



PUBLIC SECTOR ENTERPRISES

- 1: NATIONAL RESEARCH DEVELOPMENT CORPORATION (NRDC)**
- 2: CENTRAL ELECTRONICS LIMITED (CEL)**

2 CENTRAL ELECTRONICS LIMITED

2.1 INTRODUCTION

Central Electronics Limited (CEL) is a Public Sector Enterprise under the Department of Scientific and Industrial Research (DSIR), Ministry of Science & Technology, Government of India. It was established in 1974 with an objective to commercially exploit indigenous technologies developed by National Laboratories and R & D Institutions in the country. CEL is one of the companies that utilized home grown technologies during all these years of its existence. The Company is primarily engaged in production of strategic components for defence applications of national importance, equipment for railway safety and solar photovoltaic modules and systems.

The Company has developed a number of products for the first time in the country through its own R & D efforts and in close association with the premier National & International Laboratories including Defense Laboratories. In recognition of all these efforts, CEL not only have the distinction of being a DSIR recognized R & D Company, but also has been honored a number of times with prestigious awards including “**National Award for R & D by DSIR**”.

CEL has already established partnerships and linkages with various stake-holders and business associates in the areas of railways, telecom, police, power generation and distribution companies, service providers in the energy sector, public funded institutions and even rural communities through the state governments. The existing marketing channels are being consolidated and expanded harnessing the unique advantage CEL has experienced manpower in terms of its product base and PSU status.

The renewed mandate of CEL includes development and harnessing technology for **(i)** Solar Energy Systems and Solutions **(ii)** Strategic Electronic Components and systems required for Defense, Space, Atomic Energy. **(iii)** Signaling and Safety in Public Transport Systems **(iv)** Infrastructure, Eco-systems management and energy conservation and **(v)** Security and Surveillance in strategic establishments. CEL has been the pioneer in the country in the different areas of manufacturing & proprietary manufacturer of the many strategic electronic components for use by defense organizations in the country.

2.2 OPERATING RESULTS

The performance of the Company during the financial year 2018-19 is as under:-

(Rs. in Crore)

Year	2017-18	2018-19
Production	211.05	229.73
Sales	221.27	232.55
Gross Margin	39.95	11.69
Gross Profit	35.83	7.21
Profit Before tax (PBT)	13.37	4.07
Net Profit after Tax (PAT)	21.70	1.69



Dr. Shekhar C. Mande, Director General CSIR and Secretary DSIR lighting lamp on 45th Foundation Day of CEL in presence of Dr. Nalin Shinghal CMD, CEL and other dignitaries



2.3 MAJOR ACHIEVEMENTS (2018-19):

- The Company has achieved production of Rs. 229.73 Crore and turnover Rs. 232.55 Crores.
- **Microwave Electronics Division (MED)** - achieved sales of Rs. 32.09 Crore and production of Rs. 37.31 Crore in 2018-19 as against sales of Rs. 86.46 Crore and production of Rs 81.06 Crore in 2017-18. Decline in turnover is mainly due to non receipt of order from Bharat Electronics Limited (BEL) for supply of Phase Control Modules (PCMs) for Akash Missile Programme.
- The Company has achieved the Gross Margin of Rs. 11.69 Crore against Rs. 39.95 Crore in the previous year.
- The Net profit after tax was Rs.1.69 Crores against Rs. 21.70 Crores in the previous year .
- Company has taken up R&D projects in key areas such as:
 - a) Development of a range of solar applications including smart trees, flexible solar panels, BIPV solutions, portable power plants etc.
 - b) Development of high efficiency solar cells.
 - c) Upgradation of existing products of Railway Signaling systems and development of new products.
- Development of a range of components & sub-systems for defense requirements.

2.4 SWACHH BHARAT ABHIYAN

Company has implemented Swachh Bharat Abhiyan whole heartedly. Regular cleaning drives are taken up with participation of employees for cleanness of both inside and outside the factory premises



Dr. Shekhar C. Mande , Director General CSIR and Secretary DSIR dedicating Battery Energy Storage System in presence of Dr. Nalin Shinghal CMD, CEL, Sh. B.N. Sarkar , Scientist G, DSIR and other.

2.5 FUTURE STRATEGY FUTURE OUT LOOK & VISION 2020

All the four areas that the Company operates in (viz. Solar Photovoltaic, Railway Signaling systems, Integrated Security & Surveillance Systems and Defense Electronics) are Per-Se high growth, core sector areas.

SOLAR PHOTOVOLTAICS (SPV)

The Government of India has increased the target for implementation of renewable energy under National Solar Mission to 175 GW by the year 2022. The Company is making efforts to enhance solar PV business in Off-Grid/Grid Interactive Power Plants Defence sector, educational institutions etc. under National Solar Mission directly as well as through channel partners. The “Swachh Bharat Abhiyan” has a big requirement of solar powered water pumping systems in the remote areas of the country.

Government of India is also focusing on implementation of Solar Water Pumping all over India. The division has ventured into application arena and has developed multiple products like Pedal Assisted Solar



e-Rickshaw & Floating Solar Panels. It is expected that company will be able to create a niche for itself with the above products.

During the year under review, the Company is able to secure its biggest off grid order titled "Supply of Stand Alone Solar Off grid LED street lighting system in PAN India basis under Atal Jyoti Yojna" with the total value of Rs. 172.70 Crores from Energy Efficiency Services Limited (EESL).

