Draft Detailed Project Report

Gurugram Decorative Lighting Cluster

Submitted to,

Department of Industries and Commerce Government of Haryana (for assistance under Mini Cluster Scheme) Report No. 2018-CHD-00 Jan 2018

Submitted by, Gurugram Decorative CFC Private Limited

Prepared by, Ernst & Young LLE Under the project: MSME Ecosystem Transformation in Haryana 20 December 2017

Director Department of Industries & Commerce, Government of Haryana 1st Floor, 30 Bays Building, Sector 17, Chandigarh

Dear Sir/Madam,

As part of our engagement for providing consulting services for 'MSME Ecosystem Transformation in the State of Haryana', we hereby submit the Draft Detailed Project Report (DPR) for setting up of Common Facility Centre (CFC) at Decorative Lighting, Gurugram for your kind perusal. The deliverable has been prepared in accordance with our engagement agreement with Directorate of Industries, Govt. of Haryana dated 3rd January 2017, and our procedures were limited to those described in that agreement.

This Detailed Project Report is based on studies of and discussions with:

- Directorate of Industries, Govt. of Haryana
- DIC Gurugram
- Members of Gurgaon Industrial Association
- Decorative lighting product manufacturing units located in Gurugram
- Industry experts
- Secondary research

Our work has been limited in scope and time and we stress that more detailed procedures may reveal other issues not captured here. The procedures summarized in our Draft Detailed Project Report do not constitute an audit, a review or other form of assurance in accordance with any generally accepted auditing, review or other assurance standards, and accordingly we do not express any form of assurance. This draft Detailed Project Report is intended solely for the information and use of the Office of Director Industries-Haryana and is not intended to be used by anyone other than specified party.

We appreciate the cooperation and assistance provided to us during the preparation of this report. If you have any questions, please contact the undersigned.

Sincerely,

Amar Shankar, Partner - Advisory Services

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Also, we must extend our sincere thanks to decorative lighting entrepreneurs and other key stakeholders who gave us their valuable time and insights with respect to various dimensions of the industry and its support requirements. Without their help, capturing of the industry insights would not have been possible.

Abbreviations

BDS	Business Development Services
BIS	Bureau Of Indian Standards
BMW	Bayerische Motoren Werke
BPO	Business Process Outsourcing
CAGR	Compound Annual Growth Rate
CFC	Common Facility Centre
CFL	Compact Fluorescent Lamp
CII	Confederation Of Indian Industry
CNC	Computer Numerical Control
CNY	Chinese Yuan
DIC	District Industries Centre
DOEACC	Department Of Electronics And Accreditation Of Computer
DPR	Detailed Project Report
ELCOMA	Electric Lamp & Component Manufacturers' Association Of India
EPP	Enterprise Promotion Policy
ERP	Enterprise Resource Planning
Fl's	Financial Institutions
GDP	Gross Domestic Product
GIA	Gurgaon Industrial Association
GLS	General Lighting Service
GSDP	Gross State Domestic Product
GSVA	Gross State Value Added
GW	Giga Watt
НЕРВ	Haryana Enterprise Promotion Board
HFC	Haryana Financial Corporation
HID	High Intensity Discharge
HP	Hewlett Packard
HSIIDC	Haryana State Infrastructure & Industrial Development
HSPCB	Haryana State Pollution Control Board
HUDA	Haryana Urban Development Agency
IBM	International Business Machines
ICL	Incandescent Lamp
IDBI	Industrial Development Bank Of India

IECT	Information, Electronics & Communications Technology
INR	Indian National Rupee
IT	Information Technology
ITI	Industrial Training Institute
LED	Light Emitting Diode
LMCS	Lean Manufacturing Competitiveness Scheme
MOE&IT	Ministry Of Electronics & Information Technology
MSME	Micro, Small And Medium Enterprise
MW	Mega Watt
NCR	National Capital Region
NH	National Highway
NIELIT	National Institute Of Electronics & Information Technology
NSIC	National Small Industries Corporation
OEM	Original Equipment Manufacturers
PAN	Presence Across Nation
РСВ	Printed Circuit Board
R&D	Research & Development
SEBI	Securities And Exchange Board Of India
SLSC	State Level Steering Committee
SPV	Special Purpose Vehicle
SST	Salt Spray Test
SWOT	Strengths, Weaknesses, Opportunities And Threats
UAE	United Arab Emirates
UP	Uttar Pradesh
USA	United States Of America
USD	United States Dollar
VAT	Value Added Tax
w.e.f.	With Effect From
WPR	Work Participation Rate

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Executive Summary



Executive summary

The Government of Haryana through the Department of Industries and Commerce intends to transform the MSME sector of the state and put it on a growth path. Several incentives have been offered under the state's ambitious 'Enterprise Promotion Policy (EPP) 2015' to provide an impetus to growth of the MSME sector. Towards this, the state aims to strengthen the technology infrastructure as well as enhance productivity and competitiveness of various MSME clusters across the state by leveraging funding under the State Mini Cluster Scheme providing grant under its EPP 2015.

In this context, this Detailed Project Report (DPR) has been prepared to seek grant-in-aid assistance under the State Mini Cluster Scheme to set up a state-of-the art Common Facility Centre (CFC) in Decorative Lighting at Gurugram District, Haryana.

About the Gurugram Decorative Lighting Cluster

The lighting fixture market in India is expected to grow at the CAGR of 17% during 2013-2018. The Indian lighting industry has seen a growth of 59% growing from Rs. 8500 crore in 2010 to Rs. 13500 crore in 2013. This has been due to the move of use of LEDs and CFLs from GLS lamps. However, the lighting usage continues to be a high 18% of the total power consumption which is much higher than that of the developed countries, which account for 12-15%. The shift from GLS to adoption of energy efficient products and systems will help a lot in the reduction of the energy consumption. Prices of LED lights are also expected to decline in the coming years, which would drive the growth of the market over the next six years. India has been very successful in the manufacture of CFL and this can be replicated for LED as well. Further, Indian manufacturers has potential to become more cost competitive v/s China because of the increasing labour costs in China compared to India and a weakened INR v/s a strengthening CNY. The northern region accounted for the largest revenue share in the country in the year 2015-16, followed by Southern region. As per the current trends because of the ongoing government initiatives to promote LED lighting as well as consumer preferences, the LED market will grow to Rs 21600 crore by 2020, an exponential growth of 41% CAGR from Rs 1925 crore in 2013, making LED market 60% of the total lighting industry in 2020. This can be seen from the graph, also the CAGR for GLS is -10% for the period 2013-2020. The CFL market is also going down and LED is replacing it as the major lighting technology in the coming times. The LED industry is projected to grow greatly on the back of the initiatives being taken by the government. It is expected to be approximately 60% of the overall lighting industry by 2020.

The Gurugram decorative lighting cluster houses around 65 units across the entire value chain. These units are scattered across the city. The units are manufacturing a range of products such as Chandeliers, Pendants, Wall Lights, Floor Lamps, wall lamps, Outdoor lights etc. Most of the units are in the micro segment with a few in the small scale. Most of the units are selling their products through their own brand names and some are manufacturing for large players. The units are dependent on manual operations and obsolete technologies to manufacture their products. None of the micro units have in house facilities for finishing of products and they are relying on private player based primarily in Uttar Pradesh (UP) to get the finishing done on job work basis. Additionally, none of them

have an in house testing lab to test their raw materials or finished products, resulting in frequent rejection of products at the buyer's end.

The decorative lighting sector has a large scope of growth in a developing country like India. The cluster units will have a tremendous potential to expand their production capacities, if they acquire modern finishing machines.

Diagnostic Study and Interventions

A diagnostic study was undertaken by the cluster members in Septemeber 2017 to map the existing business processes in the cluster, identify the gaps, and understand the requirements of the cluster. The diagnostic study report (DSR) was compiled by the cluster stakeholders in close coordination with the District Industries Centre, Gurugram. The awareness level of the cluster units (on new electroplating technologies, new testing technologies, advance machining centre & cluster development initiatives, etc.) was found to be low. Additionally, it was observed that most of the cluster units deploy out-dated technologies and are unable to meet the requirements of the market due to lack of availability of modern machines/nequipment. The quality of products is ordinary due to dependence on manual techniques and conventional machines. Due to non-availability of testing lab facilities, units are unable to test the raw materials and finished products. These were the major pain areas that necessitated an urgent intervention. In this context, the units decided to establish a CFC.

The DSR was validated by the Director Industries & Commerce of Haryana on 25th October 2017 at New Delhi and was subsequently accepted & approved on 21st Novemeber 2017. The DSR approval letter is provided in the **Annexure-1**. The SPV was granted permission to go ahead with preparation of Detailed Project Report (DRP) for the cluster.

Proposed Common Facility Centre

The proposed CFC will facilitate:

- Testing facilities to ensure consistency and uniformity of the decorative lighting products
- > Testing for conformity issues against standards such as quality and purity
- Electroplating plant for Silver, Crome, Gold & Brass plating
- > Job work facility with modern machinery for decoravtive ligthing products

Such a common facility will both supplement and complement the activities of firms in the cluster, and there is no similar facility available in the district for use by cluster micro enterprises. The proposed common facilities will be utilized by the SPV members and will also be available to non-members units within and outside the cluster. The facility will provide a much needed infrastructural push to the cluster units and will enable them to become more competitive.

Special Purpose Vehicle for Project Implementation

After the diagnosis study, the cluster units came together to form a Special Purpose Vehicle (SPV) by the name and style of '**Vyaso Gurugram Decorative Lighting Cluster Pvt Ltd**.' The SPV has been set up as a private limited company under section 8 of the Companies Act, 2013 and rule 7 of the Companies (Incorporation) Rules, 2014. DIC, Gurugram has played an important role in SPV formation by cluster stakeholders. The SPV already includes about 11 members who are subscribing to the necessary equity base of the company. The proposed CFC will be implemented on public-private partnership basis through the SPV '**Vyaso Gurugram Decorative Lighting Cluster Pvt Ltd**.' by availing support from Government of Haryana (under EPP 2015).

The SPV members have a track record of cooperative initiatives. SPV members are also members of prominent cluster associations. Cluster members have been autonomously undertaking several soft interventions to enhance knowledge and exposure of the cluster units on new trends in decorative lighting industry and enhancing productivity of their units. This includes exposure to cluster development initiatives in other clusters, exposure visits to fairs, registration under UAM, lean manufacturing techniques, design interventions and new technologies. These programs were conducted by the SPV itself.

Project Parameters, Viability and Sustainability

The Gurugram Decorative ligthing Cluster CFC Limited with support from State Government (under the Mini Cluster Scheme) is planning to set up a Common Facility Centre having stateof-the-art decorative lighting and testing facilities to undertake job work of cluster units with a total project cost of about **Rs. 219.32 lakhs**. However, the maximum eligible project cost as per the scheme guidelines is Rs 200 lakhs, with government of Haryana's grant restricted to 90% of max eligible project cost i.e. to Rs 180 lakhs. Hence, the SPV members have proposed to contribute entire amount beyond Rs. 180 lakhs, taking their overall contribution to about **19.82% of the total project cost**. The total contribution of SPV members will amount to **Rs. 43.48 lakhs**. Support from State Government is envisaged for **Rs. 175.84 Lakhs**.

	PROJECT COST						
S. No.	Particulars	Total Project Cost	Amount as per Guidelines	Remarks			
1	Land & Building						
	a. Land Value	0.00		Fligible			
	b. Land Development	0.00	0.00	Eligible			
	c. Building & Other Civil Works	0.00		total of I&B			
	d. Building Value	0.00		P&M. and			
	Sub Total (A)	0.00	0.00	Misc. F.A.)			
2	Plant & Machinery			Eligible			

The cost of the project and proposed means of finances is tabulated below:

(De in Lakh)

	a. Indigenous	150.07		
	b. Imports	39.21	198.80	
	c. Secondary Machines	9.51		
	Sub Total (B)	198.80	198.80	
3	Miscellaneous fixed assets (C)	2.00	0.00	
4	Preliminary & Preoperative Expenses (D)	6.30	0.00	
5	Contingency			
	a. Building @ 2%	0.00	0.00	Not eligible
	b. Plant & Machinery @ 5%	9.94	0.00	for grant
	Sub Total (E)	9.94	0.00	
6	Margin money for working capital			
	(Working capital required @ 75% C.U.)	5.94	0.00	
	Sub Total (F)	5.94	0.00	
	Grand Total (A+B+C+D+E+F)	222.97	198.80	

The actual total project cost is estimated to be Rs. 222.97 lakhs. As indicated above, assistance to the project from the Govt. of Haryana is envisaged to the tune of Rs. 178.92 lakhs. SPV contribution is to the tune of Rs. 44.06 lakhs (over 19.75%) of the total project cost. The means of financing are presented below:

		Project cost upto INR 200.00 lakhs (max eligible as per scheme)		Project cost o 200.00 la	Total	
S. No. Source of finance		Percentage Contribution	Amount (INR in lakhs)	Percentage Contribution	Amount (INR in lakhs)	(INR in lakhs)
1	Grant-in-aid under Mini Cluster Scheme (Govt. of Haryana)	90	178.92	0	0	175.84
2	Contribution of SPV	10	19.88	100	24.18	44.06
	Total	100	198.80	100	24.18	222.97

The viability and sustainability of the project is evident from the project economics as well as the cooperative spirit and profile of the SPV. Some indicators of the viability are as follows:

Project's financial indicators

S. No.	Particulars	Estimates
1	BEP (cash BEP at initial operating capacity of 75%)	59.95%
2	Av. ROCE (PAT/CE)	29.61%
3	Internal Rate of Return (IRR)	24.80%
4	Net Present Value (at a discount rate of 10 per cent) - incorporating viability gap funding (grant) by GoH	NPV is positive and high (Rs. 163.36 lacs) at a conservative project life of 10 years
5	Payback period	4.84 years with Grant-in-aid assistance from GOH
6	DSCR	Not Applicable (non- availment of term loan in this project)

As evident from the financials above, with viability gap funding under Mini Cluster Scheme of GoH, the project is highly viable and sustainable. The project is expected to generate surplus from the fourth year of operation. Risk and sensitivity analysis considering a decline in user charge/ capacity utilization also validates the project sustainability.

Project Implementation

Project implementation is envisaged to involve a time-frame of about 10 months upon receipt of approval of grant-in-aid assistance from the Government of Haryana under State Mini Cluster Scheme. The project will be implemented by the SPV in close association with DIC, Gurugram. It is proposed to constitute a Cluster Development Coordination Committee (CDCC), constituted under the Chairmanship of Director of Industries, Government of Haryana to oversee all cluster development projects in Haryana under State Mini Cluster Scheme. The committee may operate under the overall monitoring of the State Level Steering Committee (SLSC).

In addition, for implementing this CFC project, a Project Management Committee (PMC) comprising of the GM, DIC Gurugram, and representatives of the SPV, Syndicate Bank, and EY experts shall be constituted to directly oversee effective monitoring and implementation. The project will be implemented through the SPV, and the PMC will report progress of implementation to the CDCC as well as State Level Steering Committee and DIC, Gurugram.

The potential for the Gurugram Decorative cluster to grow is enormous, with an increasing demand of decorative products in the region. The strengths of the Gurugram Decorative cluster lie in its location (both geographically & industrially), with a thriving food processing, agro & pharmaceutical industry in the region. However, the cluster units are unable to effectively cater to these market segments due to lack of technological capacities, low production scales and outdated processes.

This cluster has the ability to increase its output and market share by manufacturing high quality products. The proposed facility will be open to all cluster firms to enable them to get

job work done in order to cater to the Decorative product requirements of the market. The facility will also provide an opportunity to micro units to increase their capacity utilization and profitability. The facility will provide a major infrastructural push to the units reeling under high competition. The CFC will also enhance the co-operation and joint action among cluster stakeholders to improve their competitiveness to meet the demands of the domestic as well as international markets.

Introduction



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1. Introduction

1.1 Overview of the cluster

Decorative lighting products comprises of LED designer lighting products, Chandeliers, Pendants etc. that are catering to the ever growing aesthetic needs of global Indians. The industry is at present fragmented with a presence of a number of micro and small enterprises.

The Gurugram decorative lighting cluster houses around 65 units across the entire value chain. These units are scattered across the city. The units are manufacturing a range of products such as Chandeliers, Pendants, Wall Lights, Floor Lamps, wall lamps, Outdoor lights etc. Most of the units are in the micro segment with a few in the small scale. Most of the units are selling their products through their own brand names and some are manufacturing for large players. The units are dependent on manual





operations and obsolete technologies to manufacture their products. None of the micro units have in house facilities for finishing of products and they are relying on private player based primarily in Uttar Pradesh (UP) to get the finishing done on job work basis. Additionally, none of them have an in house testing lab to test their raw materials or finished products, resulting in frequent rejection of products at the buyer's end.

The decorative lighting sector has a large scope of growth in a developing country like India. The cluster units will have a tremendous potential to expand their production capacities, if they acquire modern finishing machines.

1.2 Economic Scenario of the State

Haryana is 11th state in the country in terms of GSDP, with growth rate of around 6.5%. Haryana contributes to nearly 3.4% of the India's GDP. With just 1.37% of the country's geographical area and 1.97% of country's total population, the state is counted among the top few states with the highest per capita income. The state economy is predominantly agriculture.

The industry sector contributes about 18% of the total GSDP of the state.





Haryana is fast emerging as one of the most favoured investment destinations in India. The globalization of markets and a resilient economy have given an incredible drive to the industrial sector in Haryana, which already has a competitive advantage in terms of strategic location, basic infrastructure, and a large skilled, educated and young workforce. Besides, the State has an investor-friendly policy and regulatory environment. It is one of the leading states in terms of industrial production, especially passenger cars, mobile cranes, two-wheelers & tractors. It is the 2nd largest contributor of food grains to India's central pool, accounts for more than 60% of the export of basmati rice in the country, and is 3rd largest exporter of software.

