

## Regional Project Concept Template (Category A)

The information contained in this template should be uploaded to the PCMF IT platform by the Chair of the relevant regional cooperative agreement or the NLO of the Member State submitting the concept by **31 May 2014** at the latest. Based on this information the IAEA will assess whether this project concept is in line with the TC quality criteria and requirements. Concepts positively appraised will be further developed into full project documents during the design phase.

<b>Region:</b>	South, Central America and the Caribbean		
<b>Regional/Cooperative agreement</b> (if applicable)	ARCAL	<b>Priority no. given by regional/cooperative agreement</b> (for concepts proposed under the auspices of regional cooperative agreements)	
<b>Title</b>	Support for the development of National Energy Plans, with the purpose of satisfying the energy needs of the countries of the region with an efficient use of resources in the medium and long term.		
<b>Field of activity</b>			
<b>Regional project category<sup>1</sup></b>	<input type="checkbox"/> <i>Transnational</i> <input checked="" type="checkbox"/> <i>Regional standard setting</i> <input type="checkbox"/> <i>Capacity building for developing countries</i> <input type="checkbox"/> <i>Joint TC activities with a regional or international entity</i>		
<b>Names and contact details of project counterparts and counterpart institutions (starting with the main counterpart)</b>	<ul style="list-style-type: none"> <li>• ARGENTINA Norberto Ruben Coppari. Comisión Nacional de Energía Atómica (CNEA). Av. Del Libertador 8250, (1429), Ciudad Autónoma de Buenos Aires, Argentina. Phone: (+54) 11 67727422. Fax: (+54) 11 67727526. <a href="mailto:coppari@cnea.gov.ar">coppari@cnea.gov.ar</a>. <a href="http://www.CNEA.gov.ar">http://www.CNEA.gov.ar</a></li> <li>• CHILE Jerson Reyes S. Comisión Chilena de Energía Nuclear (CCHEN). Nueva Bilbao 12501, Las Condes, Santiago de Chile. PO Box 188 - D Postal Code: 7600713. Phone: (+56) 02 23646217. Fax: (+56) 02 23646181. <a href="mailto:jereyes@cchen.cl">jereyes@cchen.cl</a>. <a href="http://www.cchen.cl">www.cchen.cl</a></li> <li>• CUBA David Pérez. Centro de Gestión de la Información y Desarrollo de la Energía (CUBAENERGIA). Calle 20 No. 4111 e/ 18 a y 47, Miramar, Playa. La Habana (11300), Cuba. Phone: (+537) 206 2064. Fax: (+537) 2041188. <a href="mailto:davidp@cubaenergia.cu">davidp@cubaenergia.cu</a>. <a href="http://www.cubaenergia.cu">www.cubaenergia.cu</a></li> <li>• NICARAGUA Norma Roas Zuniga. Universidad Nacional Autónoma de Nicaragua.</li> <li>• PERU Juan Ávila López: Instituto Peruano de Energía Nuclear (IPEN). Av. Canadá N° 1470. San Borja, Lima. Perú. Phone: (511) 4885050. <a href="mailto:javila@ipen.gob.pe">javila@ipen.gob.pe</a>. <a href="http://www.ipen.gob.pe">http://www.ipen.gob.pe</a></li> </ul>		
<b>Analysis of regional Gap/problems/needs</b>	<p><i>Give an in-depth analysis of the major problems/needs to be addressed by the project, as well as of their causes and effects; and explain how these are linked to regional development plans or frameworks (or equivalent). Refer to past efforts made in addressing these problems/needs, if any, and explain how the current project proposal builds upon them.</i></p> <p><i>Attach any supporting documents (e.g. texts of regional development plans).</i></p>		

<sup>1</sup> See the document entitled "Policy and Procedures for TC Regional Projects" at: [http://pcmf.iaea.org/DesktopModules/PCMF/docs/2014\\_15\\_Docs/notes/Regional\\_TC\\_Project\\_Policy.pdf](http://pcmf.iaea.org/DesktopModules/PCMF/docs/2014_15_Docs/notes/Regional_TC_Project_Policy.pdf).

