finance to secure energy supplies and capture value efficiently to serve host countries, shareholders and other stakeholders; (3) international organizations developing energy and mineral studies for reliable and coherent data to formulate robust and long-sighted policies; and (4) the financial community for information to allocate capital efficiently.

As a result of the increasing global interest and requests received by the UNECE Expert Group on Resource Classification for help, the support provided by current Secretariat resources and by the group of volunteers is not sustainable, and it is expected that the demands will continue to grow in the coming years. The development of UNFC has moved to a new level of activity that requires more staff, financial resources, in-kind resources and coordination than have been deployed in the past.

This project is intended to deliver the following outcomes:

- Governance of UNFC.
- Further development of UNFC.
- Maintenance of UNFC.
- Dissemination of UNFC.
- Capacity-building.
- Branding and marketing.

The total cost of this project is estimated at US \$1,900,000 per year. It is initially foreseen to last for four years and will be implemented in collaboration with all stakeholders in the pursuit of the project's objectives and outcomes. Specific partners will include UN Member States, industry organizations, other intergovernmental organizations, and both financial and financial reporting institutions.

## Project Proposal

### 1. Background

Securing reliable and affordable supplies of energy to support sustainable development is a challenge. Achieving this goal in an environmentally responsible manner is an even bigger challenge. International organizations such as UNECE along with governments and industry share the “industrial ecosystem” in which that development can happen. Strong, reliable and lasting international standards such as the United Nations Framework Classification (UNFC) are necessary for success.

UNFC provides countries with a tool for managing their national natural endowments and for ensuring that the resources are developed transparently and sustainably in a socially acceptable manner. As UNFC has developed, interest in its application has come from an increasing number of commodity groupings, countries, institutions and regulatory bodies. Many countries around the world, including in Europe, Central Asia, Africa, East and South-east Asia, Central America and the Caribbean, intend to apply the system nationally. They acknowledge the benefits and efficiencies that UNFC brings under its global mandate. UNFC is especially advantageous for developing countries, where no national system exists at present. Various companies working in these countries use their own systems, which are always not fully compatible with international standards. Experts in these countries often do not have competency in working with multiple systems and usually face difficulty in assessing the technical reports across several types of resources provided by multi-national companies.

The aim of UNFC is to be universally acceptable and internationally applicable, and the increasing global interest reflects strong progress in this area. For the many countries now entering the field of resource management in a systematic manner for the first time, typically as part of national development plans, it offers the benefits of a classification and resource progression system that is easy to use, incorporates the globally-recognized PRMS<sup>1</sup> and CRIRSCO Template<sup>2</sup>, and has the endorsement of the United Nations. This combination of attributes generates trust and confidence in the user community. This trust has been observed repeatedly in well-attended training sessions around the world. Demand for assistance with UNFC is growing as a consequence, and provision must be made to meet that demand.

UNFC is a powerful international resource classification scheme that includes consideration of social and environmental factors as well as commerciality, project feasibility and technical uncertainty. It allows a direct comparison of projects that extract primary energy fuels, such as oil, gas, coal, or uranium, or renewable projects. UNFC meets the needs of:

- Governments when managing their natural resources with a long-term view;
- Industry for information while deploying technology, management and finance to secure energy supplies and capture value efficiently to serve host countries, shareholders and other stakeholders;
- International organizations developing energy and mineral studies for reliable and coherent data to formulate robust and long-sighted policies; and
- The financial community for information to allocate capital efficiently.

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<sup>1</sup> The Petroleum Resources Management System (PRMS) is used by oil and gas companies in determining their reserves and serves as the primary basis for reporting rules established by the United States Securities and Exchange Commission. Along with the CRIRSCO Template, it has been a foundational system for UNFC.

<sup>2</sup> The CRIRSCO (Committee for Mineral Reserves International Reporting Standards) Template promotes high standards of reporting of mineral deposit estimates (Mineral Resources and Mineral Reserves) and of exploration progress (Exploration Results). Along with PRMS, it is a foundational system for application of UNFC.

Development of UNFC started with traditional solid minerals (coal), but has been extended to oil, gas, uranium, thorium and other solid minerals. Comparable work is underway for renewable energy projects and underground storage of CO<sub>2</sub> for carbon capture and storage (CCS) projects. UNFC allows investors to rank diverse portfolios of both alternative and conventional forms of energy. The system will facilitate the public-private partnerships required to accelerate the transformation of the global energy system.

UNFC builds the foundation for fact-based energy and mineral strategies and their industrial execution. Supporting UNFC on behalf of the UN Economic and Social Council (ECOSOC) is a flagship activity for UNECE. The work on UNFC is carried out by the UNECE Expert Group on Resource Classification supported by a small secretariat at UNECE. The Expert Group is open to all stakeholders worldwide, including representatives from government institutions from both UNECE and non-UNECE member countries, industry, international organizations, financial market regulators, investors and analysts, as well as professional associations and highly qualified academics and individuals. More than 250 global experts participate annually to ensure the continued development and promotion of UNFC. Since its inception in 1992, the activities relating to the UNFC have at various points been governed by a series of UNECE working parties, working groups and groups of experts (including the Expert Group). Activities under the working groups have involved a significant amount of volunteer time and commitment and the demands on these working groups have been increasing. As a result of the increasing global interest and requests received by the Expert Group for help, the support provided by current Secretariat resources and by the group of volunteers is not sustainable, and it is expected that the demands will continue to grow in the coming years. As UNFC is becoming universally accepted, the challenge posed by its success is to meet the demands of its stakeholders. The development of UNFC has moved to a new level of activity that requires more staff, financial resources, in-kind resources and coordination than previously.

