Sri Lanka: Supporting Feasibility Study and Survey to Adopt Liquefied Natural Gas (LNG) Power Generation to Diversify Energy Mix

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Supporting Feasibility Study and Survey to Adopt Liquefied Natural Gas (LNG) Power Generation to Diversify Energy Mix</th>
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<tbody>
<tr>
<td>Project Number</td>
<td>53193-001</td>
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<tr>
<td>Country</td>
<td>Sri Lanka</td>
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<tr>
<td>Project Status</td>
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<tr>
<td>Project Type / Modality of Assistance</td>
<td>Technical Assistance</td>
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<td>Source of Funding / Amount</td>
<td>TA 9741-SRI: Supporting Feasibility Study and Survey to Adopt Liquefied Natural Gas (LNG) Power Generation to Diversify Energy Mix Technical Assistance Special Fund US$ 225,000.00</td>
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**Strategic Agendas**
- Environmentally sustainable growth
- Inclusive economic growth
- Regional integration

**Drivers of Change**
- Governance and capacity development

**Sector / Subsector**
- Energy - Energy sector development and institutional reform

**Gender Equity and Mainstreaming**
- No gender elements

**Description**
The proposed feasibility study is to identify the optimal LNG facility for Sri Lanka (i.e., land-based LNG terminal or floating storage and regasification unit) and the most suitable location for the development of new LNG-fired power plants and its associated facilities. This will include detailed study by considering the demand for natural gas in Sri Lanka, global LNG market, LNG pricing and contracts, possibility of supplying LNG to regional markets, and other social and environmental aspects. Maldives is considering importing LNG for power generation and other uses. LNG terminal in Sri Lanka with sufficient storage and adequate supply will benefit from lowering the energy cost of both countries. The site selection requires offshore survey and hydrodynamic studies to ascertain technical parameters required for LNG power generation infrastructure and its associated facilities, therefore it is recommended to engage a firm with expertise, equipment, and experience working in Sri Lankan ocean waters to carry out this marine survey assignment. The TA will help provide necessary support for the feasibility study including marine survey for developing LNG based power generation and its value chain. CEB, a state-owned electricity utility, has already carried out a preliminary feasibility study with support from ADB exploring the possibility of LNG for Colombo-based power plants. The findings of the pre-feasibility study recommend the necessity to set-up an LNG terminal and other infrastructure on an expeditious basis for supplying LNG for power generation.

**Project Rationale and Linkage to Country/Regional Strategy**
The Government of Sri Lanka, through the External Resources Department (ERD), has requested ADB via letter dated 11 March 2019 to support Ceylon Electricity Board (CEB) urgently in exploring LNG as a fuel for power generation. The Ministry of Power and Renewable Energy (MPRE) also sees a greater role for LNG in its goal of reducing the use of oil and coal in the country, particularly for power generation. This is also in line with the government’s key development priority to diversify the existing generation mix to include cleaner energy resources and climate change mitigation actions. A small-scale TA was preferred to initiate the necessary activities for LNG study quickly as requested by the government. CEB currently does not have in-house capacity to undertake these tasks since LNG is entirely new to Sri Lanka. The TA will provide external consultants to assist in preparing the feasibility and survey report for LNG import, LNG terminal and sea side facilities, infrastructure and other allied facilities for LNG transmission to the prospective power plants.

**Impact**
Inclusion of cleaner energy resources and climate change mitigation actions in Sri Lanka government’s priority to diversify the power generation mix achieved

**Project Outcome**
**Description of Outcome**
Increased viable options to diversify primary energy sources in power generation of Sri Lanka.

**Progress Toward Outcome**

**Implementation Progress**
**Description of Project Outputs**
Feasibility study to identify optimal LNG facility and site completed
Site survey and hydrodynamic studies to confirm feasibility study for LNG infrastructure completed
Assessment of CEB’s technical and procurement capacity for implementing LNG infrastructure and its associated facilities conducted

**Status of Implementation Progress (Outputs, Activities, and Issues)**

**Geographical Location**
Nation-wide

**Summary of Environmental and Social Aspects**

**Environmental Aspects**
- Involuntary Resettlement
- Indigenous Peoples

**Stakeholder Communication, Participation, and Consultation**
During Project Design

During Project Implementation

Business Opportunities

Consulting Services: yes
Procurement: Not required

Responsible ADB Officer: Jaimes Kolantharaj
Responsible ADB Department: South Asia Department
Responsible ADB Division: Energy Division, SARD
Executing Agencies: Ceylon Electricity Board
3rd Floor, G.O.B.A. Bldg.
#50-Sir Chittampalam A. Gardiner Mawatha
Colombo 02, Sri Lanka

Timetable

Concept Clearance: -
Fact Finding: -
MRM: -
Approval: 06 Jun 2019
Last Review Mission: -
Last PDS Update: 06 Jun 2019

TA 9741-SRI

Milestones

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<th>Effectivity Date</th>
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Financing Plan/TA Utilization

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Project Page: https://www.adb.org/projects/53193-001/main
Request for Information: http://www.adb.org/forms/request-information-form?subject=53193-001

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