	<p>Among the needs and problems identified in the PER 2016-2021 ARCAL, the following general objective arises in the energy area: "Dispose national and/or regional energy plans for sustainable development." This goal has a two-stage breakdown which identifies the following specific objectives: "Dispose own comprehensive studies of energy development in most countries of the region" and "Dispose comprehensive energy development studies at sub-regional level".</p> <p>Energy demand in most of the countries of Latin America and the Caribbean grows at significant rates, while there is an asymmetry in the availability of resources: some countries are net exporters and others are importers of different energetic.</p> <p>This situation led to make domestic energy planning studies, with the possibility of being expanded at a sub-regional level, to search for scenarios that allow a possible balance between: optimize the use of energy resources, diversify the energy supply, and increase its safety, with a feasible energy system development cost for countries in the region.</p> <p>Studies with common tools allow assessing energy systems under the same assumptions and conditions. So the decision-makers need to have comprehensive, strategic and consistent studies. In these studies, the actions for mitigation to climate change and assessing the competitiveness of the technologies to meet energy demands – including nuclear - for those countries that consider it as an option must be included.</p> <p>The proposal bears in mind to face the strengthening of the energy planning in order to develop sustainable energy systems in the medium and long term.</p> <p>In the past, Regional Projects RLA/0/029 and RLA/0/040 of IAEA allowed training professionals from all countries of the region in the handling and use of MAED, WASP, MESSAGE and FINPLAN models, for the projection of Energy Demand and Supply in the context of Sustainable Energetic Systems. However, it is necessary to insist on this type of work, so decision makers incorporate them into national energy plans. Unfortunately, many countries have lost the ability to make energy planning for various reasons, such as changes in the structure of work teams, staff retirement, etc. Anyway it is required to incorporate young people for the existing work teams, which need to acquire knowledge in the areas of energy planning and management of the models.</p> <p>As a result of the above mentioned regional projects, there are comprehensive national studies on some of the countries of Latin America and the Caribbean, which should be updated and, in some cases, its scope should be extended to the entire energy system. Comprehensive studies are particularly necessary and important for the purposes of transition to a sustainable energy development in the region.</p> <p>This important aspect in the energy supply studies was identified and observed during the development of these regional projects.</p>
<p><b>Why should it be a regional project?</b></p>	<p><i>Indicate why it is better to address these problems/needs through a regional project (as opposed to a national one).</i></p> <p>Some countries in the Latin America and Caribbean regions have submitted proposals or accessions to such project: Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Paraguay, Peru, Mexico, Nicaragua and Uruguay. Accession of other countries in the region is expected.</p>

<p><b>Stakeholder analysis and partnerships</b></p>	<p><i>Describe the stakeholder analysis conducted, specifying all the interested or affected parties, end users, beneficiaries, sponsors and partners identified, with clearly defined roles for each entity.</i></p> <p>End users who would benefit from this type of regional project would be:</p> <ul style="list-style-type: none"> <li>- National institutions of Member Countries of Latin America and the Caribbean responsible of policymakers and planning of energy supply.</li> <li>- Decision-makers who will have strategic and key information to implement national and regional energy policies, which lead to execute projects of common benefit to the population of all countries including the benefits that the incorporation of nuclear energy in their energy matrix could bring.</li> <li>- The environment, as it seeks an energy matrix of low impact on CO<sub>2</sub> emissions, with an efficient use of energy resources.</li> <li>- End-users of energy that will have a reliable, economical and environmentally friendly supply.</li> <li>- The industries of the region related to energy technologies, including nuclear, in countries for which this is a viable option.</li> </ul> <p>Countries in the region will have the results of the comprehensive national studies and the analysis on the potential capabilities of development and integration of energy systems, locally and regionally, using for this purpose the energy planning models provided by the IAEA in which there are trained the professionals from Member States that require it. The decision makers of the countries should have technical information developed by the domestic planning teams.</p> <p>At the same time, in the process of project implementation as in the results, women and men alike would benefit. In addition to the benefits of the development of the National Energy Plan, it is expected that the staff of the technical areas (women and men) of the national institutions which are involved, develop and maintain the skills to conduct studies using energy planning tools which the IAEA provides.</p> <p>Although the project has no direct link with projects/programs of other organizations, it worth's noting that there is an affinity with works developed by other institutions that can support the project, such as:</p> <ul style="list-style-type: none"> <li>• CEPAL, which has macroeconomic assessments, and projections that could be used in the project.</li> <li>• OLADE, which keeps energy statistics of all countries in the region, which could be used when they do not have national statistics.</li> <li>• IRENA, which could be a homogeneous source of information on technologies using renewable sources.</li> </ul>
<p><b>Overall objective (or developmental objective)</b></p>	<p><i>State the objective to which the project will contribute, and demonstrate its linkage with any regional or broader development goal or priority. It has to be in line with the problems/needs identified.</i></p> <ul style="list-style-type: none"> <li>• Provide support to Member States in the region of South, Central America and the Caribbean in the development/updating of national energy strategies to meet the future energy needs in the context of sustainable development.</li> <li>• Strengthen local capabilities in the use of energy planning tools, for a better elaboration of the national strategic studies.</li> <li>• Analyze, project and assess the viability of the nuclear option in the medium and long term.</li> <li>• Provide support to develop systems and/or data libraries of energy information in Member Countries with common criteria, to facilitate the preparation of planning studies.</li> </ul>