The state is in transition from agrarian to manufacturing sector. The state is gradually transforming from an agrarian economy to an industrial economy. To boost the growth rate further and make Haryana a favourable investment destination, the state has developed the Enterprise Promotion Policy in 2015. With the EPP-2015, the state has envisaged a sustainable industrial spectrum in the state with a special focus on MSMEs in its endeavour for effecting a balanced regional and sustainable development. In order to accelerate the industrial growth in the state, the focus of the government is on holistic development, i.e. by encompassing initiatives for resource efficiency improvement, smarter technology and environment friendly methods which reduce resource consumption.

1.3 Industrial Scenario of Gurugram District

Gurugram has been one of the leading industrial districts of Haryana, a favourite place for setting up of an industry; this is due to its proximity to Delhi and its location on the Delhi-Mumbai Golden Quadrilateral road. The growth of MSEs in the district is in the right direction because of the presence of huge number of large, scale and medium scale industries. There are now more than 25,000 small, medium and large industries in this complex providing direct and indirect employment to nearly 3.5 lakh people. The combined turnover is estimated to be about Rs. 126 billion. Gurugram is a home to many industrial sectors like auto parts, auto rubber parts, leather goods and garments etc. Many international/ multinational companies like Maruti-Suzuki, Bosch, BMW, Delphi Automotive, Sony, Carrier etc are operating in this belt. It is also a major Information Technology (IT) hub and centre of various BPO companies like IBM, HP, Dell, Microsoft, Nokia etc. From this we can infer that many multinational companies are expanding their operations in Gurugram because of the growth trend of this district and the resources available here. Table 1 gives a glance of the Industry in Gurugram:

1.4 Geographical Traits

Gurugram is located at 30 km south of national capital New Delhi, about 10 kilometres from Dwarka sub-city and 268 km south of Chandigarh, the state capital. It was created on 15 August, 1979 and it is the southern-most district of Haryana. River Yamuna forms the eastern boundary of the district and flows from north to south. The district is a part of the Indo-Gangetic plains and has a well spread network of the western.

The district lies between 27°39' and 28°32'25" latitude, and 76°39'30"and 77°20'45" longitude. On its north, it is bounded by the district of Rohtak and the Union Territory of Delhi. Faridabad district lies to its east. On its south, the district shares boundaries with the

states of Uttar Pradesh and Rajasthan. To its west lie the district of Rewari and the State of Rajasthan. Gurgaon town is about 32 km away from New Delhi, the National Capital of India. Delhi-Gurgaon Expressway, a 28 km long access-controlled toll expressway connecting Delhi and Gurgaon on National Highway 8 is the major highway in the district; the expressway is part of the Golden Quadrilateral Project which connects Delhi to Mumbai. Gurugram is served by Indira Gandhi International Airport, which is located at 10km from the city. Gurugram is also connected with other major cities by railways and Gurgaon railway station is the major station present here. Hence, the district is well connected with the rest of the country through various roads and other transport mediums.

1.5 Demographic Trends

Over the past two decades, the city has undergone rapid development and rapid construction has taken place here. The District is one of Delhi's four major satellite cities and is part of the National Capital Region. It is within commuting distance of Delhi via an expressway and Delhi Metro. The District is the second largest city in the state of Haryana and is the industrial and financial center of Haryana. The district derived its name from the name of Guru Dronacharya; the village was given as gurudakshina to him by his students; the Pandavas and hence it came to be known as Guru-gram, which in course of time got distorted to Gurgaon. Thus, the district has been in existence since the times of Mahabharata. The district is surrounded by Delhi & Rajasthan.

Demographic Trends

Gurgaon is the largest city in the district, and one of the major industrial hubs of the state as well as North India. Large and renowned brands have their manufacturing facilities in the district. The district has an approximate area of 1258 Sq.Km. and as of 2011; Gurugram had a population of 1,514,4321. The data released by census India 2011, shows that population density of Gurugram district for 2011 is 1,204 people per sq. km. Average literacy rate of Gurugram in 2011 was 84.70 compared to 78.50 of 2001. In Sex Ratio in Gurugram stood at 854 per 1000 male compared to 2001 census figure of 850. Out of the total Gurugram population for 2011 census, 68.82 percent reside in urban regions of district. In total 1,042,253 people live in urban areas. In terms of literacy Gurugram stands at 1st place across Haryana. The literacy rate in 2011 was 84 per cent whereas it was 78 per cent during 2001 Census. The literacy rate amongst male population which was 88 per cent during 2001 has increased to 90.5 per cent. The literacy rate has also shown an increase amongst female population. During 2001 it was 67.4 per cent and it reached 78 percent during 2011.

Among NCR districts (excluding Delhi) Gurugram has the highest GDP followed by Faridabad. Gurugram has highest per capita Income in Haryana sub-region of NCR with INR 229208 followed by Faridabad with INR 106896; while It has the 3rd highest per capita income in India after Chandigarh and Mumbai. Auto ancillary industries form a major chunk of the industrial units present in the region.

Haryana Urban Development Authority (HUDA) and Haryana State Industrial and Infrastructure Development Corporation (HSIIDC) have multiple industrial estates and areas in the district which house facilities belonging to a plethora of sectors. The district has positioned itself as an industrial hub for sectors such IT and auto & auto-component manufacturing with a major chunk of industrial units in these sectors. The district has local offices for more than 250 fortune 500 companies.

Sector Overview



2. Sector Overview

The Decorative Lighting industry is evolving rapidly owing to the lifestyle needs of growing urban population in India. The market for decorative lighting industry is currently fragmented and is also flooded with unbranded cheap imports, predominately from China.

The decorative lighting industry is often defined as the 'jewellery of architecture'. In many building types, decorative lighting plays a significant role in building style, period, or motif. The primary purpose of decorative lighting is ornament to the space, and it plays an extremely important role in interior design and themed environments. Most decorative luminaires are often used in dry indoor spaces only. Only a few types which can be exposed to rains are used for outdoor purposes notably lanterns and some sconces are wet-labelled, meaning that they can be exposed to direct rain. The majority of decorative lights emit lower light so, they are not suitable for lighting purposes rather they serve the purpose of decoration only. Many lighting designers, for example, add accent lights to illuminate the table (task lighting) in a dining room that already has a chandelier.

Decorative lighting includes chandeliers, sconces, lanterns, pendants, lamps, ceiling surface lights, and other traditional lighting types that are mostly decorative in nature. Majority of these are mentioned below:

- Chandeliers
- Pendants are also ceiling-hung decorative fixtures.
- Close-to-ceiling luminaires
- Sconces or decorative wall-mounted luminaires.
- Torchièrs are floor lamps
- Lanterns are outdoor luminaires mounted to ceilings, walls, posts, or poles.

The Rs. 8,000 crore lighting market is growing at 12 to 14 percent growth rate per annum. Decorative lighting contributes to almost 6 percent of this market. China, USA and European countries are the leading players in this segment and there is no other country in competition with them in current era. However, the quality of the decorative lights produced in China is low whereas the quality, decorativeness and versatility of major International brands like Philips, General Electric and Osram is better and due to these reasons they dominate the high-end market, supplying mainly to corporate clients such as upmarket communities, villas, hotels and government facilities as well as a small number of high-end individual consumers.

2.1 Brief Global Scenario

The major markets of decorative lighting includes North America, Europe and China. The middle-east countries comprising Saudi Arabia, UAE, Bahrain, and other countries like Singapore, South-Korea and India are the other market players in this industry. The decorative lighting uses Incandescent bulbs, Halogen lamps, Fluorescent lights and LED lights for operation, but due to the high requirement of energy efficiency the global companies are trying to decrease the use of Incandescent bulbs and halogen lamps so as to save energy and more focus is given to LED lights. A lot of innovation and research has gone into the sector, only to increase the use of LED lights for the decorative purposes.

The decorative lighting market is highly competitive and consists of numerous players offering various products with different designs, patterns, smart lighting, and LED technology. The global fancy LED market accounted for USD 26.09 billion in 2016 and is anticipated to witness a colossal growth and will reach USD 54.28 billion by 2022, growing at a CAGR of around 13% over the period of 2017 & 2022. The increasing need for low power consumption across the globe is one of the most significant factors propelling the growth prospects for this market.





Figure 2: Global Annual Market of LED

Figure 3: Market Share of LED Lighting

With the growing awareness of eco-friendly technologies, manufacturers are increasingly focussing on the production of energy-efficient, LED lights. Moreover, LEDs contain solid mercury content, which is less likely to pollute the environment than the liquid mercury in incandescent bulbs. These attributes coupled with long working life and reliability have made them the suitable choice for the next generation of lighting systems including emergency, automotive, backlight, outdoor and indoor. With several governments around the world banning the use of incandescent bulbs, including China, and promoting the

adoption of LED lights, the market for LEDs is set for a rapid growth in the coming years. Residential application segment dominated the fancy LED lighting market and accounted for over 40% of market share in 2016. Residential applications of fancy LED lighting include lighting for kitchens, bathrooms, bedrooms, hallways, dining rooms and backyard areas. Increasing use of LED lighting for outdoor application such as tunnels, traffic lights, parking, roadways and garages is expected to provide remarkable growth opportunities to this market in the coming years. LEDs application includes both functional and decorative lighting. Europe and North America hold the largest share of global fancy LED lighting market (see figure 5) but Asia pacific is considered to be the fastest growing market for LED lighting and is expected to hold remarkable market share in years to come.

The global market for decorative lighting is segmented by end usage as following:

- Residential usage
- Commercial usage

During 2016, the residential segment accounted for the major shares of the decorative lighting market1. The customers increasingly prefer decorative lighting products and modern design concepts and different decoration ideas, which increases the target market for vendors in this marketspace. Factors such as the increase in residential houses and the growing hospitality and service industries, will contribute to the growth of the market in this end user segment in the coming years.

The decorative lighting industry segmentation by product is as follows:



The ceiling lighting segment accounted for the major shares of the global decorative lighting market during 2016. Chandeliers are the major contributors to this segment as they are popular decorative lighting products available in different sizes, designs, and patterns. location.

2.2 India Scenario

In India, decorative lighting industry in India is growing well at the back of rising disposable income of the middle income population of India and increasing number of high earning income group. This segment requires a revolution by small and medium enterprises becoming innovative and coming out with new ideas. They will have to tie with large manufacturers as co-makers for them.

The lighting fixture market in India is expected to grow at the CAGR of 17% during 2013-2018. The Indian lighting industry has seen a growth of 59% growing from Rs. 8500 crore in 2010 to Rs. 13500 crore in 2013. This has been due to the move of use of LEDs and CFLs from GLS lamps. However, the lighting usage continues to be a high 18% of the total power

¹ https://www.technavio.com/report/global-general-retail-goods-and-services-global-decorative-lighting-market

consumption which is much higher than that of the developed countries, which account for 12-15%. The shift from GLS to adoption of energy efficient products and systems will help a lot in the reduction of the energy consumption. Prices of LED lights are also expected to decline in the coming years, which would drive the growth of the market over the next six years. India has been very successful in the manufacture of CFL and this can be replicated for LED as well. Further, Indian manufacturers has potential to become more cost competitive v/s China because of the increasing labour costs in China compared to India and a weakened INR v/s a strengthening CNY. The northern region accounted for the largest revenue share in the country in the year 2015-16, followed by Southern region. As per the current trends because of the ongoing government initiatives to promote LED lighting as well as consumer preferences, the LED market will grow to Rs 21600 crore by 2020, an exponential growth of 41% CAGR from Rs 1925 crore in 2013, making LED market 60% of the total lighting industry in 2020. This can be seen from the graph, also the CAGR for GLS is -10% for the period 2013-2020. The CFL market is also going down and LED is replacing it as the major lighting technology in the coming times. The LED industry is projected to grow greatly on the back of the initiatives being taken by the government. It is expected to be approximately 60% of the overall lighting industry by 2020.



Figure 4: Expected growth of lighting industry by 2020

Industry players are eyeing high volume sales of designer lighting fixtures from urban households and are constantly focussing on development and introduction of newer variants of consumer, outdoor and decorative lighting fixtures.

2.3 Cluster Scenario

Once a small dusty agricultural rural village, Gurugram has now emerged as a city with the third-highest per capita income in India. Gurgaon has become a leading financial and industrial hub. It is popularly known as the Millennium City. The city's economic growth story started when the leading Indian automobile manufacturer Maruti Suzuki India Limited established a manufacturing plant in Gurugram in the 1970s. Today, Gurugram has local

offices for more than 250 Fortune 500 companies. The region along the NH 8 witnessed tremendous growth in the real estate industry which is a major force in the city's economy. Gurugram is home to some of the nation's most valuable real estate. DLF limited a leading real estate company acquired vast stretches of land in the city and made several real estate projects in the district. Due to this growth of real estate industry, the fancy and aesthetic lighting industry also got a boost.

Diagnostic Study Findings



3. Diagnostic Study Findings

The diagnostic study was undertaken in the cluster during September 2017 to map the existing business processes in the cluster, identify the gaps, and understand the requirements of the cluster. The diagnostic study report (DSR) was compiled with inputs from cluster SPV in close coordination with the DIC, Gurugram, with inputs from GIA and Syndicate Bank. The awareness level of the cluster units (on new electroplating technologies, testing technology & cluster development initiatives, etc.) was found to be low. Additionally, it was observed that most of the cluster units deploy obsolete technologies and are unable to meet the requirements of the market due to lack of availability of modern machines for job work, testing equipment & electroplating plant. The finishing of products is ordinary due to dependence on manual techniques and conventional machines.

The DSR was validated on 25th October 2017 and was subsequently accepted & approved by the W/DI&C on 21st November 2017. The approval letter of DSR and permission to undertake the Detailed Project Report (DPR) are provided in Annexure 1. The SPV was granted permission to go ahead with preparation of DPR for the cluster. The major findings of the DSR are presented below:

3.1 Cluster Actors and their role

Many support institutions and agencies such as industry associations, government agencies, academic/ R&D institutes, financial institutions, BDS providers etc. situated within and outside the cluster play a key role in developing the cluster as well in complementing initiatives of the cluster SPV. The key stakeholders of Gurugram Decorative Lighting Cluster are:

A. Government Bodies

District Industries Centre (DIC)

DIC is the most important government stakeholder for the cluster. The office of DIC comes under the Dept. of Industries and is headed by the Joint Director who is assisted by functional managers and technical field officers. DIC promotes and routes subsidy to micro and small enterprises in the region. The Mini Cluster Scheme under which the bakeries want to set up a CFC will also be implemented through the DIC office. The Gurugram DIC is actively promoting cluster development in the district and also helps the local units register under Unique Aadhar Memorandum (UAM). It would play a key role in formulation of the decorative lighting units SPV.

MSME-Development Institute (MSME-DI), Okhla

MSME-Development Institute, Okhla is a field office of the Development Commissioner (MSME), Ministry of MSME, New Delhi, which is an apex body for formulating, coordinating and monitoring the policies and programmes for promotion and development of MSMEs in the country. MSME-DI provides a wide range of extension / support services to the MSMEs in the state.

► Haryana State Infrastructure & Industrial Development Corporation

(HSIIDC)

HSIIDC is an autonomous body set up by the Government of Haryana in 1967, headquartered at Panchkula. HSIIDC has been playing a progressive role in the industrial development of various districts of Haryana. Over the years, it has greatly accelerated the pace of its activities by facilitating land allocation to industries, creating industrial areas and developing required infrastructure. HSIIDC has provided Change of Land Use (CLU) permission from agriculture land to industrial land. The important activities of the Corporation are:

- Development of industrial areas/ estates
- Helps entrepreneurs on matters such as securing registrations/ licences/ clearances from the statutory/other authorities.
- Provision of term-loans

Bureau of Indian Standards (BIS)

BIS is the national standard body of India established under the BIS Act 1986 for the harmonious development of the activities of standardization, marking and quality certification of goods and for matters connected therewith or incidental there to. BIS has been providing several benefits to the national economy in a number of ways-providing safe reliable quality goods, minimizing health hazards to consumers, promoting exports and imports substitute, control over proliferation of varieties etc. through standardization, certification and testing. It has a branch office in Faridabad which is under Delhi regional office and Gurugram district comes under it. The standards for decorative lighting are IS-5077. Other than these the products also comply with other lighting standards.

National Small Industries Corporation (NSIC) Gurugram

National Small Industries Corporation (NSIC) was established in the year 1955 with a view to promote, aid and foster growth of small industries in the country. Gurugram industry is served by NSIC office in Gurugram. It provides diverse services to MSME in Gurugram such as:

- Helps entrepreneurs in purchasing machinery and equipment
- Equipment leasing and working capital finance
- Information on technological up gradation
- Composite loan scheme and export assistance

B. Industry Associations

Gurgaon Industries Association (GIA)

The Gurgaon Industrial Association (GIA) is an apex and the oldest association of Gurugram. It works to create and sustain an environment conducive to the growth of industry in Gurugram partnering the government through advisory and consultative process. GIA is a non-government, not for profit, industry-managed organization which plays a proactive role in the industry's development. GIA has been Gurugram's premier industrial association with a present membership of about 400 organizations in big, medium and small categories. Gurgaon Industrial Association also provides a platform for making entrepreneurs more innovative and efficient so as to gain competitive edge at global, national, state and regional levels. GIA works closely with different governmental agencies and infuses synergies to elevate the industry by accelerating the tempo of its constant growth. It endeavours to articulate the genuine and legitimate interests and concerns of its members so that the balanced industrial growth is fostered in Gurugram. GIA takes initiatives in promoting industrial peace and safety in Gurugram and ensuring maintenance of harmonious industrial relations in the city. Some of the small scale decorative lighting units are members of GIA.

C. Educational Institutes

Industrial Training Institute, Gurugram

ITI Gurugram was established in 1959 with an objective of imparting skills in various vocational trades to meet the skilled manpower requirement of industry. ITI is housed in 17.5 acres of land in centre location of Gurugram. Institute has all infrastructure facilities needed for overall development of skilled manpower, like Workshops, theory rooms, library, Playground, Audio Visual Aids, and Hi-Tech Computer labs for awareness about computer to trainees of all trades. There are 25 different trades of Engineering & Non-Engineering field, of one or two year's duration, with 865 intakes per year. The courses are affiliated to National Council for Vocational Training (NCVT), through the Directorate General of Employment and Training (DGET), Government of India in the Ministry of labour, New Delhi. Some of the trades and units in this I.T.I are also run under approval of State Council for Vocational Training (SCVT).

