

<b>Concept Paper</b>		
<b>Dissemination Webinar on Study for "Deployment of Electric Road Transportation in South Asia"</b>		
<b>Webinar</b>	<b>PROMO</b>	<b>SEC</b>

**Background:**

Transport has a very important role in the socio-economic development of any country. Transport sector is a huge consumer of energy; it remains the largest consumer of petroleum-based fuels, accounting for 20% of global final energy consumption and 60% of total oil consumption. On the other hand more than one third of the total greenhouse gas emission comes from the transport sector. This has not only exerted a strong pressure on the depleting resource but it also has huge negative impacts on environment and adverse effects on human health.

**Introduction:**

Hydrocarbon reserves in South Asia are limited; all SAARC Member States are net importers of petroleum products. Ever growing transport sector in the SAARC Member States has been constantly exerting pressure on the oil dependence as well as resulting in the environmental externalities. One of the measures, to relax the dependence on the petroleum products and thereby mitigate the environmental impacts, is to ensure the gradual replacement of the conventional Internal Combustion Engines (ICE) vehicles with electric vehicles.

There are number of issues associated with the use of electric vehicles. Electric vehicles provide short driving range, require long recharge time and offer low speeds. Deployment of electric vehicles would necessitate sufficient electric charging stations. Different countries in the region have different levels of electrification and the fuel mixes for generating electricity, hence the indirect source to wheel emissions for EVs varies accordingly.

However, electric vehicles are more energy efficient than the conventional ICE. They, therefore, corresponds to lower fuel costs and also play role in the reduction of emissions. Using electric vehicles can reduce dependence on imported petroleum products and can hence contribute to the ensure energy security. Besides, electric vehicles also help in reducing the transport created noise pollution and other negative environmental impacts.

SEC, during FY 2017, had conducted a study for the Deployment of Electric Road Transportation in South Asia with an objective to assess the viability of deploying electric vehicles in the road transport sector and thereby identify policy and infrastructure requirement for the deployment of electric passenger vehicles in the road transport sector in the region.

**Objectives:**

The objective of the proposed webinar is to disseminate the knowledge generated, study findings and recommendations of the study report among the professionals/experts of the Member States. SAARC Energy Centre proposes this Webinar under its thematic area of Programme to “Minimize Oil Imports through Improvements in Energy Efficiency and Fuel Substitution (PROMO)”.

**Major Aspects/Topics to be covered during the Webinar:**

Webinar may cover following topics but not limited.

- Electric Road Mass Transport (ERMT) Technologies
- Deployment Requirements of ERMT
- Lessons learnt from the Success Stories across the world
- Challenges and Opportunities
- Deployment Strategy for SAARC States
- Conclusion and Recommendations of the study

**Relevance, Coherence and Sustainability:**

One of the objectives of SEC is to minimize oil imports and to minimize negative environmental impacts from the emissions due to combustion of fossil fuels. In this regard SEC conducted an in-house Study on Energy Efficiency in Road Transport Sector in the SAARC Member States in the year 2016. The proposed webinar is in fact off shoot of one of the study recommendations to expand electricity run vehicles for furthering the energy efficiency aspect in South Asia.

**Potential Professional Resource / SEC's Intellectual Contribution:**

The study author and peer reviewer(s) shall deliver presentations on knowledge generated, findings and recommendations of the study. Besides efforts will be made to engage few other relevant experts from region or outside region for their deliberations.