## **2. Project objective**

The objective of this project is the further development, deployment, and maintenance of the United Nations Framework Classification (UNFC) for effective management of national resource endowments and socio-economically efficient development of the energy resources needed for sustainable development.

### **2.1 Further Development of UNFC**

UNFC now applies to traditional solid minerals (coal), oil, gas, uranium, thorium and other solid minerals. UNFC is now in demand in an expanding number of geographies and work is underway to bridge national solid minerals and petroleum systems to UNFC, including Russia and China.

Comparable work is underway for renewable energy projects. Adopting a common assessment methodology for renewable resources will greatly benefit investors, regulators, governments and consumers. Energy companies could report their renewable energy resources on a consistent basis, alongside their reporting of mineral and hydrocarbon reserves. This outcome would provide further insight for investors and great benefits with regard to accounting and valuation of the total asset base of those companies. Work is progressing on application of UNFC to bioenergy and geothermal energy in particular, with application to hydropower, solar, wind and possibly with water and anthropogenic resources to follow. The development of an international system and a standardized terminology for classifying and presenting geothermal resources based on UNFC is being undertaken, including through an MoU with the International Geothermal Association. Adoption of UNFC as a global system underpinning the assessment and financing of projects can help accelerate geothermal projects in East Africa, Europe and elsewhere. Better yield forecasting, especially for wind, would improve investment conditions and attract private sources.

Lack of universal standards plague, in particular, the development of CCS projects in many countries where most of the projects are one-of-a-kind. An identifiable global standard based on UNFC methodology can help increase predictability and drive forward the investments needed for a low-carbon future.

## **2.2 Maintenance of UNFC**

Regular maintenance of the classification system, its increasing number of applications and globally consistent guidelines developed for the different applications, jurisdictions and geographies is a necessity. Central review of bridging documents and performance of case studies need to be made for reality checks and to ensure that UNFC is being applied correctly. Further, educators need support to ensure that UNFC is taught in a manner to ensure that its application across the world is undertaken consistently.

## **2.3 Dissemination of UNFC**

The wide range of commodity groupings requires consistent and coherent performance of a very large number of professionals for the tens of thousands of assets, fields and projects. Stakeholders represented in the Expert Group are taking responsibility for communicating with these communities and will continue to do so.

The central challenge is to ensure that stakeholders are served appropriately with fora for discussion, consents and agreement on how to maintain and practice the terminology, that their staff is offered sufficient education and training in the application of UNFC to achieve a requisite level of competency, and that they are supported in their communication with their stakeholders on a targeted and strategic basis.

The Expert Group has been represented at various events worldwide at an average frequency of once a week for the last years. This is largely in response to invitations received and has been funded in-kind by the participants or their employers with very few exceptions. It is safe to assume that this level of activity will increase substantially. It is also reasonable and prudent to plan for a more systematic approach, involving routine communication of standardized information. For the efforts to succeed on a global basis it is important to ensure that the United Nations services are delivered to all constituencies requiring them, including those in developing economies where funding of own activities currently is not possible. The cost of this kind of outreach and training could be shared equitably amongst the stakeholders benefiting from it through an efficient central financial arrangement. If effectively managed and delivered in cooperation with the many strong stakeholders in this cause, these activities are expected to lead to more wide-scale implementation for the wide range of commodity groupings and will build substantial goodwill through enhanced cooperation.

## **2.4 Capacity-building**

Beyond the presentations and publications described above, it is increasingly necessary to provide training in the application of UNFC. This involves not only the provision of validated courses, but also of certification of experts to act as ambassadors in disseminating UNFC and of users with completed minimum training requirements.

Beyond the certification of experts who have completed approved training courses, it will be necessary to define, and develop competent persons. The issues concerning certification by the United Nations and revoking certificates for non-performers will need to be studied and resolved. Many universities and educational institutions have introduced UNFC as part of the curriculum. There will be a requirement to see that training in the application of UNFC is provided in a consistent manner so that the needed level of competencies can be readily assured for government and industry use.

## **2.5 Branding and marketing (transparency, corporate reporting requirements)**

UNFC has proved to be a rigorous, well thought out classification system. Quality will need to be nurtured over time and the system will need to be updated periodically to ensure it meets the evolving needs of its users. This

quality assurance applies not just to the classification system itself, but also to its applications in public private partnerships. It is and should continue to be seen as an asset for preparers and users, as they can benefit from being associated with a quality brand.