Haryana Vishwakarma Skill University, Gurugram

The Haryana Vishwakarma Skill University has been enacted by the legislature of the state of Haryana with an objective to establish a Skill University in order to facilitate and promote skill, entrepreneurship development, skill based education and research in the emerging areas of manufacturing, textile, design, logistics and transportation, automation, maintenance, etc. and to raise skill level in various fields related to these areas.

RAWAL Institutions, Faridabad

Rawal institutions were established in 2008 under the aegis of "Goyal Educational and Welfare Society" to serve the society by delivering quality engineering and management education to pass outs of schools and transforming them into employable managers, technocrats, bureaucrats and above all good citizens of India. Many students from this institution get their industrial trainings done in various units of this cluster.

Sambhav Industrial Skill Development Centre, Noida

Sambhav Industrial Skill Development Centre takes such an initiative for the first time in India to make the young technical graduates prepared for the Industry by providing very focused and industry specific skill enhancement training. The mission of Sambhav Industrial Skill Development Centre is to focus on improving the quality of skills of technical graduates which will enable them to be confident, able and determined for a successful career. Their group companies are involved in PCB Design, PCB Manufacturing, PCB Assemblies, and LED Lighting etc. Their group companies have over 11ac sq. ft. of manufacturing space with equipment worth Rs 20Crores. They utilize their group infrastructure and knowledge to impart industry relevant skill development.

National Institute of Electronics & Information Technology (NIELIT), Delhi

National Institute of Electronics & Information Technology (NIELIT), (erstwhile DOEACC Society), an Autonomous Scientific Society under the administrative control of Ministry of Electronics & Information Technology (MoE&IT), Government of India, was set up to carry out Human Resource Development and related activities in the area of Information, Electronics & Communications Technology (IECT). NIELIT is engaged both in Formal & Non-Formal Education in the area of IECT besides development of industry oriented quality education and training programmes in the state-of-the-art areas. NIELIT has endeavoured to establish standards to be the country's premier institution for Examination Body, which accredits institutes/organizations for conducting courses in IT in the non-formal sector.

Amity University, Gurugram

The Amity University's department of Engineering and Architecture i.e. Amity school of engineering and technology & Amity school of Architecture and planning, offers courses like Bachelors of engineering in Electrical and Electronics, Bachelors in interior design, Masters of electronics and communication and Masters in Interior design. It is first of its kind course in India. The programme comprises of conceptual knowledge of interior designing and planning.

D. Banks / Fls

Haryana Financial Corporation (HFC)

Haryana Financial Corporation, based in Chandigarh was promoted jointly by the Government of Haryana and the Industrial Development Bank of India (IDBI). HFC has been approved by SEBI as a category-I merchant banker. The corporation's activities include merchant banking, trade finance, lease finance and term lending. The corporation has diversified its range of financial services to include no-fundbased assistance in the form of guarantees, letter of credit and forex services. The DPR for the project shall be appraised by HFC.

Syndicate Bank, Gurugram

Syndicate bank is the lead bank of Gurugram district. Many firms have banking relationships with this bank. Syndicate bank has 28 branches in Gurugram district of Haryana.

Small Industries Development Bank of India (SIDBI)

SIDBI is the apex financial institution responsible for the growth and development of the MSME sector. It addresses both financial and developmental gaps in the MSME eco-system. Almost all the government subsidy schemes and bilateral lines of credit are implemented through SIDBI. It adopts a 'credit plus' approach, under which, besides credit, it supports enterprise development, skill up-gradation, marketing support, cluster development, technology modernisation etc., in the MSME sector through its promotional and developmental support to MSMEs. Gurugram industry is catered through SIDBI's branch office, Gurugram.

E. Leading Manufacturers

Some of the leading decorative lighting manufacturers in Gurugram include Lumax, Jaquar, Tiswa, Eglo etc.





3.2 Cluster Turnover, Market and Employment

The cluster has a turnover of more than Rs 400 crores. The average annual turnover of micro units is approximately Rs. 1.5 crore, of small units is approximately Rs. 7 crore and of medium units turnover is around 25 crore.

The Gurugram decorative lighting cluster is quite labour intensive as currently all the work is done manually. Currently it provides employment to about 1200 workers for activities including machining, assembling, packaging and testing. On average, micro units employ approximately 5 people, small units in the cluster employ approximately 15 people and medium units employ approximately 25 people. As this industry is related to electronics so most of the workers are skilled and approximately 40% of the workers in the units comprises of women workers. Wages of skilled labour for activities such as machining, soldering, testing, assembling, etc. can be as high as Rs. 25,000 per month.

Most of the decorative lighting manufacturers are selling their products (lamps, pendants, wall hanging lights etc.) in the domestic market through their own counters. Some units are also manufacturing for large industries and brands like Philips, Jaquar, Usha, Havells, Lumax etc.

The proposed facility will be open to all cluster firms to enable them to get job work done in order to cater to the requirements of the market. The proposed CFC will provide an opportunity to micro units to get job work done on modern machines and manufacture high quality products, thereby increasing their individual capacity utilization and profitability. The facility will provide a major infrastructural push to the units reeling under high competition and will enable them to export their products. The CFC will also lead to creation of several jobs for supervisors, machine operators and unskilled workers like helpers both within the CFC and at an individual unit level due to enhanced capacity utilization.

3.3 **Production Process**

The most common product manufactured in this cluster is wall lamp. Currently both manual and semi automated processes are used for the manufacture of wall lamp. The basic raw materials used for the manufacturing of wall lamp are Mild Steel Sheet, PCB, LED, Driver and Glass. Firstly the Mild Steel Sheet is cut to required size by using a hydraulic press. Then the design for the wall light is chosen and accordingly the die for the same is made. Once the die is made, the same die is used for further processing in the hydraulic and mechanical presses. The cut pieces of the sheet are passed through the presses and the required design is made in several cuts. This design of the light is prepared in four cuts, since the design is symmetrical about both x as well as y axis, so same die was used for all the cuts and if the design was not symmetrical then different dies would have been used. Other dies are used to manufacture the different parts of the mechanical housing like joints etc. After this the holes are drilled in joints as well as in the back cover of the light using drilling machines. The stamping of the logo is also done using the power press. Joints are then welded with the front mechanical housing design using arc welding or oxy acetylene welding. The part is then worked on a bench surface grinder which removes the excess metal on the mechanical housing. After this for a precise finish surface grinding machine and sometimes hand grinder machine is used for further grinding operations. Other machining operations are performed by using Lathes and Milling machines. The front and back parts of the mechanical housing are then sent for finishing/polishing and power coating or spray painting is used as per the buyers demand. Once the finishing of the parts is complete then the assembling of the electronic parts which comprises of PCB, driver, LED etc and glass is done. The electronic components are then soldered and connected using wires. Once the assembling is finished then the testing is done and finally the finished product is packed and is sent for distribution. The flow chart is presented below:



Figure 6: Process flow chart

Most of the process is done by the skilled and unskilled labour force manually. The machining is done using hydraulic press, Lathe, Milling and drilling machines. The assembling of both electronic parts and glass is done manually. The electronic parts once soldered are kept at their position within the mechanical housing using plastic wires and the diffused glass is attached with the front part using glue gun. Once the assembly is complete, physical measurements of the product are done using vernier callipers, electric parameters like voltage, current, wattage etc are checked using multimeter. In order to check the life of the product in terms of corrosion, Salt Spray testing is done, Since this facility is not available in the cluster hence it is being done from outside. Also for the testing of intensity of light the cluster doesn't have a lumens tester. Finally after the testing is done the finished product is packed and sent for distribution.

3.4 Value Chain Analysis

Value chain analysis of the most commonly produced wall lamp is provided in table

Table 1	1: V	'alue	Chain	Analysis	of	wall	lamp 2
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Particulars	Value Added	Total Value	% of cost of
		(INR)	production
Raw Material (MS sheet,		175	37.5
electrical components, glass)			

² Source: Stakeholder Consultation inputs
Machining Operations (Pressing, Grinding, Welding)	44	219	9.4
Labour (for machining and assembly)	63	282	13.52
Finishing Operation	90	372	19.32
Testing	15	387	3.22
Packaging	37	424	7.94
Overheads	33	457	7.08
Transportation	9	466	1.93
Total Production Cost (Rs)			466
Profit margin in Rs. (12%)			56
Selling Cost.			522

The value chain analysis has been prepared based on the stakeholder consultation. It can be observed that the raw material amounts to 37.5% of total cost of production. Some finishing is outsourced and currently accounts for 19.327% of the total cost of production. The industry is labour intensive, with labour costs accounting for approximately 13.52% of total production cost. Currently major proportion of finishing of the final products is done from outside but if there is a facility of doing it in the CFC then the cost of finishing will go down by a large proportion. The competitiveness of the cluster units can be increased by targeting the major cost area of finishing operations and machining and providing common facilities to the units in order to undertake machining and finishing operations at a lower cost.

3.5 Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis

A SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis of the MSME decorative lighting units in the cluster is carried out keeping in mind the technology, marketing, product quality, skills, inputs, innovation, business environment and energy/environment compliance of the units. The SWOT analysis provided in table 2:

	Current situation		Future		
	Strengths	Weaknesses	Opportunities	Threats	
Markets	Products are required	Sales confined to	 Growing domestic 	Competition from	
	throughout the year without	local area	market potential (PAN	China in global	
	any seasonal impact	Presence of other	India)	markets	
	Cluster located on major	large players to	Potential to supply to a	► Competition from	
	National Highway NH8	whom bulk orders	number of countries	other major	
	Proximity to the Delhi and	are made	Capacity building of	electronic clusters	
	well connected to other	Units are unable to	entrepreneurs on	like Nasik,	
	major cities	price their products	export promotion &	Chennai, Delhi,	
	Presence of large number of	competitively due	documentation	Moradabad,	
	buyers in the region	to high cost of raw	▶ Tie up with online	Mumbai etc. in	
		materials and old	portals for selling of	domestic markets	
		machinery	products		
			▶ Potential for high		
			market growth due to		

Table 2: SWOT analysis of the cluster

		Lack of brand	growth of real estate	
		building of the	industry	
		products	▶ Potential for common	
			branding and supply to	
			large format retailers	
			▶ Develop a common	
			platform for marketing	
Technology/	Some units have ISO	► Usage of old	Setting up of CFC with	Increase in cost of
Product	certifications	machinery and	accredited testing lab,	production
quality	Capability to produce	technology	job work facilities	► Low production
	competitively	Unavailability of	Decrease in price due to	scales among
		skilled manpower to	mass production	small units
		work on modern	▶ Latest equipment for	► Increase in
		machinery	quality products	awareness on
		Absence of certified	Process automation	quality
		testing lab facilities	Potential to streamline	certifications shall
		in the cluster	the process efficiency	lead to losing out
		Lack of knowledge	through lean	of business
		among small units	manufacturing	Competition from
				vendors

		on operational		manufacturing
		requirements		products with
				advanced
				technology
Skills/	Good employment conditions	Acute shortage of	► Engage technical	Youth interested
Manpower	Majority of workers fall	manpower in the	institutions for skill	to work in other
	under skilled worker	cluster	development programs	lucarative sectors
	technology	► Absence of	Customized training	▶ Large companies
	Skills acquired on-the-job	dedicated training	courses and training	such as Philips,
	Availability of various	centre for	programs on required	Jaquar, Osram,
	Technical Training Institutes	decorative lighting	skills.	Havells etc. attract
	teaching interior design	industry	► Engage technical	the manpower
	courses	Lack of interaction	institutes for skill	
	Many new generation	between SMEs and	development	
	entrepreneurs have Masters	technical institutes	▶ Engage a local NGO to	
	in electronics and interior	for providing	mobilize regional youth	
	design related courses	technical training	for training	
		▶ No mechanism to		
		mobilize regional		
		youth for training		

		Presence of		
		unskilled and non		
		trained labour force		
Inputs	Availability of raw materials	Price of locally	Potential to reduce	Rise in price of raw
	from nearby areas	available raw	energy costs by energy	material and
	Buyers sometimes specify	material is more	auditing	fuels/power
	the dealers from whom they	than that if	▶ Potential to develop a	► Cost of power in
	want the material required	procured from	portal displaying	India is more in
	for manufacturing	outside	information (price and	comparison to
		► Fluctuation in raw	sources) of raw	other
		material quality and	materials	manufacturing
		prices		countries like
		► No web portal		China etc
		displaying the		
		prices and sources		
		of raw material		
Innovation	▶ Many entrepreneurs are	Lack of process	Acquiring latest	Could lose
	from engineering and	automation	equipments	business due to
	interior design background	► Low investment in	Set up a job work facility	lack of innovative
		R&D	with R&D centre	facilities in the

Ability to produce the	► Lack of	Development of a	Gurugram
products as per buyers	standardised ERP	standard IT based ERP	Decorative
requirements	solution for	solution	Lighting Cluster
Some units create their own	decorative light	Structured processes	► Reluctance to
designs of wall and table	cluster	for information sharing	share information
lamps manufacturing	► No research	among SMEs in the	on innovation
	program with some	cluster	between units in
	educational	▶ Cross learning from	the cluster
	institute	other progressive	
		clusters	
		Introducing research	
		programs with	
		educational institutes	

Business	Steady growth in domestic	Lack of knowledge	Establish a CFC with	Decorative lighting
Environment	demand	of regulatory	latest technologies for	industry might
	Area well known as a major	frameworks	testing and job work	shift to other
	industrial hub across South	High cost of	facility	places where
	Asia	Industrial land in the	Create awareness of	excise exemptions
	Active industry associations	cluster	government schemes	are being offered
	Conducive policy and	No long term vision	and regulations	Change in policies
	regulatory initiatives	of most of the		and regulatory
	Pro-active state industry	industrialists		Increased land
	department undertaking	Lack of common		rates
	several developmental	infrastructure/ CFC		
	initiatives for the decorative	facilities		
	lighting industry			
Energy/	Less dependence on fossil	High power tariff	Potential to reduce	Increase in power
Environment	fuels.	Wastage of energy	energy costs by energy	tariff
	The activity fall under safe	due to manual	auditing	Increased focus on
	category. Does not come	processing		standards
	under polluted industry by			
	air, water or chemical			
	outflow			

3.6 Major Issues / Problem Areas of the Cluster

The key problems cluster related problems identified are:

- Absence of testing lab: Testing is one of the primary aspects in the electronic industry. No major company buys product without certification of quality parameters. This is one of the important impediments for the decorative lighting cluster as they are finding it very difficult to expand the market without the production of test certificates. As per the law as well, various tests need to be conducted by the light manufacturing units. The lack of testing labs also results in production delays and hampers the chances of exports from this cluster.
- Lack of availability of modern manufacturing equipment: Most of the machinery used by the units is outdated leading to production of substandard decorative lighting products particularly for machining on Lathe and other machines which is base for manufacturing of all decorative lights. The units lack automation and most of the equipment are controlled manually by the labour workforce and when the labour is not available the production process comes to a halt and there are delays in deliveries due to which many clients are lost.
- Inability to provide high quality finishing: Most of the units used in the cluster get the finishing done from Moradabad due to the lack of machinery for high quality finishing operations. Because of this the cost of production goes high. The absence of this facility leads to lack in quality and hence the units are unable to sell their products to big players.
- Limited access to markets: The cluster units are small in size with low production capacity. Individually, they have not been able to garner bulk orders. Moreover, they have been unable to diversify their products due to lack of technological capacities, which has led to limited access to market. In order to increase the production capacity as well as produce new products, units require modern efficient machinery. Lack of capital to purchase these machines has limited the production capacity of these units.
- Production inefficiencies: Deployment of obsolete machines and dependency on manual operation leads to operational inefficiencies and increased cost of production. This has hindered the ability of micro and small firms to obtain bulk orders from anchor units. Consequently, the units are witnessing declining market shares and lower sustainability.
- Lack of standardization of processes & products: Decorative lighting products of the cluster are not consistent due to lack of adequate efforts and technology required for standardization. The cluster is presently catering to the local market due to inability to meet the standards set by larger firms/ MNCs. This has been a hindrance to expanding the market.

Due to inexistence of these facilities, cluster units face frequent production delays, cost inefficiencies, rejections, material wastages and declining market shares. These facilities, if provided through a CFC in the cluster with government support, will help the units become more competitive and enable them to dramatically move up the value chain.

3.7 Key technologies missing

The technological gaps on various fronts that the CFC proposes to target, along with scope and illustration of major facilities is provided in table 3.

Γable 3: Rationale for hard interventio

Rationale for proposed hard interventions und	er CFC mode
Critical technology gaps in the cluster	Proposed technology interventions to enhance cluster's competitiveness through CFC mode
Testing lab for raw material & finished products	
Absence of a material testing facility is one of the primary challenges in the food industry. It is one of the primary aspects in the electronics and lighting industry. No major company buys products without certification of quality parameters. This is one of the major impediments for the decorative lighting cluster as they are finding it very difficult to expand their market without product test certificates. As per the law as well, various tests need to be conducted by the decorative lighting units. Without certification units are not able to export their products. The lack of testing labs also results in production delays and hampers the chances of exports from this cluster.	 Presence of certified testing lab in the cluster shall ensure the required certification and quality of products. This shall further enable cluster units to expand their market share and tie up with large buyers. The testing lab facility in the cluster shall run on a commercial basis and provide testing facilities to cluster units for a range of products. Testing and certification of products shall also increase the product credibility in terms of market acceptance. With this facility, cluster units will be able to increase their production and export their products. Under this facility the following testing machines will be established: Salt Spray Chamber: It can be used at CFC to check corrosion resistance of materials and surface coatings. X-Ray Fluorescence Spectrometer: used for elemental analysis and chemical analysis, particularly in the investigation of metals, glass, ceramics and building materials. It can be used in the CFC for measuring the thickness of coatings and for analysing materials.
Value added Finishing Facility with Electroplating	
Most of the units used in the cluster get the finishing done from other states like Delhi and UP due to the lack of machinery for high quality finishing operations. Because of this, the quality of the produce is not consistent and the cost of production also increases significantly.	Coatings also impart special property to the decorative lighting products. By providing these facilities to the cluster units, units are able to produce quality of products & enhance their production capacity. This electroplating facility will be run on commercial basis under the banner of CFC.