RAILWAY SAFETY & SIGNALING SYSTEMS

CEL had been engaged in design and manufacture of Railways signaling equipment such as Analog and Digital Axle Counters & Block Signaling Equipment for last 30 years.

Indian Railways is planning major investment in the area of safety as well as capacity enhancement / new lines. This is expected to result in a huge demand for signaling and control equipments. CEL is working towards further developing its own R&D as well as production facilities in these areas, with support from the DSIR.

STRATEGIC ELECTRONICS

CEL is involved in the development & production of strategic electronic components such as Phase Control Modules (PCMs) for the Radar systems, Piezo fuse assemblies for High Explosive Anti Tank (HEAT) ammunition. The Company has signed ToT agreement with DRDO/DMRL for Ceramic Radome for Seeker Missiles. The Company is also making all efforts to further expand the product portfolio through various new products. CEL has started production of Divya Nayan (text to audio conversion device) for blinds with technology support from the CSIO-CSIR.

The Company has received TOT of Laser Fencing System from LASTEC DRDO recently and the same is being productionized for border perimeter security. Further it is in process of getting TOT on (a) Underground sensor (b) Long range surveillance (c) Thermal imaging camera etc for contributing to making Cross Border Integration System (CBIMS) which will meet a major requirement of guarding our land borders .

INTEGRATED SECURITY SYSTEMS

The current security scenario in the country has made security systems (Including Baggage Scanners, DFMDs surveillance equipment, intelligent systems, Bomb detection and disposal equipment etc.) a very high growth area. There is a need for reputed and reliable Public Sector entities in these areas. The Company is focusing on this area as an important business segment for future growth.

2.6. FOREIGN EXCHANGE EARNING AND OUTGO

During the year under review, CEL has spent Rs 7.06 Crore in foreign exchange as against Rs. 15.04 Crore in the previous year towards purchase of raw material, components and spares, capital goods, travel and agency commission etc. CEL earned foreign exchange of Rs.0.74 Crore as against Rs. 2.21 Crore in the previous year from export of its products.

2.7 CONSERVATION OF ENERGY

The Company continues its efforts to reduce energy consumption with the Objective of optimal use of energy resources and cost reduction to the Company. Keeping as the philosophy that "ENERGY SAVED IS ENERGY PRODUCED, the Company has installed and commissioned multiple



in-house Solar Photovoltaic Power Plants having total capacity of 1.3 MWp. The renewable energy portion in total electricity consumption has been increased upto 60% during March, 2019.

CEL became the first consumer in UP to install net-metering at 33 KV supply voltage. The net metering system for the 1.3 MWp solar photovoltaic power plants installed in CEL exports its surplus electricity generated through the solar power plants to UPPCL grid. Further CEL has drastically reduced the diesel consumption in comparison of last four years.

2.8 PARTICULARS OF EMPLOYEES:

In terms of the provisions of Section 197 (12) of the Act read with Rules 5(2) and 5(3) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, none of the employees of CEL either employed throughout the year or employed for a part of the year was in receipt of remuneration more than that minimum prescribed in the Rules.

However as per the provisions of Section 197 of the Companies Act, 2013 and rules made there under Government Companies are exempted from inclusion of the statement of particulars of employees.

2.9 IMPLEMENTATION OF HINDI, INDUSTRIAL RELATIONS :

CEL continues to implement the Official Language policies of the Government through motivation and incentivization. Employees were imparted training in usage of Hindi in computer applications. A Hindi month has also been organized from 14.09.2018 to 13.10.2018.

During the Hindi month, competitions in Hindi, in the areas of General Knowledge,

Poetry & Hindi Speech were organized for workers and Officers belonging to Hindi and non-Hindi areas. In-House Hindi Magazine named "Hamara CEL" is also published. The Annual Report of CEL is also regularly published in diglot form in compliance of DPE guidelines and employees are encouraged to use Hindi in official correspondence.

2.10 WELFARE OF RESERVED CATEGORIES:

All Government directives relating to the reserved categories such as SC, ST, Physically Handicapped, Ex-Servicemen etc. are followed by the Company.

2.11 IMPLEMENTATION OF RTI ACT

Government of India has enacted the Right to Information Act (RTI) 2005 with a view to bring-in transparency and accountability in the working of Public Authorities. CEL has evolved necessary structure to facilitate implementation of the RTI Act in the Company. Information Officer has been appointed and an Appellate Authority has been designated for smooth implementation of various provisions of the RTI Act. Necessary information has also been posted on the website of the Company www.celindia.co.in. During the year (2018-19) 68 Applications were received out of which 62 applications were replied and 6 applications were rejected under the RTI Act 2005.

2.12 MATERIAL DEVELOPMENTS IN HUMAN RESOURCES, INDUSTRIAL RELATIONS FRONT, INCLUDING NUMBER OF PEOPLE EMPLOYED

Industrial relations continued to be harmonious during the year. The Company has imparted training to the workmen and executives in their related fields, which has been helpful in development and growth of



employees. Process of regular recruitments at various levels has been put in place keeping with the Company's growth & technology needs.

All Government Directives relating to the reserved categories such as SC, ST, Physically Handicapped, Ex-servicemen etc. continue to be implemented during the year. Total number of employees on rolls of the Company as on 31.3.2019 is 366.

The particulars of SC / ST and other categories of employees as on 31 March 2019 are as under :

Categories of Employee	As on 31.03.2019	
	Executives	Non Executives
SC	22	55
ST	NIL	NIL
OBC	10	17
PH	4	8
General	129	121

