

<b>Concept Paper</b>		
<b>Webinar on "Promotion of Light Electric Vehicles in SAARC"</b>		
<b>Webinar</b>	<b>PRG-185/2020/POSIT</b>	<b>SEC</b>

### **Background:**

Conventional Internal Combustion Engine (ICE) vehicles emit pollutants, such as, Carbon Monoxide (CO), Hydrocarbons (HC), Oxides of Nitrogen (NOx) and Particulate Matter (PM), thus, contributing to their high ambient concentrations in urban areas. Exposure to these pollutants in significant concentrations is known to cause severe damage to the health of the people, leading to premature mortality. The urban poor are particularly vulnerable as many of them live close to the roads where these vehicles operate in large numbers. Each year, air pollution accounts for tens of thousands of premature deaths and billions of dollars in medical costs and lost productivity. The large numbers of 2 and 3 wheelers, particularly in the large cities, contributes significantly to urban air pollution.

Electric vehicles, with zero tail-pipe emissions, have a great potential for reducing this pollution. However, electric cars are still relatively expensive, especially in the context of purchasing power of people in SAARC countries. There is higher potential for the electrification of road transport, particularly in urban areas, through light electric vehicles such as e-bikes, e-scooters, e-motorcycles, and e-rickshaw.

### **Introduction:**

SEC, under its thematic area of "Programme on Successfully Implement Technology Transfer (POSIT)", will organize a webinar on "Promotion of Light Electric Vehicles in SAARC". The webinar will be up to 3 hours activity, consisting of presentations from experts having knowledge and experiences of electric vehicles, especially the light electric vehicles. The webinar will discuss in detail the economic, environmental and social performance of light electric vehicles wheelers vis-a-vis the traditional internal combustion engine vehicles. Local manufacturing requirements, necessary adaptations of urban infrastructure and relevant safety regulations shall also be discussed. Moreover, the webinar will also discuss specific case studies, such as that of China, India, Thailand, Netherlands etc.

### **Objectives:**

The overall objective of this webinar is to highlight and promote the numerous benefits that the use of light electric vehicles brings to the common consumer and the governments. The webinar will share specific economic and environmental benefits, relevant case studies and provide participants with information on how to achieve large scale adoption.

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

The following aspects will be covered in the webinar (but not limited to):

1. Technological innovations and improvements
2. Legislative support required for large scale adoption
3. Infrastructure requirements
4. Market analysis

5. Detailed overview of economic, environmental, social and health benefits
6. Manufacturing requirements and opportunities
7. Consumer costs, maintenance requirements and technical support
8. Role of financial intermediaries for promotion
9. Case Studies and successful example of public awareness campaigns

**Relevance, Coherence and Sustainability:**

The webinar is relevant to PETREN thematic area of SEC. It is coherent to past SEC activities on electric vehicles. Through this webinar, SEC shall strive to share best knowledge of electric vehicles in SAARC region, and will continue to hold such webinars in future.

**Potential Professional Resource:**

EV experts from public & private sector, energy agencies and academia will be participating from within and outside SAARC region to speak for 25-40 minutes to share their knowledge. SEC Coordinator will finalize the event program in close coordination with the speakers.