At present the cluster units are depending on private player for electroplating facilities.	
Advanced Machining Centre	
Presently, most of the do not have the CNC of VMC machines. Cluster units do not have the value added machines for metal cutting, pressing & shearing. They are depending on the private players for the job work. Private players in the market charges high prices for job work. Due to the lack of high capacity VMC & CNC machines results in production delays. Also, units are not able to capture more market area.	 By establishing the machining centre under the CFC banner, the following machines can be established: CNC machine: This machine can also be used for several types of sheet bending and cutting jobs with respect to the required bending dimension by selecting the right die design. This machine is very useful in obtaining desired shape of cutting and bending and maintaining accuracy in dimensions. VMC machine: With a vertically oriented spindle, tools stick straight down from the tool holder, and often cut across the top of a workpiece. This machine can be used for creating the parts, die or molds with precision, accuracy, repeat-ability and surface finishes.

3.8 Cluster growth potential

The potential for the Gurugram Decorative cluster to grow is enormous, owing to the increasing demand of Decorative products in the region. The region along the NH 1 witnessed tremendous growth of the food processing industries during the late 90s. The onset of the green revolution, progress in dairy farming, and expansion of agro-based & agriculture oriented industries (particularly rice mills in large numbers) provided an impetus to the industrial growth in the region. Subsequently, the region witnessed a transition from agriculture to industry. The Haryana government has also undertaken several initiatives to promote industrial development in the region. The state has ensured creation of massive infrastructure in terms of complete electrification, provision of road transport, expansion of administrative, educational and health facilities in small towns, and establishment of many new industrial townships and urban estates.

Consequently, Gurugram became a major industrial hub with the presence of a large number of industries across various segments and industrial sectors such as Decorative, dairy, food processing, rice milling, pharma, plastic, agriculture implements, etc. However, the cluster units are unable to effectively cater to these market segments due to lack of technological capacities, low production scales and outdated processes. Against this backdrop, if modern job work Decorative manufacturing facilities are provided to micro-units of the cluster under CFC mode, their production costs will reduce and they will be able to garner bulk orders from MNCs like Pizza Hut, McDonalds, Future Group etc.

Diagnostic Study Recommendations



4. Diagnostic Study Recommendations

Based upon the diagnostic study report and subsequent discussions with various cluster stakeholders and members of Gurgaon Decorative Lighting Cluster during preparation of this Detailed Project Report (DPR), a mix of hard and soft interventions are being proposed to enhance the competitiveness of the cluster units. These have to be undertaken with government support to ensure the survival and growth of the decorative lighting units in Gurugram. The recommendations for both soft and hard interventions have been elaborated in subsequent sections.

Cluster enterprises have also been undertaking several soft interventions (before, during and after the DSR) on their own and have been active in enhancing their awareness and exposure. The units have conducted several awareness programs and trainings by their own expense. They have also conducted exposure visits to other developed clusters, participated in national exhibitions and facilitated UAM registrations.

- 4.1 Soft Interventions Recommended and Action Taken
 - 1. Capacity Building and Awareness Generation: One of the primary recommendations for soft interventions was to build the capacities of cluster units and generate awareness among stakeholders regarding cluster development (collective approach to address their issues) and benefits available to them in the form of cluster. In this regard, the cluster units had participated in the various exhibitions, the details of which are provided below:
 - Member Meetings: Cooperation and trust building among members is foremost condition for smooth functioning of the cluster and SPV. A meeting was organized by cluster members during the month of October 2017 in Gurugram to enhance cooperation among



member units and to obtain inputs for the DSR. Members of the cluster were informed about the registration of company for the cluster and identification of land for the CFC. Members of the cluster raised their concerns during the meeting which were resolved by other members of the cluster.

2. Participation in Exhibition & exposure visit: In order to enhance the exposure of cluster units on new and emerging technologies in the Decorative lighting cluster, a number of exposure visits were recommended. The aim was to gather technical knowledge and expertise required for developing the cluster. Additionally, recommendations for participation in trade fairs and exhibitions were made to provide a platform to cluster units to promote their products well as witness

innovative products being brought out in the market. The following actions were taken in this regard:

Mega Trade Fair at Expo Centre Noida,: -The Mega Trade Fair is an annual event organised by India International Mega Trade Fair. It was organized at Noida, UP, during the month of August 2017. Members of Decorative Cluster participated in the event to understand the technological upgradation in the Decorative lighting industry.



Participation in Pragati Maidan Exhibition: The vendor of the decorative lighting has organised the exhibition at Pragati Maidan in the month of October 2017. Members of the decorative lighting cluster participated in the event to understand the requirement of their suppliers.

4.2 Hard Interventions (Machines / Technology in the proposed CFC)

The Decorative units in the Gurugram need technological support to enhance their competitiveness and ensure their survival. The units are reeling under bitter competition and low margins, and require modern high capacity automatic machines and other related equipment to get their job work done and reduce their production costs.

The following common infrastructural facilities are being proposed for the CFC, with support from the state industry department.

Salt Spray Machine:

It is an equipment which is used to perform the corrosion test, i.e. it is used to check the corrosion resistance of materials and surface coatings. Usually the materials tested are metallic and finished with a surface coating which is intended to provide a degree of corrosion protection

to the underlying metal. Salt spray testing is an accelerated corrosion test that produces a corrosive attack to coated samples in order to evaluate the suitability of the coating for use as a protective finish. The appearance of corrosion products (<u>rust</u> or other oxides) is evaluated after a pre-determined period of time. Test duration depends on the corrosion resistance of the coating; generally, the more corrosion resistant the coating is, the longer the period of testing before the appearance of corrosion/rust.



Coating/plating Thickness Gauge/NDT Measuring Equipment: Spiral It is an equipment used to measure the thickness of the coating or the plating done on body of the decorative lights like on the steel plate of a wall lamp. It is non-destructive testing measurement equipment and uses eddy currents for the measurement purposes.

- Lifter CNC Milling Machine: CNC milling machine is a cutting machine which uses a milling cutter to remove material from the surface of a workpiece. The milling cutter is a rotary cutting tool, often with multiple cutting points. It is a computerised numerical control machine, i.e. the codes are input in the machine and all the process is done on the basis of those codes.
- Electrophoretic Lacquer Coating Plant: Electrophoretic plants has replaced spraying and dipping with a more efficient process, taking out the skill factor of spraying and replacing solvent based systems with a more environmentally friendly and less hazardous process. It is used for coatings on the base metals used in the production of decorative lights.
- Powder Coating Equipment: Powder coating equipment is used to apply coating as a free-flowing, dry powder. The coating is typically applied electrostatically and is then cured under heat to allow it to flow and form a skin. The powder may be thermoplastic or a thermoset polymer. The coating is usually used to create a hard finish that is tougher than conventional paint
- Effluent Treatment Plant:. The ETP will be medium sized in capacity to handle water discharge of approx. 5000 m3/ day and for treating electroplating related effluents such as pastes, starch, gums, oil, mordant, acids, solution. So, the common facility center will be set up in Gurugram Sector-37 where the CETP is already available.





4.3 Expected Outcome after Intervention

The project will be beneficial both for Decorative units and the cluster as a whole. The setting up of the CFC is expected to generate the following benefits for the cluster units:

- > Enhanced value addition for cluster products
- Significant reduction in cost of production and higher capacity utilization by each unit
- Higher degree of competitiveness of cluster enterprises
- Scope for the cluster to target new market segments by developing new and improved products
- The requirements of SPV members are adequate to utilize the capacity of the CFC. Nevertheless all cluster firms shall be encouraged to use the facility. Many micro unit entrepreneurs who could not afford to significantly contribute by way of

necessary investment to the equity base of the project have also been accommodated even with low equity contribution

- The CFC will generate more job opportunities both at the cluster and individual unit level due to enhanced capacity utilization
- The CFC is also expected to enhance the levels of cooperation and joint-action amongst cluster stakeholders and SPV members to cooperate in other areas such as joint marketing initiatives, common raw material procurement and so on.
- It will also complement the efforts of state government in promoting clusters in the state and serve as a model for upgrading micro enterprise clusters.

Area	Current Scenario	Expected Outcomes
Production Units	About 65 units	About 70 units
Markets	Most of the units in Gurugram are selling their products in the local market and some are selling in the throughout the nation. And few are supplying to OEMs	Supply to the big OEMs. The units can also export to other countries under their own brand name
Employment	About 1200	About 1300
Technology	 No testing lab No high quality machinery for soldering and production of drivers 	 Hi-tech accredited testing lab Availability of high quality automated machines
Production	 Small batch size Material wastage Delays 	 High quality Bulk production No material wastage
Turnover	About 400 crores	Will increase to about 440 crores in the first year, expected to increase subsequently increase by 10% each year.

Special Purpose Vehicle (SPV) for Project Implementation



5. SPV for Project Implementation

The micro units at Gurugram Decorative Cluster came together to form a Special Purpose Vehicle (SPV) as a private limited company under section 7 of the Companies Act, 2013 and rule 8 of the Companies (Incorporation) Rules, 2014. The SPV is named as **'Vyaso Gurugram Decorative Lighting Cluster Pvt Ltd.** U74999HR2018PTC072095. The SPV was registered on 5th Jan 2018. The certificate of registration along with Memorandum of Association (MoA) and Articles of Association (AoA) and PAN Card of the SPV are provided in *Annexure* **- 3.** The company has an authorized paid up capital of Rs. 1.00 Lakh which shall be enhanced in the near future. The members are micro-sized firms (registered units) involved in Decorative related activities, predominately based in industrial area of Gurugram.

DIC, Gurugram and state government both played an important role in SPV formation by cluster stakeholders. The SPV includes about 11 members who are subscribing to the necessary equity base of the company. The SPV shall be open for new members to join and for the existing members to leave while maintaining a minimum member base of at least 10 at all times. The proposed CFC will be implemented on public-private partnership basis through SPV 'Vyaso Gurugram Decorative Lighting Cluster Private Limited' by availing support from Government of Haryana (under EPP 2015) state mini cluster scheme.

The SPV members have a strong track record of cooperative initiatives. SPV members are also members of prominent cluster associations. Cluster members have been autonomously undertaking several soft interventions to enhance knowledge and exposure of the cluster units on new trends in Decorative industry and enhancing productivity of their units as mentioned in the previous sections. These include exposure to cluster development initiatives in other clusters, exposure visits to fairs, and registration under UAM and awareness programs on new trends in Decorative industry, design interventions and new technologies. These programs were conducted in collaboration with DIC and BDS providers.

The SPV has conducted a series of stakeholder consultations (with various members, DIC, Gurugram and EY experts) during finalization of project components, selection of technologies and development of Detailed Project Report. The SPV has been instrumental in spreading awareness about cluster development under state mini-cluster scheme in Gurugram and has also helped in validation of findings and recommendations. It has kept the state government and the DIC Gurugram engaged during the entire period of development of DSR and DPR.

5.1 Shareholder profile and Shareholding mix

List of Directors: The SPV has three directors. The details of the directors are furnished in the table 6. Other than these directors, the SPV will have provision of having one director each from the state government. The SPV comprises members from micro Decorative manufacturing units. It is homogeneous in nature due to similar products and activities performed by the cluster units.

Table 5: List of SPV Directors

S. No.	Director Name	Name of the unit	Unit address
1	Dinesh Saini	Dinmans.com	1143 A,Sec-52,Gurgaon-122001
2	R.K. Saini	R K Industries	951,sec-37,pace city 2,Gurgaon122001

The lead promoters/ shareholders have several years of successful experience in production of Decorative products and are also well versed with the benefits of cluster development initiatives. These units are financially viable in nature.

Members of the SPV have been engaged in production of Decorative products in Gurugram for several years. SPV directors/ members of the SPV also have considerable experience in marketing and manufacturing of Decorative products. Directors/members have been in close interactions with technical experts, government institutions and machinery suppliers. Post the DSR validation, the DIC Gurugram also acknowledged the genuineness and enthusiasm of the SPV members to undertake project initiatives under state mini cluster scheme as well as verified the existence of the SPV members. The verified list is provided in **Annexure 4**.

The SPV was formed with the objective of taking up cluster level activity in a joint and coordinated manner, wherein all units have equal say. The shareholding pattern of members of the registered SPV includes the contribution from every member of SPV and no individual shareholder holds more than 10% equity stake in the capital of the company. Details of SPV members along with their contact persons, unit details, UAM numbers and products manufactured are provided in table 7.

S.N.	Contact Person	Company Name	Contact No.	Address of Unit	UAM No	Products
1	Dinesh Saini	Dinmans.com	8860169960	1143 A,Sec- 52,Gurgaon-122001	HR05A0004266	Lamps & lighting fixtures for Decorative lamp
2	R.K. Saini	R.K. Industries	9312219513	951,sec-37,pace city 2,Gurgaon122001	HR05B0005104	Sheet metal & wire component for powder & plating
3	Pawan Kumar	R.S. Auto Industries	9810232125	952,sec37,pace city - 2,Gurgaon 122001	HR05B0004270	Stitching shade.
4	Mahesh Kumar	Fine coats	9818254571	Plot no 98,Sector- 3,Bawal Haryana	HR05A0005298	Coating on lighting products
5	Pawan Kumar	ALKA Enterprises	9810514988	Saini Khera Village near Signature tower	HR05A0005301	Sheet metal /Finishing
6	Rajesh Kumar	JCD LED	9213455516	Ward no 23,gautam nagargohana	HR18A0002317	LED For Decorative Lamp
7	Anil Kumar	A R Industries	7503546890	Kadipur Industrial Area	HR05A0005574	LRD Spinning and Sheet Met all Work
8	Anita Kumari	Parul industries	9896029036	Manesar industrial Area	HR05A0002108	Sheet metal/Lighting product lamp.
9	Tarun Kumar	Vivaan Enterprises	9999512858	Saini Khera Industrial Area	HR05A0005302	Lighting Products
10	Rohtash Kumar	Inspire Technology	8860523323	Basai enclave part 2 gali no-1 plot no-8 Gurgaon -122001	HR05A0005618	Lighting and home decorative product.
11	Sanjay Kumar	SHIV Industries	9891602557	Saini Khera Gurgaon		Sheet metal Components

Table 6: Details of SPV Members of Gurugram Decorative Cluster

5.2 Initiatives undertaken by the SPV

As mentioned in detail in section 4.1 (Soft interventions recommended and action taken), the SPV members have proactively undertaken a lot of capacity building initiatives to promote the cooperation among cluster units and enhance knowledge and exposure of the units. These initiatives have been undertaken in collaboration with DIC, EY, IIMTF & decorative lighting Vendors etc. The major initiatives are:

- Pursuing initiatives in close coordination with DIC Gurugram to facilitate understanding of cluster development, common procurement, marketing, available government support, latest technology for common facility etc.
- Exposure visits to trade fairs and machinery fairs for decorative lighting in NCR and large factories in other locations to understand the technology, market requirement and available opportunities.
- Conducting various programs for capacity building, awareness generation and technological advancement in the cluster as well as participation in similar programs organized by stakeholders.
- Identification of building for lease in the name of SPV.

5.3 SPV Roles and Responsibilities

The SPV will play an important guiding role in the overall management and operations of the CFC. It will provide direction to the management of the CFC and will monitor usage and performance of the CFC. The SPV will constantly report to the state government about the performance of the CFC. The major roles and responsibilities that are envisaged to be performed by the SPV post the submission of this DPR are mentioned below:

- Coordinating with the state industry department for DPR approvals in the SLSC
- > Accompanying EY experts to various meetings at the state government departments
- Execution of land registration in SPV name
- Garnering the SPV project contribution from the members
- > Formation of purchase committees for procurement of goods and services
- Establishing, operating and maintaining all common facilities as mentioned in the DPR
- > Obtain any statutory approvals/clearances from various government departments
- Recruit appropriate professionals to ensure smooth execution of the CFC
- Collection of user charges from members and other users of the facilities as per the decided rates so as to meet the recurring expenses and future expansions of the CFC. While various estimates on user charges / service fee are presented in this DPR, all decisions including usage priority of facilities by members will be made on the basis of decision by members of SPV.
- > Preparation and submission of progress reports to state industry department

The Memorandum and by-laws of the Cluster SPV indicates the democratic process in terms of decision making on the basis of votes. All members of SPV will meet once every fortnight/month to discuss/resolve operational issues. The management of the CFC will be

a two tier structure for smooth and uninterrupted functioning. The executive body i.e. Board of Directors (BoD) will include office bearers elected/nominated from time to time, including one nominee of State Government (DIC). They will also remain present during meetings.

While various estimates on user charges/ service fees are presented in this DPR, all decisions including usage priority of facilities by members will be made by unanimous decision of the members. The CFC will seek direction and guidance from the SPV BoD, and the day-to-day administration will be taken care of by the management that shall be appointed by the SPV BoD. Their role is detailed below:

1. **Board of Directors**: The BoD will be the main governing body and will oversee the operations of the CFC. They will have the decision making power in terms of fixing user fees (for members and non-members) and usage of reserves etc. for future expansion. The Chairman and Managing Director will oversee the entire operations; each Director will be entrusted with specific responsibility like marketing, technical, finance, public relations etc. based on their interests and experience.

