

Public Consultation

**REGULATION OF THE ELECTRIC VEHICLE CHARGING STATIONS
AND PROTECTION OF CONSUMER RIGHTS**

Public Utilities Commission of Sri Lanka



“Economic, Technical & Safety Regulator of the Electricity Industry & Shadow Regulator of the Lubricant Market”

PUBLIC CONSULTATION ON REGULATION OF THE ELECTRIC VEHICLE CHARGING STATIONS AND PROTECTION OF CONSUMER RIGHTS

TITLE

Regulatory Tools for Electric Vehicle Charging Stations and Protection of Consumer Rights

PERIOD OF CONSULTATION

From 13th September 2017 to 04th October 2017

THE OBJECTIVE OF THE CONSULTATION

Public Utilities Commission of Sri Lanka (PUCSL) invites stakeholders views, suggestions, recommendation, concerns and comments related to issues pertaining to the electric vehicle charging stations (EVCS) and users of such services to draft required regulatory tools. The submissions should be related to the following areas;

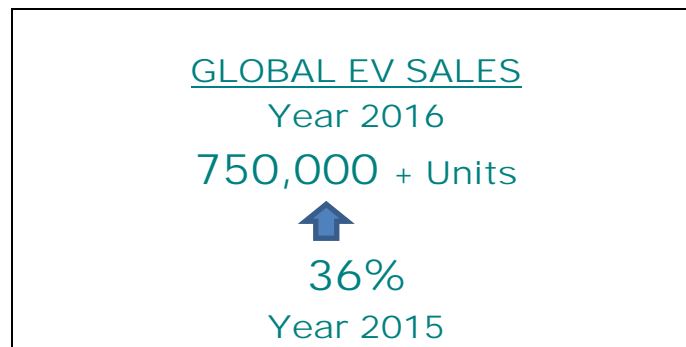
- a) Requirement of maintaining and updating a register of authorized EVCS at CEB and LECO
- b) Code of practices for EVCS
- c) Determination of end user tariffs, safety and other technical standards for EVCS
- d) Rights and Obligations Statement for consumers of EVCS
- e) Issues faced by EVCS and consumers of such centres
- f) Issues related to residential charging facilities

GLOBAL ELECTRICAL VEHICLE INDUSTRY

It is observed that the global electrical vehicles(EV) have hit a new record in 2016 with 750,000 sales worldwide, with an increase of 36 percent compared to 2015.

The global EV stock has surpassed two million vehicles in 2016 after crossing the one million thresholds in 2015.

The EV stocks hold 0.1 percent of the total number of motor vehicles in the world.



With the increase in usage of electric cars in the world, the charging infrastructure of electric vehicles by public and private sector has also continued to grow.

In 2016, a number of publicly available charging centers registered a growth of 72 percent.

It was forecasted that electric vehicles would be 35 percent of global new car sales by 2040.

Source : International Energy Agency / Bloomberg.com/ Ceylon Chamber of Commerce

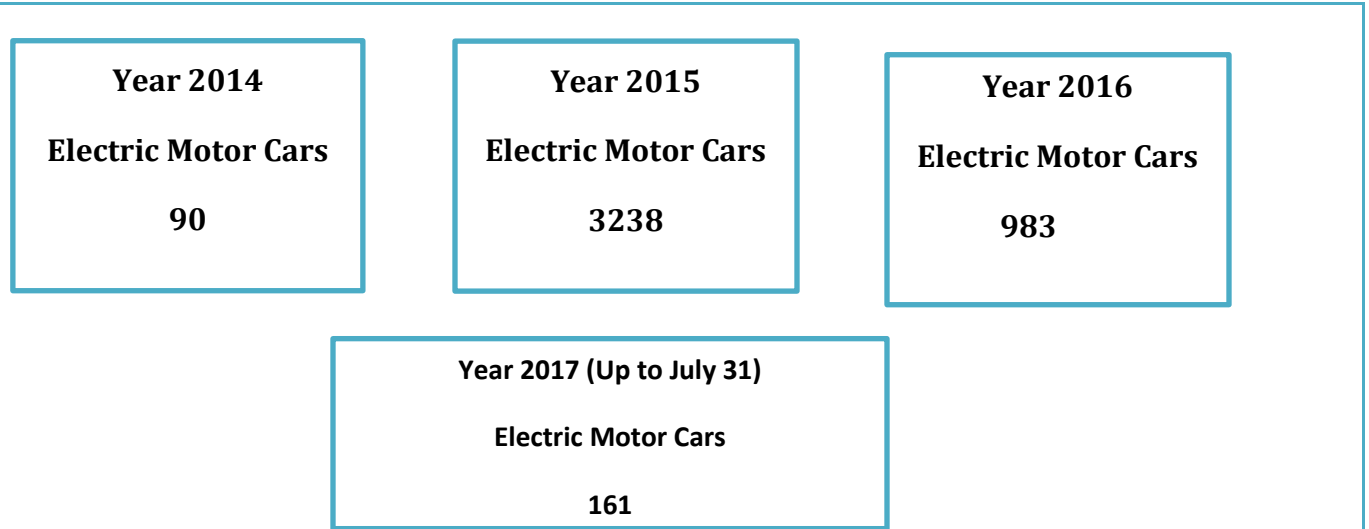
ELECTRIC VEHICLE INDUSTRY – SRI LANKA

Electric Vehicles

Registration of electric motor cars in Sri Lanka has increased from 90 in the year 2014 to 3,238 in the year 2015.