Coherence with other statistical information on which industrial ecosystems are shaped is important. While the detailed information contained in UNFC inventories are not always suitable for public disclosure, transparency around the classification and with respect to high levels of aggregation of the numerical information should be maintained.

Extractive industries are increasingly viewed as “depleting” industries and there is growing opposition to this activity all over the world due to environmental perceptions. Some of the opposition comes from legacy issues of the past where industries operated under less stringent regulatory requirements. Today, extractive industries are required to perform to higher standards with more transparency and requirements of structured sustainability reporting. More effective communications with a wider spectrum of stakeholders have become a necessity. UNFC is an important tool for accurate and transparent communications about fossil energy, mineral reserves and resources and related renewables .

### 3. Expected outcomes

- EA1. Governance of UNFC to ensure comprehensive oversight of UNFC processes, programmes, and activities; resolution of key issues and challenges (definitions, resources) through consensus-building wherever possible; and management of the Secretariat.
- EA2. Further development of UNFC to encompass renewable energy projects, underground storage of CO<sub>2</sub> for CCS projects, and other resources. Maintenance of UNFC including periodic maintenance of the classification system, its increasing number of applications, and globally consistent guidelines developed for the different applications, jurisdictions and geographies; central review and performance of case studies for reality checks and to ensure that UNFC is being applied correctly; and support for educators.
- EA3. Dissemination of UNFC achieved through workshops, websites, publications, presentations, and educational courses. Capacity-building conducted through training courses, certification procedures, and qualification of competent persons.
- EA4. Branding and marketing. Establishing UNFC as a strong brand that can be utilized for marketing and promotion. UNFC has proved to be a rigorous, well thought out classification system. Quality will need to be maintained not only for the classification system itself, but also to its applications in public private partnerships. UNFC should continue to be seen as an asset for preparers and users, as they can benefit from being associated with a quality brand that can ensure users that transparency and corporate reporting requirements are met.

### 4. Indicators of achievement

#### I1. Governance

- 1. Establishment of oversight body and procedures for governance
- 2. Establish clear mechanisms for dispute resolution and meeting challenges
- 3. Effective management of the Secretariat

#### I2. Development and Maintenance

- 1. UNFC expanded to include renewables
- 2. UNFC expanded to include CO<sub>2</sub> storage
- 3. UNFC updated and maintained
- 4. Case studies on the application of UNFC prepared
- 5. Support provided to educators through workshops or other means

#### I3. Dissemination and Capacity building

- 1. Conduct of workshops
- 2. Institution of a Dedicated Website
- 3. Publications Issued
- 4. Presentations at Key Venues

5. Conduct of Educational Courses
  6. Conduct of Training, including certification procedures
  7. Establishment of Standards to be Met to Qualify as a Competent Person
- I4. Branding and Marketing
1. Global Recognition of UNFC as a brand in resource classification
  2. Uptake in the use of UNFC by countries, companies, and other organisations

## **5. Main activities**

### A1. Governance

1. Establish necessary oversight body with terms of reference

### A2. Development and Maintenance

1. Coordinate activities of the relevant task forces to develop UNFC for renewables and CO<sub>2</sub> storage and to update and maintain UNFC.
2. Solicit countries and experts to prepare UNFC case studies
3. Organize workshops and hold training courses for UNFC educators

### A3. Dissemination and Capacity building

1. Conduct workshops, institute and maintain a dedicated website
2. Prepare relevant publications, deliver presentations at key venues
3. Conduct educational courses and training, including certification procedures for competent persons

### A4. Branding and Marketing

1. Prepare informational materials and publications, and distribute through appropriate channels
2. Work with countries, companies, and other organisations to encourage uptake of UNFC

## **6. Assumptions and Risks**

The assumption is that the needs for a single unifying system of resource classification will remain in demand and will be useful for countries, companies, and other international organizations.

It is assumed that experts will remain engaged with the significant amount of in-kind contributions that they have offered to date. There is a risk that this model may break down in the future.

## 7. Total budget & implementation

The total cost of this project is estimated at US \$1,900,000 per year.

**Table 1 – Budget overview for the project**

	Requested amount from donors	UNECE in-kind contribution	Total (rounded)
1. Three-person staff (a senior professional, a junior professional, and a support staff), including needed supplies and infrastructure, to provide continued secretariat support	720 000	0	720 000
2. Hosting meetings, workshops, and training seminars	120 000	0	120 000
3. Support for travel of experts and UNECE Secretariat	250 000	0	250 000
4. Publications, brochures, booklets, website	100 000	0	100 000
5. Consultants	500 000	0	500 000
6. 13%	219 700	0	219 700
<b>Total project (annual, rounded)</b>	<b>1909700</b>	<b>0</b>	<b>1909700</b>

## 6. Duration of the project:

4 years (2016–2019)

## 7. Implementation entities

The Expert Group, with the support of the UNECE Secretariat, is responsible for the overall project implementation. UNECE will cooperate with all stakeholders in the pursuit of the objectives and outcomes. Specific partners will include UN Member States, industry organizations, other intergovernmental organizations, and both financial and financial reporting institutions.