2. Managerial, Technical and Administrative staff: A competent and well qualified professional with a background in the Decorative industry will be appointed as the Chief Executive Officer (CEO), who will look after day-to-day operations of the CFC and shall be directly reporting to the Board of Directors. Each facility (dough making, bread making, cookies making, rush making & packaging) will have its own expert staff (supervisors, operations and helpers) as per the requirement. The details of manpower and other requirements are already mentioned in the DPR in the Project Economics section. There shall be provisions for administrative staff such as accounts personnel, marketing professional, store-keepers etc. to ensure effective functioning of the CFC. The proposed organizational structure of the CFC is given in figure 7:



Figure 7: Organisational Structure of Proposed CFC

Project Economics



6. **Project Economics**

6.1 **Project Cost**

The actual total cost of setting up a CFC Decorative Cluster, Gurugram is estimated **at Rs. 219.32 Lakhs.**

The total cost estimation includes the following project components:

1. Land

- 2. Building and civil works
- 3. Machinery and equipment
- 4. Miscellaneous fixed assets
- 5. Preliminary & Pre-operative expenses
- 6. Contingency
- 7. Margin money for working capital

The detail of each project component is provided below:

6.1.1 Land and Building

Land

SPV has identified the building & obtained a letter establishing the availability of the building. The building is located at Plot No. 952, Sector-37, Near JBM Gurugram, Haryana. The available area of the building is 3000 sq. ft and monthly rent for the first year would be INR 45,000/- with annual increase at the market rate (estimated at 10%)

The document highlighting this and establishing the proof for availability of building is provided in *Annexure 4*. The SPV members shall entirely provide the amount required to lease of building as their contribution towards the project cost.

	BUILDING - LEASE BASIS									
S. No.	Actual Cost									
1	Building Area (sq. ft.)	3000								
2	Monthly Rent (INR lakh)	0.45								
3	Rent for first year (INR lakh)	5.40								
4	Year on year increase in rent @	10.00%								

Table	7:	Requirement	of	building
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6.1.2 Plant and Machinery

As detailed in section 4.2 (Hard interventions) a number of modern automatic and high capacity machines for testing, finishing & job work etc. have been recommended to enable cluster units enhance their competitiveness. The machines have been categorized

as primary and secondary. The machines that shall be used primarily for job work have been categorized as primary, whereas, the auxiliary/supporting machines have been categorized as secondary machines. The major facilities proposed at the CFC are testing facilities of raw materials as well as finished products, finishing & job work. The total cost of plant and machinery including secondary machine has been estimated at Rs. 198.80 lakhs and contingency works out to Rs. 9.94 Lakhs.

The details of the proposed machinery items are presented in the table 9. The detailed specifications and quotations of the machines are provided in **Annexure 7**. The SPV has considered quotations for machinery from suppliers based on the manufacturer's reputation, service support, price and quality. However, an open online tendering system shall be followed for procurement of these machines during project execution, and selected vendors will be further invited to negotiate.

	PLANT & MACHINERY												
S. No.	Machine Name	Quar	ntity	Basic	Price	Total Basic Price		Custom Duty as Applicabl e*	GST as Applicable *		Total Price		Grand Total
		Indigen ous	Impor ted	Indigeno us	Import ed	Indigeno us	Import ed	Imported	Indigeno us	Import ed	Indigeno us	Import ed	
	Primary												
Α	Machinery												
	SCF-450 CCT												
1	Salt Spray Machine	1		9.88		9.88	-	-	1.78	-	11.66	-	11.66
	CNC Lathe	1						_					
2	Machine	I		19.75		19.75	-	_	3.56	-	23.31	-	23.31
	Shimadze												
	Energy		1										
	Dispersive				29.67	-	29.67	3.56	-	5.98	-	39.21	39.21
3	(QSR lab)												

Table 8: List of Proposed Plant & Machinery

4	Electroplatin g Plant	1		72.33		72.33	-	-	13.02	-	85.35	-	85.35
5	CVMC JV 55	1		25.22		25.22	-	-	4.54	-	29.76	-	29.76
	Sub Total (A)	4	1	127.18	29.67	127.18	29.67	3.56	22.89	5.98	150.07	39.21	189.28
В	Secondary Machinery												
1	Split AC	1		0.45		0.45	-	-	0.08	-	0.53	-	0.53
2	DG Set 62.5 KVA	1		7.00		7.00	_	-	1.26	-	8.26	-	8.26
3	Window AC	1		0.29		0.29	-	-	0.05	-	0.34	-	0.34
4	Storage Refrigerator	1		0.32		0.32	-	-	0.06	-	0.38	-	0.38
	Sub Total (B)	4	0	8.06	-	8.06	-	-	1.45	-	9.51	-	9.51
	Grand Total	8	1	135.24	29.67	135.24	29.67	3.56	24.34	5.98	159.58	39.21	198.80

6.1.3 Miscellaneous Fixed Assets

The CFC would also require fixed assets such as furniture, fixtures, firefighting equipment, and first-aid equipment etc. for smooth running of operations. The total estimated capital expenditure for purchase of miscellaneous fixed assets is estimated to be Rs. 2.00 Lakhs. Details are provided in the table 10.

Table 9: Miscellaneous Fixed Assets

Miscellaneous fixed assets Particulars	Amount (INR in Lakhs)
Office items and allied items, furniture, fixtures, firefighting equipment and back-up power supply etc.	2.00
Total	2.00

6.1.4 Preliminary and Pre-operative Expenses

Another major component of the project cost is the preliminary and pre-operative expenses. The preliminary expenses are envisaged as expenses incurred for registration of SPV, legal and administrative expenses, detailed civil engineering drawings with estimates, tendering forms, and tendering cost etc.

Pre-operative expenses include expenses for electricity connection charges, administrative establishment, travelling, bank charges, stationery, telephone, overhead expenses during construction and machinery testing, machine testing cost, bank charges, traveling, etc. It also includes professional project management charges such as consultancy fees. The total expenditure for preliminary and pre-operative expenses are estimated at Rs. 6.30 Lakhs (details provided in the table 11).

	PRELIMINARY & PRE OPERATIVE EXPENSES										
S. No.	Particulars	Amount									
1	Company Registration Charges	0.75									
2	Tender forms & tendering cost	0.50									
3	Project Report Preparation (DSR & DPR)	Nil									
4	Project Management Charges	Nil									
5	Travelling Cost	0.25									
6	Machine testing cost	0.20									
7	Cost of Refurbishment, electricity fittings, plumbing	0.20									
8	One time electricity connection charges	1.71									
9	Lease deed registration charges	1.29									
10	Security Deposit (Rent)	0.90									
11	Bank Appraisal Charges	0.50									
	Total	6.30									

Table 10: Preliminary and Pre-Operative Expenses

6.1.5 **Provision for Contingencies**

Provision for contingencies has to be made on plant/machinery and buildings. Contingencies estimated @2% on building and as the building on rent so there is no the contingency for building Rs. 0.00 lakhs. Contingencies on plant and machinery have been estimated at 5% that amounts to Rs. 9.77 lakh.

6.1.6 Margin Money for Working Capital

The total working capital requirement during the first year of operation at 75% capacity utilization is estimated at Rs. 21.94 lakh with margin money requirement of Rs. 5.94 Lakh (25% of working capital requirement as margin). The working capital requirement has been calculated based on requirement of one month of operational expenses and the calculation has been provided in the subsequent section.

6.1.7 Summary Project Cost

A summary of total estimated project cost as per actuals and as per mini cluster scheme is presented in the table 12.

S. No.	Particulars	Total Project Cost	Amount as per Guidelines	Remarks
1	Land & Building			
	a. Land Value	0.00		
	b. Land Development	0.00	0.00	Eligible
	c. Building & Other Civil Works	0.00	0.00	(Max 25% of total of L&B
	d. Building Value	0.00		P&M, and
	Sub Total (A)	0.00	0.00	Misc. F.A.)
2	Plant & Machinery			
	a. Indigenous	150.07		
	b. Imports	39.21	198.80	Fligible
	c. Secondary Machines	9.51		Liigible
	Sub Total (B)	198.80	198.80	
3	Miscellaneous fixed assets (C)	2.00	0.00	
4	Preliminary & Preoperative Expenses (D)	6.30	0.00	
5	Contingency			
	a. Building @ 2%	0.00	0.00	Not eligible
	b. Plant & Machinery @ 5%	9.94	0.00	ior grant
	Sub Total (E)	9.94	0.00	
6	Margin money for working capital			
	(Working capital required @ 75% C.U.)	5.94	0.00	
	Sub Total (F)	5.94	0.00	
	Grand Total (A+B+C+D+E+F)	222.98	198.80	

Table 11: Total Project Cost

6.2 Means of Finance

The project will be financed from two sources: equity from SPV, and grant-in-aid from Govt. of Haryana (under state mini cluster scheme, EPP 2015). The assistance to the project from Govt. of Haryana under state mini cluster scheme is envisaged to the tune of 90% of max project cost of 200 lakhs. The SPV will be required to contribute 10% of project cost for project cost up to Rs. 200 lakh and any amount in excess of 200 lakhs. Hence, the SPV members have proposed to contribute entire amount beyond Rs. 180 lakhs, taking their overall contribution to about 19.75% of the total project cost. The total contribution of SPV members will amount to Rs. 44.06 lakhs. Support from State Government is envisaged for Rs. 178.92 Lakhs. i.e 80.25%.

S. No.		Project cost u 200.00 lakh eligible as per	ipto INR s (max scheme)	Project cost o 200.00 la	Total	
	Source of finance	Percentage Contribution	Amount (INR in lakhs)	Percentage Contribution	Amount (INR in lakhs)	(INR in lakhs)
1	Grant-in-aid under Mini Cluster Scheme (Govt. of Haryana)	90	178.92	0	0	178.92
2	Contribution of SPV	10	19.88	100	24.18	44.06
	Total	100	198.80	100	24.18	222.98

6.2.1 Share Capital

The contribution of the SPV members will be by way of subscription to shares in the SPV registered as a Private Limited Company. The extent of paid-up share capital/equity contribution would be Rs. 44.06 lakh contributed by the cluster SPV.

The authorized share capital of the company is Rs. 1 lakh at present which shall be increased in due course. The extent of share capital/equity contribution by each member will be restricted to a maximum of 10% of total contribution to the share capital of the company.

6.2.2 Grant-in-Aid

Grant-in-aid of Rs. 178.92 lakh is expected from the Government of Haryana. The amount received by the way of grant under state mini cluster scheme will be utilized towards procurement plant and machinery for the project.

6.3 Expenditure Estimates

In this section, a detailed estimate of expenditure of the CFC has been given on eight hour single shift operation basis. This has been estimated based upon extensive inputs by the cluster members and the prevalent rates of consumables, utilities and manpower in the cluster. This section considers annual cost of undertaking job work and expenditure

estimates. The critical components related to expenditure comprise consumables, manpower, electricity and also expenditure on repair and maintenance of assets, insurance and administrative overheads.

Other elements comprise expenditures by the way of interest toward working capital loans, miscellaneous expenses and non-cash depreciation expenditure.

6.3.1 Consumables

Machines installed in the CFC shall require consumables during operations and completion of the job work. Consumables are critical components of project facilities and may be understood in terms of diesel, hydraulic oil, grease, nozzles, moulding equipment, solutions, chemical etc.

S. No.	Machine Name	No. Of Machi nes	Particulars	Amou nt (in Rs. Lakh)					
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				75%	80%	85%	90%	95%	100%
Α.	Primary Machines								
1	SCF-450 CCT Salt Spray Machine	1	Chemicals, Sea salt solution	1.80	1.92	2.04	2.16	2.28	2.40
2	CNC Lathe Machine	1	Gas, Hydraulic Oil, Grease, Blades	0.90	0.96	1.02	1.08	1.14	1.20
3	Shimadze Energy Dispersive (QSR lab)	1	Solutions	0.72	0.77	0.82	0.86	0.91	0.96
4	Electroplating	1	Chemicals, zinc, bricks, chrome, brass	0.90	0.96	1.02	1.08	1.14	1.20
5	CVMC JV 55	1	Gas, Hydraulic Oil, Grease, Blades	1.98	2.11	2.24	2.38	2.51	2.64
В.	Secondary Machines								
1	DG Set	1	Diesel	1.62	1.73	1.84	1.94	2.05	2.16
	Total			7.92	8.45	8.98	9.50	10.03	10.56
	Consumables per month			0.66	0.70	0.75	0.79	0.84	0.88

Table 13: Consumables

6.3.2 Manpower Requirement

Another major expenditure head is the manpower. Therefore the facilities installed in the CFC will require manpower to function effectively as mentioned in section 5.3 of the report. The total manpower requirement for the project would be about 20 persons. The manpower required under project has been divided under two categories: Direct & Indirect. Direct manpower is required for operation of machines while indirect manpower is required for administrative purposes. The annual expenditure on salary component for direct manpower is estimated at Rs. 17.96 lakh and for indirect at 6.20 lakhs. The total expense on manpower is projected at Rs. 1.97 lakh per month or Rs. 23.69 lakh per annum. The details of monthly and yearly expenses for manpower required for running the project is provided in table 15:

Category	No. of Manpower Required	Salary per month per person (INR)	Total Salary Per Month (INR)	Total salary & wages per Year (INR lakh)					
	DIRECT MANPOWER								
Supervisor	1	20,000.00	20,000.00	2.40					
Operator	4	15,000.00	60,000.00	7.20					
Helper	2	9,000.00	18,000.00	2.16					
Loading/Unloading Labour	2	8,500.00	17,000.00	2.04					
Office Boy	1	8,500.00	8,500.00	1.02					
Security Guard	1	9,000.00	9,000.00	1.08					
	11	70,000.00	1,32,500.00	15.90					
Add: Perquisites/Fringe B	enefits @ 10%			1.59					
Sub Total (A)				17.49					

Table 14: Expenditure Related to Salary (direct manpower - machine operators and helpers)

Table 15: Expenditure Related to Salary (indirect manpower - administrative and support staff)

Category	No. of Manpower Required	of Salary per Total Salary wer month per Per Month red person (INR) (INR)		Total salary & wages per Year (INR lakh)
	INDIRECT	MANPOWER		
Cluster Development Executive	1	23,000.00	23,000.00	2.76
Accountant	1	15,000.00	15,000.00	1.80
Security Guard	1	9,000.00	9,000.00	1.08
	3	47,000.00	47,000.00	5.64
Add: Perquisites/Fringe Benefit	0.56			
Sub-Total (B)				6.20
Total (A) + (B)	14			23.69

6.3.3 Utilities

The most important utilities required in the project are power supply and water. Proposed CFC requires power for operation of machinery as well as other supporting equipment for smooth operations. The total connected load requirement has been estimated at 51.70 kW. The table below depicts the machine and equipment wise power requirement in the CFC. The drawn power is conservatively assumed at 75% of the connected load in the case of operating facilities and shop floor.

S. No.	Machine & Equipment	Power Requirement (kW)/ Connected Load	Total power requirement (60% of drawn power) kWh
1	SCF-450 CCT Salt Spray Machine	3.00	1.80
2	CNC Lathe Machine	11.00	6.60
3	Shimadze Energy Dispersive (QSR lab)	2.00	1.20
4	Electroplating Plant	18.00	10.80
5	CVMC JV 55	11.00	6.60
6	Administrative Facilities	2.00	1.20
	Total Connected load for CFC	47.00	28.20
	Buffer Connected Load (10% of Total Connected Load)	4.70	
	Total	51.70	

Table 16: Machine & Equipment (facility) wise power requirement

The power requirement for operation of core machinery and equipment, testing lab and administrative facilities is 47.00 kWh. Electricity required for shop floor activities in terms of operation of core machinery and equipment is 5640 units per month. The facility is heavily based on electricity for operations and will also require additional 10% connected load as a buffer to get the electricity connection. The total connected load for the CFC is estimated to be 51.70 kW.

Fixed charges for connection of 51.70 kW @ Rs. 173 per kW = Rs. 8944 and monthly consumption will be 5640 units which amounts to Rs. 59704.0. This has been calculated based on the prevalent rates of the power provider.

Table 18 presents the estimated annual expenditure in terms of power related charges.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	75%	80%	85%	90 %	95%	100%
Fixed	1.07	1.07	1.07	1.07	1.07	1.07
Variable	4.57	4.87	5.18	5.48	5.79	6.09
Total	5.64	5.95	6.25	6.56	6.86	7.16
Per month	0.47	0.50	0.52	0.55	0.57	0.60

Table 17: Annual Expenditure Statement vis-à-vis Power Charges

6.3.4 Annual Repairs and Maintenance Expenses

The annual repair and maintenance expenses have been estimated to be Rs. 6.11 lakh. The details are presented in the table below:

	Year 1 Year 2 Y		Year 3	Year 4	Year 5	Year 6	
	75%	80%	85%	90 %	95%	100%	
Building	0.11	0.12	0.13	0.14	0.14	0.15	
Plant & Machineries	4.47	4.77	5.07	5.37	5.67	5.96	
Total	4.59	4.89	5.20	5.50	5.81	6.11	

Table 18: Annual Repairs and Maintenance Expenditure

6.3.5 Insurance and miscellaneous Administrative Expenses

Insurance is a critical component of asset protection at the CFC. Insurance is computed on the basis of 0.5 % on the fixed assets. Cost of insurance shall remain as a fixed cost. Miscellaneous administrative expenses are estimated at a lump-sum of Rs. 1.04 lakh per year. The cost of miscellaneous expenses is also considered to be fixed irrespective of scale of operation. The details are presented in the table below:

S. No.	Expenditure component	Particulars	Amount per annum (@ 100% C.U. in Rs. Lakh)
1	Insurance	Estimate @ 0.5% on fixed assets (such as buildings, civil works, and Plant & machinery, including related contingency expenses	1.04
2	Miscellaneous administrative expenditure	Stationery, communication, travelling, and other misc. overheads	1.50
Total			2.54

Table 19: Insurance and Miscellaneous Administrative Expenses

6.4 Working Capital Requirements

Working capital has been calculated in terms of one month's operating expenses required for the CFC. The operating expenses include consumables, salaries, utilities, repair & maintenance, insurance and miscellaneous administrative expenses. The details are presented in the table below.