<b>Analysis of objectives</b>	<i>Draw up an objective tree to highlight the hierarchy of objectives as well as the cause–effect logic that this project is expected to achieve.</i>
<b>Role of nuclear technology and the IAEA</b>	<p><i>Indicate the nuclear technique that would be used and outline why it is suitable for addressing the problems/needs in question. Is this the only available technique? Does it have a comparative advantage over non-nuclear techniques?</i></p> <p><i>What specific role is the IAEA expected to play in the project?</i></p> <p>The project must identify the energy potential of the countries of the region and ability to support future energy needs in the context of sustainable development.</p> <p>This situation led to make domestic energy planning studies, with the possibility of being expanded at a sub-regional level, to search for scenarios that allow a possible balance between: optimize the use of energy resources, diversify the energy supply, and increase its safety, with a feasible energy system development cost for countries in the region.</p> <p>In these studies, the actions for mitigation to climate change and assessing the competitiveness of the technologies to meet energy demands – including nuclear - for those countries that consider it as an option must be included.</p> <p>Through the efficient integration and management of available resources in the countries of the region, favoring the use and participation of low emission's generation technologies in the national energy matrix.</p> <p>In the past, through previous technical cooperation activities and regional projects (RLA/0/029 and RLA/0/040) of IAEA, capabilities were created and various electricity generation options were evaluated.</p> <p>There are countries in the region in which the use of the tools and training provided by the IAEA have been fundamental to the development of national energy plans that are in force, and even have been made periodic reviews using the same tools.</p> <p>This aspect requires that the IAEA continue providing analytical tools for training in the countries of the region (training local experts) in the development of national studies and later in the sub-regional studies in order to assess different options to optimize the national energy supply. Conduct workshops for the presentation and discussion of results in order to address how best comprehensive surveys of the region. Promote the publication of results.</p>
<b>Project duration</b>	<p><i>Indicate a realistic starting date and the number of years required to complete the project. (In the case of projects expected to exceed four years, an assessment will be conducted before the end of the fourth year to decide on the validity of an additional year.)</i></p> <p>Start date: 01/01/2016 Estimated time duration: 2 years</p>
<b>Requirements for participation</b>	<p><i>Indicate the minimum requirements that counterpart institutions in Member States would need to meet in order to participate in this project, and how the fulfilment of these requirements will be verified.</i></p> <p>Each country will have a responsible institution to appoint as a project coordinator and in turn will have local experts (a team) to carry out energy planning studies. Commits to the IAEA report progress of local studies.</p> <p>Each country, depending on the needs and availability, shall make the</p>

	necessary regional project workshops and events associated with the development of the project infrastructure.		
<b>Participating Member States</b>	<p>List the Member States expected to participate in this project that meet the requirements established above. Indicate the role of each Member State in the project.</p> <p>Country:</p> <p>Some countries in the Latin America and Caribbean regions have submitted proposals or accessions to such project: Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Paraguay, Peru, Mexico, Nicaragua and Uruguay. Accession of other countries in the region is expected.</p> <p>Role:</p> <p style="text-align: right;"><input type="checkbox"/> Resource (providing expertise)  <input checked="" type="checkbox"/> Target (receiving expertise)</p>		
<b>Funding and project budget</b>	Provide an estimate of the total project costs and the funding expected from each stakeholder:		
		Euro	Comment
	Government cost-sharing		(to be sent to the IAEA)
	Counterpart institution(s)		
	Other partners		Who?:
	IAEA Technical Cooperation Fund (TCF):	900,000.00	
	Fellowships / Scientific visits / Training courses/ Workshops		
	Experts		
	Equipment		
	<b>TOTAL</b>	<b>900,000.00</b>	