

**Senior Expert Group Meeting on
Sustainable Development of Lithium Resources in Latin America:
Emerging Issues and Opportunities**

**Co-Organized by:
United Nations Department of Economic and Social Affairs (DESA) and
United Nations Economic Commission for Latin America and the Caribbean (ECLAC)**

**Venue:
UN ECLAC, Av. Dag Hammarskjöld 3477, 763 0412 Vitacura, Santiago, Chile**

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Aide-Mémoire

A. Background

Lithium-based batteries and energy storage technologies play an increasingly important role in laptop computers, mobile phones and other battery-powered electronic appliances. With the **growing interest in electric vehicles for more sustainable transport and mobility systems** global demand for lithium is widely expected to continue to grow significantly, offering new opportunities for both developed and developing countries. Emerging lithium-based battery technologies may also gain importance in other applications.

Global demand for lithium has grown very rapidly. The countries of the Latin American region have the largest known resources of lithium. The world's largest producers of lithium in 2007 were Chile, Argentina, Australia, USA, China, and the Russian Federation. Large known resources of lithium are also located in other countries in Latin America, particularly in Bolivia and Mexico, in Asia, and in Africa. Exploration efforts are increasing worldwide to widen the sources of lithium.

Many governments of the Latin American region have expressed keen interest in further exploring and rapidly developing capacities for the sustainable production and processing of lithium. However, for such development to be sustainable, it requires the **integration of economic, social and environmental aspects in policy decision making.**

Independent technical assessments, comprehensive market analysis, and short and long term trend projections are all essential prerequisites for informed decision making on lithium mining and the related investment, resource development and socio-economic policies.

Most lithium resources are located in remote and mountainous areas. Many of these locations lack the necessary basic infrastructure in terms of roads or water and electricity supply. Considerations for the pursuit of lithium include various concerns and questions: Can the

existing local natural and human resource constraints be overcome in a sustainable and cost-effective manner in order to further develop existing or open new lithium mines? Which technology options are available? How can environmental impacts be minimized? How can local communities benefit from mining development? Will supplies be sufficient to meet projected lithium demand growth in the electronic and automotive industries? How will lithium battery technologies develop? Can lithium mining and battery recycling offer emerging opportunities for “Green Economy”? How can greater international cooperation facilitate sustainable development?

B. Objectives of the Senior Expert Group Meeting on Sustainable Development of Lithium Resources in Latin America

The *Senior Expert Group Meeting on Sustainable Development of Lithium Resources in Latin America: Emerging Issues and Opportunities* is co-organized by the United Nations Department of Economic and Social Affairs (DESA) and the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), in collaboration with other concerned and interested institutions.

This meeting will provide a platform for wider information and experience sharing, in particular among experts and policy makers from the region, as well as a limited number of visiting international experts from other regions.

The meeting will draw on the expertise of senior experts from both the public and private sectors. Interdisciplinary in nature, this activity intends to provide an independent assessment of emerging lithium-related technologies and policies.

The meeting will enhance on-going efforts in the South American sub-region to develop lithium resources in a sustainable manner, and to encourage further development of lithium production along positive economic, social and environmental guidelines.

Specifically, the Senior Expert Group Meeting aims to:

- identify and discuss sustainable development issues in the extraction and industrial processing of lithium, including economic, social and environmental aspects;
- compile an independent assessment of the potentials and the benefits of expanded lithium mining and processing at existing and potential new sites, in particular in the countries of Latin America;
- consider the potential contribution to regional sustainable development and related policies that can enhance investment, employment and income generation, as well as benefit sharing;
- discuss opportunities for improving the sustainability of lithium production and use;
- provide proposals for improved regulatory and legislative measures in the sub-region;
- create an expanded informal consultative network, bridging the gaps between policy-making, science, academia, and the private-sector;
- identify possible future projects and partnerships for international cooperation.