S. No.	Particulars	Period	As per Capacity Utilisation									
			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
			75%	80%	85%	90%	95%	100%	100%	100%	100%	100%
1	Consumables	1 month	0.66	0.70	0.75	0.79	0.84	0.88	0.88	0.88	0.88	0.88
2	Utilities (Power)	1 month	0.47	0.50	0.52	0.55	0.57	0.60	0.60	0.60	0.60	0.60
3	Working Expenses (Manpower)	1 month	1.61	1.68	1.76	1.83	1.90	1.97	1.97	1.97	1.97	1.97
4	Rent	1 month	0.45	0.50	0.54	0.60	0.66	0.72	0.80	0.88	0.96	1.06
5	Sundry Debtors (Sales Value)	2 months	18.75	20.00	21.25	22.50	23.75	25.00	25.00	25.00	25.00	25.00
6	Working capital (Total expenses)		21.94	23.38	24.82	26.27	27.72	29.18	29.25	29.33	29.42	29.51
7	Working Capital Margin		5.94	7.38	8.82	10.27	11.72	13.18	13.25	13.33	13.42	13.51
8	Working Capital Loan		16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	Interest on Working capital loan @11%											
9	p.a.		1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76
10	Working Cap Margin %age		27.07%	31.56%	35.53%	39.08%	42.28%	45.16%	45.30%	45.45%	45.61%	45.79%

Table 20: Calculation of Working capital requirement
The working capital requirement of the project for the one month of operation has been considered for consumables and expenses. The SPV will contribute the margin money for working capital and rest of working capital will be borrowed from local bank. While calculating the project cost 25% of working capital is shown as margin for working capital and the remaining will be borne by SPV as borrowings. The margin money required for working capital is estimated to Rs. 21.94 lakh during the first year of operation (75% C.U.). Further, total working capital required at an operating capacity of 80% comes out to Rs. 23.38 lakh. The corresponding margin money for working capital requirement at 75% & 80% capacity utilisation amounts to Rs. 5.94 lakh and Rs. 7.38 lakh respectively, and the corresponding loan amounts at Rs. 16.00.

6.5 Depreciation Estimates

Estimates of depreciation are non-cash expenditure and presented in this section based on Written down Value (WDV) method. Accounting for depreciation would facilitate sustainability of operations in terms of developing a fund for replacement of assets. The relevant fund that accumulated could facilitate the replacement of such assets toward the end of the envisaged asset life of 10 years. Depreciation of building is at the rate of 10% per year, plant and machinery at 15% a year (envisaged project life of 10 years prior to replacement of assets), furniture at 10%, computer at 60% and depreciation of other miscellaneous fixed assets at the rate of 15% a year as per the WDV method. Depreciation based on Written down Value method (WDV) method has been used for computation of income tax. The computation as per WDV method is as mentioned in the table below:

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Land										
Opening Balance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Less : Depreciation	-	-	-	-	-	-	-	-	-	-
Closing Balance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building and Civil work										
Opening Balance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Less: Depreciation @ 10%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing Balance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plant & Machinery										
Opening Balance	208.73	177.42	150.81	128.19	108.96	92.62	78.72	66.92	56.88	48.35
Less: Depreciation @ 15%	31.31	26.61	22.62	19.23	16.34	13.89	11.81	10.04	8.53	7.25
Closing Balance	177.42	150.81	128.19	108.96	92.62	78.72	66.92	56.88	48.35	41.09
Computers										
Opening Balance	0.50	0.20	0.08	0.03	0.01	0.01	0.00	0.00	0.00	0.00
Less: Depreciation @ 60%	0.30	0.12	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.00
Closing Balance	0.20	0.08	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00

Table 21: Depreciation based on WDV

Furniture										
Opening Balance	0.60	0.54	0.49	0.44	0.39	0.35	0.32	0.29	0.26	0.23
Less: Depreciation @ 10%	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.02
Closing Balance	0.54	0.49	0.44	0.39	0.35	0.32	0.29	0.26	0.23	0.21
Other Misc. Fixed Assets										
Opening Balance	0.90	0.77	0.69	0.62	0.56	0.50	0.45	0.41	0.37	0.33
Less: Depreciation @ 15%	0.14	0.08	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.03
Closing Balance	0.77	0.69	0.62	0.56	0.50	0.45	0.41	0.37	0.33	0.30
Total Depreciation	31.81	26.86	22.79	19.35	16.45	13.98	11.89	10.11	8.59	7.31
Depreciated value	178.93	152.07	129.28	109.93	93.48	79.50	67.61	57.50	48.91	41.60

6.6 Income/Revenue estimates

The CFC is expected to generate revenue by way of user charges that shall be levied based upon the hours a machine is operated for a particular job. The user charges shall vary based upon the user i.e- the SPV members and non SPV members. The user charges will be less for the SPV members as compared to non SPV members. Firms based outside Gurugram shall be charged a premium for availing the CFC services. The major income sources for the CFC are envisaged by the way of providing testing facilities, electroplating facilities, job work with modern machineries and cleaning facilities.

The user charges have been estimated based upon the operational expenses of the CFC and the prevalent market rates in Gurugram. User charges for service machineries have not been considered as a part of revenue. Estimation of user charges for availing services at CFC has been done on a conservative basis.

The relevance and appropriateness of user charges is also evident form the fact that the rates fixed help meet operating expenditures and provide sustainable replacement of assets. It is also envisaged that the CFC will generate enough income to sustain and grow, making it an absolutely viable project.

The estimated user charges for various machineries are presented in table below:

Table 22:	User	Charges	for	Machinery
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S. No.	Machine Name	No. Of Machines	User Charge per hour (Rs.)	No. Of Workin g hours per day	No. Of Workin g days per month	Revenue per month (Rs. lakh)	Annual Revenue generatio n (in Rs. lakh)	Amount in Rs. Lakh)					
								Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
								75%	80%	85%	90%	95%	100%
1	SCF-450 CCT Salt Spray Machine	1	1400	8	25	2.80	33.60	25.20	26.88	28.56	30.24	31.92	33.60
2	CNC Lathe Machine	1	850	8	25	1.70	20.40	15.30	16.32	17.34	18.36	19.38	20.40
3	Shimadze Energy Dispersive (QSR lab)	1	1500	8	25	3.00	36.00	27.00	28.80	30.60	32.40	34.20	36.00
4	Electroplating Plant	1	1300	8	25	2.60	31.20	23.40	24.96	26.52	28.08	29.64	31.20
5	CVMC JV 55	1	1200	8	25	2.40	28.80	21.60	23.04	24.48	25.92	27.36	28.80
	Total						150.00	112.50	120.00	127.50	135.00	142.50	150.00

Table 23: Income and Expenditure Statement

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Number of working days	300	300	300	300	300	300	300	300	300	300
Number of shift	1	1	1	1	1	1	1	1	1	1
Capacity Utilisation in %	75%	80%	85%	90 %	95%	100%	100%	100%	100%	100%
A. Income										
(User/ Service Charge)	112.50	120.00	127.50	135.00	142.50	150.00	150.00	150.00	150.00	150.00
B. Cost of Production :										
1. Utilities Power (Fixed + Variable)	5.64	5.95	6.25	6.56	6.86	7.16	7.16	7.16	7.16	7.16
2. Direct labour and wages	13.12	13.99	14.87	15.74	16.62	17.49	17.49	17.49	17.49	17.49
3. Consumable	7.92	8.45	8.98	9.50	10.03	10.56	10.56	10.56	10.56	10.56
4. Repair and Maintenance	4.59	4.89	5.20	5.50	5.81	6.11	6.11	6.11	6.11	6.11
5. Depreciation	31.81	26.86	22.79	19.35	16.45	13.98	11.89	10.11	8.59	7.31
Total Cost of production	63.07	60.14	58.08	56.66	55.76	55.31	53.22	51.44	49.92	48.64
C. Administrative expenses :										
6. Manpower (Indirect)	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20
7. Rent	5.40	5.94	6.53	7.19	7.91	8.70	9.57	10.52	11.58	12.73
8. Insurance	1.04	0.89	0.76	0.65	0.55	0.47	0.40	0.34	0.29	0.24
9. Misc Expense	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Total Administrative Expenses	14.15	14.54	15.00	15.54	16.16	16.87	17.67	18.57	19.57	20.68
D. Financial expenses :										
10. Interest on Working capital loan										
@ 11% per annum	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76
Total Financial Expenses	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76
E. Total Expenses B+C+D	78.98	76.44	74.84	73.95	73.68	73.94	72.64	71.76	71.25	71.08
F. Profit A - E	33.52	43.56	52.66	61.05	68.82	76.06	77.36	78.24	78.75	78.92
G. P&P Expenses written off	1.26	1.26	1.26	1.26	1.26	0.00	0.00	0.00	0.00	0.00

H. Income before Tax (F-G)	32.26	42.30	51.41	59.79	67.56	76.06	77.36	78.24	78.75	78.92
I. Adjustment of Loss	-	-	-	-	-	-	-	-	-	-
J. Income Tax (@25.75% for										
company)	8.31	10.89	13.24	15.40	17.40	19.59	19.92	20.15	20.28	20.32
K. Net Profit /Loss for the year	23.96	31.41	38.17	44.39	50.16	56.48	57.44	58.09	58.47	58.60
L. Cumulative Surplus	23.96	55.36	93.53	137.92	188.09	244.56	302.00	360.09	418.56	477.16

As evident from the table above, the project is financially viable. A cumulative surplus of about Rs. 477.16 Lakh shall be earned by the SPV even after accounting for taxation and depreciation at the end of ten years. This surplus generated shall be used for further addition in the machinery or improvement and up-gradation of facilities. Additionally, the SPV intends to conduct a lot of other development activities in the cluster that shall be funded through the surplus earned at the CFC.

The detailed computation of income tax given in the above table. The income tax rates have been considered depending upon the announcements made in the Budget 2017 and the tax applicable on a company. Income tax has been considered at 25.75 per cent on taxable profit inclusive of all the tax components.

As mentioned, the income tax implication is computed at the rate of 25.75 percent that is, 25 percent plus education cess @ 3 per cent. The incidence of tax ranges from Rs. 8.31 Lakh per annum for year 1 to Rs. 20.32 lakh per annum in year 10.

6.7 Cash flow statement

Cash flow statement indicates the cash balance and the liquidity position of the project over the years. The table below presents the sources and disposal/uses of funds statement of the project.

Particulars	Construction Period	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. Source Funds :											
1. Cash Accurals (Net Profit + Interest Paid)		35.28	45.32	54.42	62.81	70.58	77.82	79.12	80.00	80.51	80.68
2. Increase in capital	44.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. Depreciation		31.81	26.86	22.79	19.35	16.45	13.98	11.89	10.11	8.59	7.31
4. Increase in WC Loan		16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Increase in Grant-in-aid from GoH	178.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Sources of Funds	222.97	83.09	72.18	77.21	82.16	87.02	91.80	91.00	90.11	89.10	87.99
B. Use of Funds :											
1. P&P Expenses	6.30	-	-	-	-	-	-	-	-	-	-
2. Increase in fixed assets	210.73	-	-	-	-	-	-	-	-	-	_
3. Increase in other Assets	5.94	30.90	7.62	8.86	10.35	12.13	14.27	15.45	18.53	22.23	26.67
4. Increase in Sundry Debtors		18.75	1.25	1.25	1.25	1.25	1.25	0.00	0.00	0.00	0.00
5. Interest		1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76
6. Taxation		8.31	10.89	13.24	15.40	17.40	19.59	19.92	20.15	20.28	20.32
Total Use of Funds	222.97	59.72	21.52	25.10	28.75	32.54	36.87	37.13	40.44	44.27	48.75
C. Net Surplus (A -B)		23.37	50.66	52.11	53.41	54.49	54.93	53.87	49.67	44.83	39.24
D. Cumulative Surplus		23.37	74.03	126.14	179.55	234.04	288.97	342.85	392.51	437.35	476.59

Table 24: Cash Flow Statement

The cash flow statement showcases the available net surplus for 10 years of the CFC operations. Depreciation is also considered on a higher side on the straight line method for cash flow calculations along with adjusted preliminary expenses. As most of the capital expenditure is being supported as grant under the Mini Cluster scheme, EPP 2015, therefore it does not have any negative effect on the Cash flow, in terms of interest, etc.

6.8 **Projected Balance Sheets**

The annual balance sheets for the CFC have been projected based upon estimates in the earlier sub-sections with regard to various current and fixed liabilities and also current and fixed assets. As evident from the projections, a considerable amount of reserves and surplus gets accumulated. These shall also be utilized for expansion of the CFC and undertaking other cluster development activities. Decision on deployment of reserves and surplus accumulated will be based on the performance of the project and requirements of cluster firms and members of the SPV. The projected balance sheets are provided in the table below:

Particulars	At the end of impl. Period	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1. Fixed Assets :											
Gross Block	210.73	210.73	178.93	152.07	129.28	109.93	93.48	79.50	67.61	57.50	48.91
Less : Depreciation (WDV)		31.81	26.86	22.79	19.35	16.45	13.98	11.89	10.11	8.59	7.31
Net Block	210.73	178.93	152.07	129.28	109.93	93.48	79.50	67.61	57.50	48.91	41.60
Total Fixed Assets (A)	210.73	178.93	152.07	129.28	109.93	93.48	79.50	67.61	57.50	48.91	41.60
2. Current Assets :											
Cash & bank Surplus (B.F)		23.37	74.03	126.14	179.55	234.04	288.97	342.85	392.51	437.35	476.59
Sundry Debtors		18.75	20.00	21.25	22.50	23.75	25.00	25.00	25.00	25.00	25.00
Margin Money for WC Loan	5.94	5.94	7.38	8.82	10.27	11.72	13.18	13.25	13.33	13.42	13.51
Other Current Assets		30.90	37.08	44.50	53.40	64.07	76.89	92.27	110.72	132.86	159.44

Table 25: Balance Sheet

P&P Exp	6.30	5.04	3.78	2.52	1.26	0.00	0.00	0.00	0.00	0.00	0.00
Total current Assets (B)		84.00	142.27	203.23	266.97	333.58	404.04	473.36	541.56	608.63	674.54
Total Assets (A+B)	222.97	262.93	294.34	332.50	376.90	427.06	483.53	540.97	599.06	657.54	716.14
3. Current Liabilities :											
Working Capital Loan		16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
Total Current Liabilities (C)		16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
4. Fixed Liabilities											
Shareholders' Contribution	44.06	44.06	44.06	44.06	44.06	44.06	44.06	44.06	44.06	44.06	44.06
Grant from GoH	178.92	178.92	178.92	178.92	178.92	178.92	178.92	178.92	178.92	178.92	178.92
Reserves and Surplus		23.96	55.36	93.53	137.92	188.09	244.56	302.00	360.09	418.56	477.16
Total Fixed Liabilities (D)	222.97	246.93	278.34	316.50	360.90	411.06	467.53	524.97	583.06	641.54	700.14
Total Liabilities (C+D)	222.97	262.93	294.3 4	332.50	376.9 0	427.0 <mark>6</mark>	483.5 <mark>3</mark>	540.97	599.06	657.5 4	716.14

6.9 Break-even analysis

The break-even (BE) estimates of the project indicate the level of activity at which the total revenues of the project equal the total costs. From this point, a project is expected to start generating profits. As per the calculations, the CFC achieves break even in the first year itself as no major interest costs are being incurred. Hence, BE estimates at level of activity relevant to the first year and subsequent years of activity are provided in the table below:

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Capacity Utilization	75%	80%	85%	90%	95%	100%
A. Total Earning by way of user						
charges	112.50	120.00	127.50	135.00	142.50	150.00
B. Variable costs						
Consumables	7.92	8.45	8.98	9.50	10.03	10.56
Utilities (power- variable charge)	4.57	4.87	5.18	5.48	5.79	6.09
Interest on WC Loan	1.76	1.76	1.76	1.76	1.76	1.76
Repair & Maintenance	4.59	4.89	5.20	5.50	5.81	6.11
Manpower (Direct)	13.12	13.99	14.87	15.74	16.62	17.49
Total Variable Cost (B)	31.95	33.96	35.98	37.99	40.00	42.02
C. Contribution (A-B)	80.55	86.04	91.52	97.01	102.50	107.98
D. Fixed Overheads (Cash)						
Manpower (Indirect)	6.20	6.20	6.20	6.20	6.20	6.20
Utilities (Power - fixed charges)	1.07	1.07	1.07	1.07	1.07	1.07
Rent	5.40	5.94	6.53	7.19	7.91	8.70
Insurance	1.04	0.89	0.76	0.65	0.55	0.47
Misc. Expenditure	1.50	1.50	1.50	1.50	1.50	1.50
Sub-total (D)	15.22	15.61	16.07	16.61	17.23	17.94
E. Fixed Overheads (Non-cash)						
Depreciation	31.81	26.86	22.79	19.35	16.45	13.98
Preliminary & Pre-operative expenses written off	1.26	1.26	1.26	1.26	1.26	0.00
Sub-total (E)	33.06	28.12	24.05	20.61	17.71	13.98
F. Total Fixed Overheads (D+E)	48.29	43.74	40.12	37.22	34.94	31.92
Break-even point (F/C)	59.95%	50.83%	43.83%	38.37%	34.09%	29.56%

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Idule	20.	DIEdk	Even	cstillidies

Book break-even is achieved at 59.95% (of operational capacity at 75 percent) and at 50.83% (of operational capacity at 80 percent). The operation of the CFC is expected to break-even and realise profit from 1st year of operations. Therefore, very low risk is involved in the project.

Moreover, the SPV members have the potential to run the facility for longer than one shift resulting in enhanced capacity utilization and generation of more revenues. In that case, project will break even earlier than estimated. Additionally, the approach has been to develop projections based upon conservative estimates (costs on a higher side and user charge/ revenues on a lower side) whereas, in real the revenues may be far higher.

6.10 Feasibility analysis summary and sustainability indicators

A summary of the financial analysis in terms of key financial indicators such as Return on Capital Employed (ROCE), Net Present Value (NPV), Break Even Point (BEP) and the Internal Rate of Return (IRR) is presented in the table below. The indicators validate the financial viability and sustainability potential of the proposed project.