Total registration of electric motor cars from the year 2011-2016 is approximately 4,349.

Apart to a large number of electric motor cars, Sri Lanka also has limited numbers of electric motor tricycles, motor cycles, dual purpose vehicles and single cabs.



Source : Dep of Motor Traffic

Electric Vehicle Charging Centers

An electric vehicle charging station, also called EV charging station, electric recharging point, charging point, charge point and EVSE (electric vehicle supply equipment), is an element in an infrastructure that supplies electric energy for the recharging of electric vehicles.

As plug-in hybrid electric vehicles and battery, electric vehicle ownership is expanding, there is a growing need for widely distributed publicly accessible charging stations, some of which support faster charging at higher voltages and currents than those available from residential EVSEs.

Charging stations fall into four basic contexts in the global scenario:

Residential charging stations: An EV owner plugs in when s/he returns home, the car recharges overnight. A home charging station usually has no user authentication, no metering, and may require wiring a dedicated circuit. Some portable chargers can also be wall mounted as charging stations.

Charging while parked (including public charging stations) – a commercial venture for a fee or free, offered in partnership with the owners of the parking lot. This charging may be slow or high speed and encourages EV owners to recharge their cars while they take advantage of nearby facilities. It can include parking stations, parking at malls, supermarkets, small centres, and train stations (or for a business's own employees).

Fast charging at public charging stations- >40 kW, delivering over 60 miles (100 km) of range in 10–30 minutes. These chargers may be at rest stops to allow for long distance trips. They may also be used regularly by commuters in metropolitan areas, and for charging while parked for shorter or longer periods.

Battery swaps or charges in under 15 minutes

In a global context, battery capacity and the capability of handling, faster charging are both increasing, and methods of charging needs to improve. New options have also been introduced (on a small scale, including mobile charging stations and charging via inductive charging mats).

In the Sri Lankan context, increasing numbers of EVs driving on roads will create additional electricity demand, especially at peak times. One major requisite to popularize the use of electric vehicles is to have a well-functioning electric vehicle battery charging network (range of a typical Electric Motor Car is about 100-130 km without recharging).

Presently around 50 privately owned Electric Vehicle Charging Stations (EVCS) are operating in the country, covering all main towns, catering to the growing number of customers using electric vehicles but remain unregulated due to lack of proper legislation.

At present, there is no risk Insurance procedure for EVCS to cover public liability. Apart from that, charging meter accuracy, quality levels and inspections are not regulated in Sri Lanka.

ELECTRIC VEHICLE USERS

Sri Lanka presently does not have a rights and obligations statement to cover the electric vehicle users and therefore no dispute resolution procedure has been drafted.

TARIFF FOR ELECTRIC VEHICLES

All such dedicated EVCS could be given a relatively low 'Industry' category electricity tariff for their purchases.

However, commercial establishments have started electric vehicle charging as an additional service to attract customers for the core business and their purchase tariff would be 'General' category (relatively high), in most cases.

The tariff for charging EV's entails number of significant questions worth discussion, including;

- Whether to use time of use or flat rate structure or allow both,
- To which extent that the investments should be promoted, with respect to specific policy objectives of the government?
- How to discriminate fast charging and normal charging to promote one over the other, and whether to have time-based (as opposed to kWh based) rates as an option?
- How to discriminate EV charging networks from individual charging stations and whether to incentivize charging networks for additional services they offer?
- Whether to regulate end user tariffs by PUCSL or to simply control pass through tariffs of charging station owners and allow price competition between charging station operators?

LEGAL BACKGROUND

The Government empowered PUCSL to;

- a) Establish a register of EVCS at each Distribution Licensee- CEB and LECO,
- b) Issue code of practice for EVCS,
- c) Determine end user tariffs,
- d) Issue safety and other technical standards for EVCS and
- e) Collect information on a regular basis for monitoring purposes.

Also, the approval was granted to introduce amendments to the Sri Lanka Electricity Act enabling regulatory intervention on EVCS, enabling PUCSL to enforce user tariffs, licensing as well as imposing of safety and technical standards.

The new regulations aim to address these shortcomings and introduce measures to ensure sales meter accuracy, inspection, information collection for monitoring and consumer-complaint-handling procedure.

WAYS TO ENGAGE

Write to:

Public Consultation on Electric Vehicle Charging Stations
Public Utilities Commission of Sri Lanka,
Level 06, BoC Merchant Tower, 28,
St. Michael's Road,
Colombo 3.

Respond online by accessing PUCSL Website

Or Email to: consultation@puosl.gov.lk

Fax: (011) 2392641, **on or before 04th of October 2017**

A session for oral submissions will be held in the month of October, 2017. The date and venue will be notified soon.

The interested parties will be given the opportunity to present their views at the aforesaid session.

Therefore, you may specify your interest for oral submission along with the written submissions.

The Public Utilities Commission of Sri Lanka.
Level 06, BOC Merchant Tower, No. 28, St. Michael's Road, Colombo 03.
Telephone: (011)2392607/8 Fax: (011)2392641
Date: 13th September 2017