C. Technical background information for United Nations Commission for Sustainable Development (UN CSD-19 and Rio+20 Conferences)

As a part of its forth implementation cycle (2010-2011), the United Nations Commission on Sustainable Development (CSD) is currently reviewing implementation of its decisions with regard to the thematic cluster including transport, chemicals, waste management, mining, and the Ten Year Framework of Programmes on Sustainable Consumption and Production. The discussions and the recommendations of the suggested Roundtable are envisaged to provide relevant additional background information for the up-coming CSD policy debate, in particular with regard to sustainability in mining and transport (electric mobility) sectors.

In accordance with United Nations General Assembly resolution A/RES/64/236 of 31 March 2010, the United Nations will also organize the United Nations Conference on Sustainable Development, to be held in Brazil in 2012. One of the two main themes of the UN CSD (Rio+20) is “a green economy in the context of sustainable development and poverty eradication”. The outcomes of the *Senior Expert Group Meeting on Sustainable Development of Lithium Resources in Latin America* may also provide useful background information for the Rio-20 preparatory process.

D. Provisional programme and main topics for discussion

The provisional programme is under preparation. It is expected to cover, inter alia, the following topics for discussion:

Day 1:

- Assessment of national, regional and world market trends: Analysis and projection of lithium demand and supply;
- Assessment of current and future lithium application technologies (batteries, electronics, and other fields);
- Lithium geological environment and resources (evaporites vs. pegmatites and other lithium bearing rocks);
- Lithium mining: From mining through processing and ultimate upgrading.
- Presentations and discussions of reports by national experts (including Argentina, Bolivia, Chile, Mexico);

Day 2

- Current legal environment (mining code, environment impact assessment, social considerations, mineral beneficiation, taxes) of the mining industry in countries involved in mineral exploitation, in particular in Latin America;
- Infrastructure and natural resource requirements in lithium mining;
- Elements of environmental impact assessment of lithium mining in the short and long term;
- Local employment generation and regional social and economic development
- The long-term life cycle of lithium and assessment of its contribution to sustainable development (including potentials for recycling of materials);
- Perspectives for multi-stakeholder participation and benefit-sharing.

A detailed annotated provisional programme will be circulated to participants in advance of the Expert Group Meeting.

E. Co-Organizers and Supporters

The Meeting is co-organized by the United Nations Department of Economic and Social Affairs (UNDESA) and the United Nations Economic Commission for Latin America and the Caribbean, with additional technical and financial support provided by various partner institutions, including the Korea Energy Economics Institute (KEEI) and the Korea Energy Management Corporation (KEMCO).

F. Participants

Participation in this meeting is by invitation only. It is expected that some 40-50 experts, officials and other participants from the Latin American region and from around the world will attend this event, including:

- Senior government officials and policy makers;
- Distinguished transport, environment, industry and mining experts;
- Representatives and experts of civil society, academia and the private sector;
- Representatives of national and international professional associations;
- Experts and representatives of relevant UN and international organizations, including international financial institutions.

Participation in the meeting is free of charge, but participants are expected to cover their own travel costs. A limited number of travel cost sponsorships will be available for invited experts/resource persons from developing countries.

G. Submission of Papers and Presentations

The co-organizers are inviting a number of technical background information papers to be prepared for presentation and discussion at the meeting. The co-organizers also welcome the presentation of reports from participating countries.

Participating experts interested in making presentations are invited to submit in advance of the meeting brief summaries of their suggested presentations.

All invited presentations should be limited to the specified presentation time. All invited speakers are requested to submit advance copies of their papers and presentations in electronic format to the secretariat for circulation among participants.

The proceedings of the Forum are intended to be published on the webpage of the UN-DESA: http://www.un.org/esa/dsd/susdevtopics/sdt_transport.shtml as well as on the websites: www.cepal.org/drni and www.cepal.org/ddsah.

H. Languages

The Expert Group Meeting will be conducted in English and Spanish, with simultaneous interpretation provided between these two languages.

I. Logistics

Detailed information on logistics, including registration, visa requirements, travel details and hotel accommodation arrangements are contained in a separate *Information Note for Participants*.

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