S. No.	Particulars	Estimates
1	BEP (cash BEP at initial operating capacity of 75%)	59.95%
2	Av. ROCE (PAT/CE)	29.61%
3	Internal Rate of Return (IRR)	24.80%
4	Net Present Value (at a discount rate of 10 per cent) - incorporating viability gap funding (grant) by GoH	NPV is positive and high (Rs. 163.36 lacs) at a conservative project life of 10 years
5	Payback period	4.84 years with Grant-in-aid assistance from GOH
6	DSCR	Not Applicable (non-availment of term loan in this project)

The annual estimates in the context of ROCE are presented in the table below:

Table 28: Calculation of Return on Capital Employed

ROCE	ROCE = EBIT/Capital Employed										
ROCE	15.26%	19.76%	24%	27.60%	31.09%	34.90%	35.48%	35.88%	36.11%	36.18%	29.61%

The average value of ROCE (with grant-in-aid) is 29.61%. This indicates the high technoeconomic viability of the project should the government contribute a significant portion of the project cost as grant. Capital employed considered are those elements excluding the grant component to the project.

The Net Present Value is estimated at a discount rate of 10%. However, as reflected from the high values of NPV, it is positive at even 10.0%, the rate at which bank offers debt capital facility and even at higher discount rates. Project IRR is 24.80% (at a conservative project life of 10 years). This substantiates the viability of the project.

6.11 Additional revenue sources

Additional sources of revenue shall also be explored by the SPV by offering procurement and marketing services in future to more enterprises. The SPV members are strong believers of the cluster concept and would like to explore the potential of undertaking cluster initiatives to improve the backward and forward linkages of the cluster units.

However, in order to ensure conservativeness in income estimates, in the initial years, the income earning possibilities of such revenues are not captured in this DPR.

6.12 Risk Analysis & Sensitivities

Risk in the project is relatively low in the context of the following:

- Promoters are experienced: Risk in the project is quite low given the strength and profile of the SPV members. They have considerable experience not only in the Decorative Lighting industry but also in undertaking cluster developmental initiatives.
- Facility is pre-marketed: Evidently, complete capacity of the core facility to be established in terms of various facilities may be easily availed by members of the SPV themselves, thus the facility would already have a captive market.
- Sustainability indicators in terms of the strength of the SPV and the economics of the project: Evidence of cooperative initiatives of SPV members as articulated in previous chapters; for instance, in terms of pursuing several joint efforts, registering the SPV, proceeding towards procurement of land, and securing commitment from members, vis-à-vis progressively mobilizing necessary paid up capital, all reflect the strength of the SPV.

High economic viability indicators upon considering the benefits of grant-in-aid under the state mini cluster scheme and EPP 2015 also serve as evidence of techno-economic viability and sustainability of the project. A sensitivity analysis has been carried out to ascertain the impact on the project, should there be any loss of revenue. This has been calculated assuming drop in user charges. Major financial parameters are still attractive. The important parameters related to the sensitivity analysis are presented in the table below:

S. No.	Particulars	Base case	With 5% decline in user charge	With 10% decline in user charge	With 15% decline in user charge
1	BEP (cash BEP at operating capacity of 75%)	59.95%	64.45%	69.57%	75.57%
2	Internal Rate of Return (IRR)	24.80%	22.45%	19.91%	17.28%
3	Av. ROCE (PAT/CE) (with Grant)	29.61%	26.61%	23.48%	20.35%
4	Net Present Value (at a discount rate of 10 per cent) - incorporating viability gap funding (grant) GoH	167.59	137.67	107.26	76.85

Even assuming a fall in user charge, ROCE is favourable. From the above it is evident that the project is very viable even under (unlikely) risky environment circumstances.

6.13 Assumptions for financial calculations:

The financial statements and project profitability estimates in this DPR are based on the following assumptions:

1. The total project cost is pegged @ Rs. 222.98 Lakh on the basis of estimates and quotations.

2. To finance the project, a total of Rs. 222.98 Lakhs is required. The financing will consist of grant from central government, government to Haryana and contribution by SPV.

In the financial projections and analysis, year 2018 is the envisaged period of project implementation also involving construction of buildings and installation of plant, machinery and other equipment. This period will commence from the date of final approval by the State Level Project Steering Committee under State Mint-Cluster Development Scheme. The financial projections thereafter are prepared for 10 years of operation starting 2018.

4. The Registered SPV will manage CFC, and these services are to be used by the SPV to member as well as non-member units. The common facility will benefit registered SPV as well as non-member firms who (in some cases) may not afford to contribute to necessary equity capital.

5. The CFC will operate for 25 days a month, that is, for 300 days a year on an eight hour single shift basis. Operation on single shift basis is assumed for purposes of projecting income estimates.

6. Capacity utilization is assumed at 75% in the first year; 80% for second & third year and 85% thereafter. This is a conservative estimate for first 5 years as SPV members alone could avail of over 100 per cent of the installed capacity on single-shift basis.

7. The workings with regard to expenses related to the project have been tabulated and categorized in terms of those related to consumables, manpower, electricity, and miscellaneous administrative expenditures.

8. Repairs and maintenance is provided @ 2% of building cost and @ 3% of plant and machinery cost at varying capacity utilization.

9. Insurance is provided @ 0.5% on fixed assets including building & civil works, machinery, contingency as fixed cost at all capacity utilization.

10. Electricity connection required for the CFC shall cost at Rs. 1100 as security deposit and Rs. 2200 as service charge per kW connected load as per the regulatory norms in Haryana.

11. Fixed charges per kW of electric connection shall be charged @ Rs. 173 and variable charges @ Rs. 9 per unit consumed.

12. Income estimates have been projected most conservatively. The prescribed user charges are competitive vis-à-vis charges for similar services in other regions.

13. Depreciation on fixed assets is calculated on written down value (WDV) method for calculating profitability and on for other purposes.

14. Provision for income tax has been made @ 25.75% including surcharge. This is the rate prescribed for Private Limited Companies as per the recent Budget 2017.

15. Profitability estimates in terms of ROCE, NPV, IRR are computed considering operating results for first 10 years of operation.

Project Implementation and Monitoring



7. Project Implementation and Monitoring

- 7.1 Envisaged Implementation Framework
 - 1. **Time frame:** Project implementation is envisaged to involve a time-frame of about 12 months upon receipt of final approval of grant-in-aid assistance from the Government of Haryana under mini cluster scheme.
 - 2. User Base: The facilities may be used by SPV members and non-members. However, the charges will vary. The SPV will also be open for new entrants subject to them subscribing to the shareholding of the SPV, and them being genuinely pro-active and interested in cluster initiatives. The BoD of the SPV can decide on same or differential user charges for both members and non-members or based upon the volume of the output.
 - 3. **Project implementation schedule:** The project implementation schedule envisaged over a period of 10 months involves several activities. The schedule is elaborated in the table below:

Activity/Month	1	2	3	4	5	6	7	8	9	10
Collecting										
SPV members										
Lease deed registration in the name of SPV										
Receipt of final sanction from GoH										
Preparation of e- tender for Machinery										
Formation of purchase committee										
Inviting E tenders for purchase of machines Construction of facilities										
Obtaining statutory clearances and approvals										
Purchase of machinery and equipment										

Table 30: Project Implementation Schedule

Installation and trial run of machinery and equipment					
Arrangement of working capital					
Monitoring of the project by BoD					
Monitoring of the project by PMC					
Commencement of operations of the facility					

4. **Contractual agreements/ MoU with member units:** Agreements have been indicatively finalized in terms of utilization of assets in respect of shareholders.

A total of 11 units are participating in the SPV and all these units have agreed to contribute towards the SPV share of the project cost. The utilization of the common facility will be in line with the proposed shareholding pattern. The consent letter wherein the member units agree for payments of 10% share of cost of CFC will be submitted in due course of time and as per final approval from Government of Haryana.

- 5. Memorandum and By-Law of Registered Company: MOA, AOA and bye laws are indicative of the management and decision making structure of the SPV. All the members of SPV have paid an advance and are members of the Registered Private Entity. Few other units are also willing to be members of the SPV and once the CFC is approved and sanctioned from government of Haryana, many more members will be interested to subscribe to the shares of the SPV.
- 6. Availability of Building & Status of Acquisitions: A building has been identified by SPV for the CFC with area of 3000 sq. ft. and will be taken on lease after approval of DPR. The consent letter for lease has already been taken from the building owner.
- 7. Availability of Requisite Clearances: Necessary land with all required clearances will be procured by the SPV. Electricity is already available in the area and the proposed CFC can easily be connected to the grid. The other required clearances (environment, labor etc.) shall be obtained in due course.
- 8. O & M Plan: The revenue stream for O&M is dependent on realization of user charges from the SPV members and other users/MSMEs in the case of various facilities. As detailed in the financial section, the cash incomes are sufficient to meet operating expenditures, overheads as well as depreciation for sustainable replacement of assets. The SPV will also have to keep a track of maintenance of assets through collection of user charges from the members/ users.

7.2 Monitoring Mechanism

As mentioned in the implementation schedule, the following key activities shall be conducted during establishment of the CFC:

- Civil Alterations
- Electrical works
- Purchase of machinery & commissioning
- Trial production
- Commercial production

The successful implementation of above activities will depend on the following aspects:

- Implementation of above within the time frame
- Supervising and overseeing the implementation of the proposals and fine tuning and advocating more measures if needed, depending on the site conditions
- Project level monitoring indicators to evaluate the implementation of the CFC proposal at recommended intervals
- Suitable purchase mechanisms for proposed plant & machinery
- Periodical reporting of the status of implementation and monitoring of the results of key performance indicators, and
- Constant evaluation of the measures implemented based on the data available from project level monitoring and status reports and providing directions accordingly.

It is proposed to constitute a governance mechanism in the form of a **Cluster Development Co-ordination Committee (CDCC) under the chairmanship of Director of Industries, Government of Haryana** to oversee all cluster development projects in Haryana. The CDCC will look after the project under Mini Cluster Scheme to be implemented under the state's Enterprise Promotion Policy 2015.

The committee may operate under the overall monitoring of the State Level Steering Committee (SLSC). Other key stakeholders such as representatives of cluster SPV, related government departments, support institutions, cluster level industry associations and consultants may be inducted as members under the committee.

The members may comprise the following:

- i. Director, Industries and Commerce, Government of Haryana (Chairman)
- ii. Concerned Joint Director, Department of Industries and Commerce
- iii. GM, DIC Gurugram
- iv. HSIIDC state officer
- v. Commercial bank general Manager
- vi. President of related industry association
- vii. Directors of related SPV
- viii. EY Cluster Development Expert under MSME project

The meeting of CDCC may be held on a quarterly basis to review performance of the clusters. The CDCC will guide monitoring and implementation of the project.

In addition, for implementing the Gurugram Decorative Lighting CFC project, a Project Management Committee (PMC) comprising the GM, DIC, Gurugram, and representatives of SPV, Syndicate Bank, Kurukshetra University and EY experts shall be constituted to directly oversee effective monitoring and implementation.

The project will be implemented through SPV and PMC will report progress of implementation to the CDCC as well as State Level Steering Committee and DIC Gurugram.

Conclusion



8. Conclusion

There is an increasing high demand for the decorative lighting products with innovative technologies and features in both domestic and international markets. The weak areas include lack of testing facility and modern automated machining facility within the cluster, which results in units having to approach private service providers. This increases the costs of manufacturing for the units, thereby reducing their competitiveness. This challenge can be overcome by setting up a CFC with these facilities, which can be availed at lower costs. Once they have these facilities they don't have to depend upon the private service providers, also their production capacity will increase there by making them capable of taking bulk orders and increasing their market potential.

The micro sized decorative lighting units of Gurugram are dependent on manual and obsolete technologies for manufacturing their products. Moreover, their products lack quality certifications due to absence of a testing lab in the cluster. The training of workers is also on the job and leads to raw material wastage.

The cluster is also in the nascent stage and the units have not undertaken much joint initiatives. Therefore, an action plan for soft interventions has been chalked out to sensitize the cluster stakeholders on various aspects of cluster development as well as enhance their exposure on new technologies in electronic and light industry and new trends in decorative lighting products and packaging. The action plan shall be implemented with support from the state government under the mini cluster scheme.

The only constraint is the lack of technologies and related infrastructure which can be removed by setting up a CFC. The cluster firms have not been able to obtain bulk orders from large customers due to lack of quality, production capacity and poor quality of produce. The technologies required for upgradation are extremely expensive and the same cannot be adopted by any individual units in the cluster. Hence, the following facilities have been proposed in the CFC:

- > Value added modern machines for job work
- Value added finishing Facilities
- Value added testing facilities

The total project cost (including plant/machinery and buildings) is estimated to be Rs. 2.22 crores. Special Purpose Vehicle will set up the CFC with support from state government of Haryana under PPP mode. The facility will provide major infrastructural push to the units reeling under high competition. Additionally, the automobile market is set to grow significantly in the future and will provide immense opportunities to the units of Gurugram to supply high quality products in large quantities at competitive prices. The Project will enhance the capability of the cluster in the above areas and improve its competitiveness to meet the soaring demand. The CFC will be set up with support from DIC and the state government (Department of Industries) under PPP mode. The land for the project has already been identified by the SPV and shall be acquired immediately upon in final approval by State Government. The state industry department is envisaged to provide grant for setting up of the modern machines under the Mini-Cluster scheme, Haryana EPP 2015. The SPV members have proposed to contribute Rs. 44.06 lakhs of the project cost. Support

from Mini Cluster Scheme of the State Government of Haryana is envisaged for Rs. 180.00 lakh. Syndicate Bank will provide working capital requirement for the project. The project is financially viable and is expected to generate enough revenue to ensure its sustainability for the project will be provided by Corporation Bank. The project is financially viable and is expected to generate enough revenue to ensure its sustainability.

Annexures



9. Annexures

Annexure 1: DSR Approval Letter

From

The Director of Industries & Commerce, Haryana

То

M/s Ernst & Young LLP, SCO-166-167, 1st Floor, Sector 9-C, Madhya Marg, Chandigarh. Email :- <u>upinder.dhingra@in.ey.com</u>

Memo No. Mini Cluster/Decorative Lighting/Gurugram/

Subject:

Approval of DSR and directions for preparation of Detailed Project Report of Gurugram Decorative Lighting Cluster.

Kindly refer to the subject cited above.

It is informed that the Diagnostic Study Report (DSR) of Gurugram Decorative Lighting cluster has been approved by Director of Industries and Commerce under the state mini cluster scheme.

Therefore, EY LLP is directed to initiate steps for preparation of Detailed Project Report (DPR) of the cluster.

(R.C Dahra)

Consultant (Cluster)

Endst. No. Mini Cluster/Decorative Lighting/Gurugram/ A Dated:- 21/11/2017

A copy of the above is forwarded to

 SPV, Decorative Lighting Cluster for Information. They are directed to provide the requisite information desired by EY so as to enable them to prepare the DPR at the earliest.

2. Joint Director, DIC, Gurugram.

Consultant (Cluster) of for Director of Industries & Commerce, Haryana

Annexure 2 (a): SPV Certificate of Incorporation



GOVERNMENT OF INDIA MINISTRY OF CORPORATE AFFAIRS

Central Registration Centre

Certificate of Incorporation

[Pursuant to sub-section (2) of section 7 of the Companies Act, 2013 (18 of 2013) and rule 18 of the Companies (Incorporation) Rules, 2014]

I hereby certify that VYASO GURGAON DECORATIVE LIGHTING CLUSTER PRIVATE LIMITED is incorporated on this Second day of January Two thousand eighteen under the Companies Act, 2013 (18 of 2013) and that the company is limited by shares

The Corporate Identity Number of the company is U74999HR2018PTC072095.

The Permanent Account Number (PAN) of the company is AAGCV2351N *

Given under my hand at Manesar this Third day of January Two thousand eighteen .

Digital Signature Certificate Mr Sanjaya Kumar Verma

For and on behalf of the Jurisdictional Registrar of Companies Registrar of Companies Central Registration Centre

Disclaimer: This certificate only evidences incorporation of the company on the basis of documents and declarations of the applicant(s). This certificate is neither a license nor permission to conduct business or solicit deposits or funds from public. Permission of sector regulator is necessary wherever required. Registration status and other details of the company can be verified on www.mca.gov.in

Mailing Address as per record available in Registrar of Companies office:

VYASO GURGAON DECORATIVE LIGHTING CLUSTER PRIVATE LIMITED PLOT NO. 952, SECTOR-37, NEAR JBM, GURGAON, Gurgaon, Haryana, India, 122001



* as issued by the Income Tax Department

Annexure 2(b): Copy of Memorandum of Association (MoA) & Article of Association (AoA)

[Pursuant to Schedule I (see Sections 4 and 5) to	SPIC C MOA
the Companies Act, 2015)] FORM NO. INC-55	(e-Memorandum of Association
MOA language: English Hindi	
SRN of form INC-1 G71301394 Pre-fill	
Table applicable to company as notified under schedule I of the companies Act, 2013	Α
Table A- MEMORANDUM OF ASSOCIATION OF A COMPANY LIMITED BY SHARES	
1. The Name of the Company is VYASO GURGAON DECORATIVE LIGHTING CLUSTER P	PRIVATE LIMITED
2.The Registered office of the company will be situated in the state of Haryana-HR	
3.(a)The objects to be pursued by the company on its incorporation are	
To function as Special Purpose Vehicle (SPV) and Set up Common Facilities Centre(CFC) and other in Industry and for the benefits of its members and Industry/concerned stake holders following the guidelin Scheme of Government of Haryana.	frastructure activities for Decorative nes and notifications for Mini Cluster
To undertake works/scheme/programs of Government relating to growth and development of Decorativ and hard intervention activities under Mini Cluster Scheme of Government of Haryana.	ve Industry and carry out/conduct soft
To act as a resource centre for development and strengthening network as Business development Serv Capacity building and Hand holding support for the purpose of growth and development of the Decorati Scheme of Government of Haryana.	vices related to Technology, Market, ive Industry under Mini Cluster
To make available raw and packing material to all members of Decorative Industry at competitive rates material bank.	by opening of raw and packing
To arrange latest technology for upgrading all manufacturing units to provide Quality certificate to its m	embers.
To render assistance and encouragement as may be necessary to persons engaged in Decorative and	l/or Manufacturing Industry.
To undertake and to do trading, manufacturing, import, export of all type of Decorative products and re- development of Decorative Industry.	search work in connection with
To conduct training centre programs/seminars.	
3.(b)Matters which are necessary for furtherance of the objects specified in clause 3(a) are	

To receipt of contract amount in foreign currencies & repatriate the amount outside India.

