## GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH

## LOK SABHA STARRED QUESTION NO. 497 (TO BE ANSWERED ON 26.07.2019)

## **Central Electronics Limited**

\*497. SHRI DHAIRYASHEEL SAMBHAJIRAO MANE: SHRI SUDHEER GUPTA:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) the aims and objectives of establishment of Central Electronics Limited (CEL);
- (b) whether CEL has been successful in achieving its aims and objectives so far and if so, the details thereof;
- (c) the number of products developed by the CEL for the first time in the country through its own Research and Development institutions so far and the steps taken by CEL to improve its working; and
- (d) whether the CEL observed its 45<sup>th</sup> Annual Day recently, if so, the details thereof along with the programmes organized by the CEL to mark this occasion?

## ANSWER

MINISTER OF HEALTH AND FAMILY WELFARE; MINISTER OF SCIENCE AND TECHNOLOGY; AND MINISTER OF EARTH SCIENCES (Dr. HARSH VARDHAN)

(a), (b), (c) & (d): A Statement is laid on Table of the House.

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- (a) The objectives for which Central Electronics Limited (CEL) was established, interalia include:
  - i. to acquire and take over the Electronic Components Production Unit of the National Physical Laboratory together with the rights and liabilities of the Council of Scientific and Industrial Research (CSIR) as far as they relate to these units and also to, take over any project related to electronics components manufacture in any other research, education or production institution whether in the CSIR or other organizations;
  - ii. To acquire, for purposes of production, know-how developed in any CSIR or other Research and Development Laboratories, educational and /or production organizations in India in electronics instruments and systems.
  - iii. To carry on in India or elsewhere all kind of business relating to development, manufacture, assembling, trading, repairing, maintaining or any other product & services in the areas of electrical / electronic system & equipment, components for electronics systems and materials for electronics industry.
  - iv. To enter into any business related to renewable energy, including but not limited to production installation, commissioning, maintenance of power plant equipments, accessories and related material as well as marketing, sales, equipment and energy trading etc.
  - v. to develop, manufacture & trade in all type of specialized materials for strategic requirements including but not limited to defense, space, medical and nuclear energy applications.
  - vi. To run educational / training courses in technology related disciplines/ trades.
- (b) Yes, Sir. CEL is a pioneer in solar and renewable energy business in the country. It has developed several products and services in the area of solar business such as power plants of various capacities, solar water pumping Systems, Roof Top and Ground Mounted Solar Power Plants, Project Management consultancy, etc. CEL is also engaged in the business of Security Surveillance System. CEL procures the equipment from original equipment manufacturers (OEMs) and integrates this equipment into Integrated Security Solutions (ISS). Command and Control of such ISS solutions is

achieved through a CEL developed command and control system. The ISS solutions are provided for Transport (Rail, Metro, Road and Airport); Integrated solutions for Government & utilities (energy, Defence, oil and Gas); Building (Hospital, Industrial, schools); Smart citizen services (Education, Health, surveillance and traffic).

**CEL** has developed several products for the first time in the country (c) through its own R&D efforts as well as in collaboration with different CSIR and DRDO labs and other institutions. These include, the first solar cell and solar modules in 1977 & 1978 respectively, first solar power plant in 1992, Phase Control Module (PCM), LRDE (Electronics Radar & Development Establishment) for use in Rajendra Radar, Cadmium Zinc Telluride (CZT) for Defence applications and Axle counter for the use of Railway signalling systems. Recently, CEL has taken a number of technologies from different National Laboratories. institutions such as: Fused Silica Radome for Missile from DMRL/DRDO; Laser Fencing Systems from LASTEC/DRDO; and CVS Sensor from IIT Delhi and has developed products that are ready for commercialization. Further, higher end version of Axle Counters i.e. High Availability Single Section Digital Axle Counter (HASSDAC) and Multi Section Digital Axle Counter (MSDAC) have already been commercialised. CEL is also in the process of acquiring the technologies such as Divya Nayan from CSIO, Tetra Based RF Radios from CDEC, Long range surveillance equipments from IRDE, Drishti from CSIR-NAL and X-Band circulator and Switch Assembly from SAC-ISRO. Focus has been given for indigenous development of Defence products. The recent infrastructure development includes Automatic Solar Photovoltaic Module Production Plant having a capacity of 28 MWp. 1.2 MWp solar power plants in campus comprising of 550Kwh Battery Energy Storage System 1MW/500KWH, Admin complex having net zero energy, BIPV Car Parking, Solar Technology Park, BIPV Solar ware house and Green Campus Project having platinum rating by Indian Green Building Council. Further, revamping of HT & LT infrastructure has been done to save purchased power & Diesel consumption of the company.

CEL has taken several steps towards improving its working. CEL has introduced e-procurement, online tendering and adopted GeM for procurement and sale of CEL products, vendor evaluation/rating etc. for enhanced transparency. CEL is contributing towards the National Solar Mission by constantly developing innovative solar applications

such as light weight flexible modules, solar trees, solar smart poles, building integrated power plants for smart city application, mini-grid power plant for village electrification, large scale power plant (in megawatt), solar warehouse etc. for energy security of the country. CEL has also started short term training course as a skill development / entrepreneurship initiative for graduate pass outs.

(d) Yes, Sir. On the occasion of the 45<sup>th</sup> foundation day celebrated on 26<sup>th</sup> June 2019, India's first MW Scale Centralized Battery Energy Storage System, 1500 sq. meter Solar Technology Park and 200 KWp Solar BIPV Warehouse were dedicated to the Nation. CEL has also distributed tricycles, wheel chairs to the disabled persons under its Corporate Social Responsibility (CSR) activities.

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