To do all or any of the acts or things as mentioned in the main objects either as principals, contractors or otherwise and either alone or in conjunction with others.

3. To remunerate any firm, person or body corporate rendering services to the Company, including without limitation, in relation to the promotion or formation of the Company, either by cash payment or by allotment to him or them of shares and securities of the Company as paid -up in full or in part or otherwise.

4. To pay all costs, charges and expenses incurred or sustained in or about the formation, registration, promotion, incorporation, establishment and advertisement of the Company or which the Company shall consider to be preliminary including contracts entered into by the Company.

5. To enter into contracts or arrangements or other dealings for more efficient conduct of the business of the Company or any part thereof and also to enter into any arrangement with any Government or Authorities or any persons or companies that may seem conducive to the main objects of the Company.

6. To buy, sell, repair, alter, improve, exchange, let on hire, import, export and deal in all works, plant, machinery, tools, appliances, apparatus, products, materials, substances, articles and things capable of being used in any business which the Company is competent to carry on, or which may be required by any customer or person having dealings with the Company or which may seem capable of being profitably dealt with in connection therewith and to manufacture, experiment with, render marketable and otherwise deal in all products and services incidental to any of the businesses carried on by the Company.

7. To lease, sub-lease, hire, purchase, license or otherwise acquire and/or sell, dispose of, construct, alter, modify, develop or otherwise deal in any properties, factories, shades, offices, guest houses, employee accommodation, godowns, warehouses, or other structures for housing and carrying on the businesses of the Company or for its employees, clients or other persons or for any other

8. To enter into, undertake and execute contracts or other arrangements with any parties for any transactions, including the provision and supply or use of materials, machinery, equipment, articles or other products and/or services necessary for or otherwise required for or incidental to carrying out the objectives of the Company.

9. To recruit, train and develop staff, organize seminars, training programs and conferences for employees, customers and the general public.

10. To recruit, train and develop a pool of technical, managerial and administrative personnel including staff, employees, agents, for the Company or any subsidiary, affiliate or group companies or any other company, firm or other person, particularly where such companies, firms or persons are engaged in any business related to the business of the Company.

11. To employ, engage, appoint, retain or otherwise procure, suspend or terminate the services of professionals, consultants, engineers, design consultants, technicians, legal and financial advisors, or other experts and to imbibe innovation and modern management techniques in the functioning and businesses of the Company.

12. To retrench, lay-off, suspend, terminate the appointment of or dismiss executives, managers, assistants, support staff and other employees and to remunerate them at such rates as may be thought fit.

13. To adopt such means of making known the articles, goods, products, appliances manufactured or dealt in or processes and services provided by, or at the disposal of the Company, as well as properties, assets and effects of the Company as may seem expedient, in particular by advertising in the press and through billboards, hoardings, motion pictures, by broadcasting, telecasting or by publication of books, periodicals and any other material convenient to the Company, by participating in trade fairs, exhibitions and by granting prizes, rewards and donations.

14. To acquire, and possess the whole or part of the business assets, property, goodwill, rights and liabilities of any persons, society, association or company carrying on any business.

15. To appoint dealers, sub-dealers, agents, sub-agents, distributors, sole selling agents, sole concessionaries, either in India or any place in India, for the efficient conduct of the bus iness of the Company, and remunerate them for their services.

16. To take and/or provide discounts or to approve other terms of payment or credit in relation to any sums owing to or due from the Company and to impose or agree to pay any interest thereon or to write off any such sums or parts thereof.

17. To pay for any property or rights acquired, either in cash, against debentures, or in fully or partly paid shares, or by the issue of securities, or by providing services and generally in such terms as may be determined and agreed upon.

18. To carry on research and development activities on all aspects related to the business and objects of the Company.

19. To undertake all types of technical, economic, and financial investigations and aid or assist or enter into partnership with any institution, university, company, partnership, firm or person or persons conducting such research or study and to subsidize, endow and assist workshops, libraries, meetings, lectures, and conferences and do suc h other acts to generally encourage, promote and reward studies, researches, investigations, experiments, tests and inventions of any kind that may be considered to assist any of the businesses of the Company.

4.The liability of the member(s) is limited and this liability is limited to the amount unpaid, if any, on the shares held by them.

5. The share capital of the company is		100,	100,000.00					rupees, divided into,		

10,000.00	Equity	shares of	10.00	rupees each	

6 We, the several persons, whose names and addresses are subscribed, are desirous of being formed into a company in pursuance of this memorandum of association, and we respectively agree to take the number of shares in the capital of the company set against our respective names:

I, whose name and address is given below, am desirous of forming a company in pursuance of this memorandum of association and agree to take all the shares in the capital of the company (Applicable in case of one person company):

S.No.	No. Subscriber Details							
	Name, Address, Description and	DIN/PAN/Passport Number	No. of shares taken		DSC	Dated		
1	DINESH SAINI S/o RAM PRATAP SAI R/o HOUSE NO.125-P SECTOR 13, P/ Haryana-HR-125001 OCCUPATION: BUSINESS	08033328	5000	Equity		01/01/18		
2	Rakesh kumar 5/0 om praksah ; R/0 House no. 269 ,Saini Khera, (HR- 122001, India Occupation: Business	08033318	5000	Equity		01/01/18		
	Total Sha	res taken		10,000.0	Equity	_		
		s	igned before Me					
Name	9	Address, Descripti	ion and Occupation	DIN/P/ Numb Memb Numb	AN/Passp er/ ership er	ort DSC	Dated	
ACS	DIGVIJAY SINGH	515A, 3RD FLOOR, I COURT, GURGAON-	DEEP PLAZA, DISTRIC 122001	38771			01/01/18	
7.Shri	Shri/Smt ,							

	of		
resident of			
Aged		years shall be the nominee in the event of death of the sole member.	

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[Pursuant to Schedule I (see Sections 4 and 5) to the Companies Act, 2013)] FORM NO. INC-34	SPIC <i>e</i> AOA
	(e-Articles of Association)
AOA language English	
SRN of form INC-1 G71301394 Prefill	
*Table F as notified under schedule I of the companies Act, 2013 is applicable to the company	Ŷ
VYASO GURGAON DECORATIVE LIGHTING CLUSTER PRIVATE LIMIT	ED

A COMPANY LIMITED BY SHARES

Table F - ARTICLES OF ASSOCIATION OF A COMPANY LIMITED BY SHARES

	Articl e No	Description
		Interpretation
	I	 (1) In these regulations (a) "the Act" means the Companies Act, 2013, (b) "the seal" means the common seal of the company. (2) Unless the context otherwise requires, words or expressions contained in these regulations shall bear the same meaning as in the Act or any statutory modification thereof in force at the date at which these regulations become binding on the company. (3) Private limited company The Company is a Private Company within a meaning of Section 2(68) of the Companies Act, 2013 having a minimum paid-up share Capital of rupees as may be prescribed, and which by its articles: - (i) restricts the right to transfer its shares. (ii) except in case of One Person Company, limits the number of its members to two hundred: Provided that where two or more persons hold one or more shares in a company jointly, they shall, for the purposes of this clause, be treated as a single member: Provided further that— (A) persons who are in the employment of the company; and (B) persons who, having been formerly in the employment and have continued to be members after the employment ceased, shall not be included in the number of members; and (iii) prohibits any invitation to the public to subscribe for any securities of the company;
		Share capital and variation of rights
	II 1	Subject to the provisions of the Act and these Articles, the shares in the capital of the company shall be under the control of the Directors who may issue, allot or otherwise dispose of the same or any of them to such persons, in such proportion and on such terms and conditions and either at a premium or at par and at such time as they may from time to time think fit.
	2	 (i) Every person whose name is entered as a member in the register of members shall be entitled to receive within two months after incorporation, in case of subscribers to the memorandum or after allotment or within one month after the application for the registration of transfer or transmission or within such other period as the conditions of issue shall be provided, (a) one certificate for all his shares without payment of any charges; or (b) several certificates, each for one or more of his shares, upon payment of twenty rupees for each certificate after the first. (ii) Every certificate shall be under the seal and shall specify the shares to which it relates and the amount paid-up thereon. (iii) In respect of any share or shares held jointly by several persons, the company shall not be bound to issue more than one certificate, and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all such holders

	3	(i) If any share certificate be worn out, defaced, mutilated or torn or if there be no further space on the back for endorsement of transfer, then upon production and surrender thereof to the company, a new certificate may be issued in lieu thereof, and if any certificate is lost or destroyed then upon proof thereof to the satisfaction of the company and on execution of such indemnity as the company deem adequate, a new certificate in lieu thereof shall be given. Every certificate under this Article shall be issued on payment of twenty rupees for each certificate.
	4	Except as required by law, no person shall be recognised by the company as holding any share upon any trust, and the company shall not be bound by, or be compelled in any way to recognise (even when having notice thereof) any equitable, contingent, future or partial interest in any share, or any interest in any fractional part of a share, or (except only as by these regulations or by law otherwise provided) any other rights in respect of any share except an absolute right to the entirety thereof in the registered holder.
	5	 The company may exercise the powers of paying commissions conferred by sub-section (6) of section 40, provided that the rate per cent or the amount of the commission paid or agreed to be paid shall be disclosed in the manner required by that section and rules made thereunder. The rate or amount of the commission shall not exceed the rate or amount prescribed in rules made under sub-section (6) of section 40. The commission may be satisfied by the payment of cash or the allotment of fully or partly paid shares or partly in the one way and partly in the other.
	6	(i) If at any time the share capital is divided into different classes of shares, the rights attached to any class (unless otherwise provided by the terms of issue of the shares of that class) may, subject to the provisions of section 48, and whether or not the company is being wound up, be varied with the consent in writing of the holders of three-fourths of the issued shares of that class, or with the sanction of a special resolution passed at a separate meeting of the holders of the shares of that class.
		(ii) To every such separate meeting, the provisions of these regulations relating to general meetings shall mutatis mutandis apply, but so that the necessary quorum shall be at least two persons holding at least one- third of the issued shares of the class in question.
	7	Ine rights conterred upon the holders of the shares of any class issued with preferred or other rights shall not, unless otherwise expressly provided by the terms of issue of the shares of that class, be deemed to be varied by the creation or issue of further shares ranking pari passu therewith.
	8	Subject to the provisions of section 55, any preference shares may, with the sanction of an ordinary resolution, be issued on the terms that they are to be redeemed on such terms and in such manner as the company before the issue of the shares may, by special resolution, determine.
		Lien
	9	(i) The company shall have a first and paramount lien (a) on every share (not being a fully paid share), for all monies (whether presently payable or not) called, or payable at a fixed time, in respect of that share; and (b) on all shares (not being fully paid shares) standing registered in the name of a single person, for all monies presently payable by him or his estate to the company: Provided that the Board of directors may at any time declare any share to be wholly or in part exempt from the provisions of this clause.
		(ii) The company's lien, if any, on a share shall extend to all dividends payable and bonuses declared from time to time in respect of such shares. The company may sell, in such manner as the Board thinks fit, any shares on which the company has a lien;
	10	Provided that no sale shall be made (a) unless a sum in respect of which the lien exists is presently payable; or (b) until the expiration of fourteen days after a notice in writing stating and demanding payment of such part of the amount in respect of which the lien exists as is presently payable, has been given to the registered holder for the time being of the share or the person entitled thereto by reason of his death or insolvency.
		(i) To give effect to any such sale, the Board may authorise some person to transfer the shares sold to the purchaser thereof
	11	(ii) The purchaser shall be registered as the holder of the shares comprised in any such transfer.
		(iii) The purchaser shall not be bound to see to the application of the purchase money, nor shall his title to the shares be affected by any irregularity or invalidity in the proceedings in reference to the sale.

	12	(i) The proceeds of the sale shall be received by the company and applied in payment of such part of the amount in respect of which the lien exists as is presently payable. ii) The residue, if any, shall, subject to a like lien for sums not presently payable as existed upon the shares before the sale, be paid to the person entitled to the shares at the date of the sale.
		Calls on shares
	13	 (i) The Board may, from time to time, make calls upon the members in respect of any monies unpaid on their shares (whether on account of the nominal value of the shares or by way of premium) and not by the conditions of allotment thereof made payable at fixed times: Provided that no call shall exceed one-fourth of the nominal value of the share or be payable at less than one month from the date fixed for the payment of the last preceding call. (ii) Each member shall, subject to receiving at least fourteen days' notice specifying the time or times and place of payment, pay to the company, at the time or times and place so specified, the amount called on his shares. (iii) A call may be revoked or postponed at the discretion of the Board.
	14	A call shall be deemed to have been made at the time when the resolution of the Board authorizing the call was passed and may be required to be paid by instalments.
	15	The joint holders of a share shall be jointly and severally liable to pay all calls in respect thereof.
	16	(i) If a sum called in respect of a share is not paid before or on the day appointed for payment thereof, the person from whom the sum is due shall pay interest thereon from the day appointed for payment thereof to the time of actual payment at ten per cent per annum or at such lower rate, if any, as the Board may determine.
		(ii) The Board shall be at liberty to waive payment of any such interest wholly or in part. (i) Any sum which by the terms of issue of a share becomes payable on allotment or at any fixed date, whether
	17	 (i) any sum when by the terms of issue of a share becomes payable of all other of at any incer date, whether on account of the nominal value of the share or by way of premium, shall, for the purposes of these regulations, be deemed to be a call duly made and payable on the date on which by the terms of issue such sum becomes payable. (ii) In case of non-payment of such sum, all the relevant provisions of these regulations as to payment of
		interest and expenses, forfeiture or otherwise shall apply as if such sum had become payable by virtue of a call duly made and notified.
		The Board (a) may, if it thinks fit, receive from any member willing to advance the same, all or any part of the monies uncalled and unpaid upon any shares held by him; and
	18	(b) upon all or any of the monies so advanced, may (until the same would, but for such advance, become presently payable) pay interest at such rate not exceeding, unless the company in general meeting shall otherwise direct, twelve per cent per annum, as may be agreed upon between the Board and the member paying the sum in advance.
		Transfer of shares
	19	 (i) The instrument of transfer of any share in the company shall be executed by or on behalf of both the transferor and transferee. (ii) The transferor shall be deemed to remain a holder of the share until the name of the transferee is entered in the register of members in respect thereof.
	20	The Board may, subject to the right of appeal conferred by section 58 decline to register (a) the transfer of a share, not being a fully paid share, to a person of whom they do not approve; or (b) any transfer of shares on which the company has a lien.
	21	 (a) the instrument of transfer is in the form as prescribed in rules made under sub-section (1) of section 56; (b) the instrument of transfer is accompanied by the certificate of the shares to which it relates, and such other evidence as the Board may reasonably require to show the right of the transferor to make the transfer; and (c) the instrument of transfer is in respect of only one class of shares.

	22	On giving not less than seven days' previous notice in accordance with section 91 and rules made thereunder, the registration of transfers may be suspended at such times and for such periods as the Board may from time to time determine:
		Provided that such registration shall not be suspended for more than thirty days at any one time or for more than forty-five days in the aggregate in any year.
		Transmission of shares
	23	(i) On the death of a member, the survivor or survivors where the member was a joint holder, and his nominee or nominees or legal representatives where he was a sole holder, shall be the only persons recognised by the company as having any title to his interest in the shares (ii) Nething in closes (i) shall salese the estate of a descend init holder from any linkitity in second of any
		share which had been jointly held by him with other persons.
	24	 Any person becoming entitled to a share in consequence of the death or insolvency of a member may, upon such evidence being produced as may from time to time properly be required by the Board and subject as hereinafter provided, elect, either (a) to be registered himself as holder of the share; or (b) to make such transfer of the share as the deceased or insolvent member could have made.
		(ii) The Reard shall in either case, have the same right to decline or surgered registration as it would have had
		(ii) The board shall, in either case, have the same right to decline or suspend registration as it would have had, if the deceased or insolvent member had transferred the share before his death or insolvency.
		(i) If the person so becoming entitled shall elect to be registered as holder of the share himself, he shall deliver or send to the company a notice in writing signed by him stating that he so elects.
	25	(ii) If the person aforesaid shall elect to transfer the share, he shall testify his election by executing a transfer of the share.
		(iii) All the limitations, restrictions and provisions of these regulations relating to the right to transfer and the registration of transfers of shares shall be applicable to any such notice or transfer as aforesaid as if the death or insolvency of the member had not occurred and the notice or transfer were a transfer signed by that member.
	26	A person becoming entitled to a share by reason of the death or insolvency of the holder shall be entitled to the same dividends and other advantages to which he would be entitled if he were the registered holder of the share, except that he shall not, before being registered as a member in respect of the share, be entitled in respect of it to exercise any right conferred by membership in relation to meetings of the company:
	20	Provided that the Board may, at any time, give notice requiring any such person to elect either to be registered himself or to transfer the share, and if the notice is not complied with within ninety days, the Board may thereafter withhold payment of all dividends, bonuses or other monies payable in respect of the share, until the requirements of the notice have been complied with.
		In case of a One Person Company
		(i) on the death of the sole member, the person nominated by such member shall be the person recognised by the company as having title to all the shares of the member;
	27	 (ii) the nominee on becoming entitled to such shares in case of the member's death shall be informed of such event by the Board of the company;
		 (iii) such nominee shall be entitled to the same dividends and other rights and liabilities to which such sole member of the company was entitled or liable;
		(iv) on becoming member, such nominee shall nominate any other person with the prior written consent of such person who, shall in the event of the death of the member, become the member of the company.
		Forfeiture of shares
	27	If a member fails to pay any call, or instalment of a call, on the day appointed for payment thereof, the Board may, at any time thereafter during such time as any part of the call or instalment remains unpaid, serve a notice on him requiring payment of so much of the call or instalment as is unpaid, together with any interest which may have accrued.

		The notice aforesaid shall
	28	(a) name a further day (not being earlier than the expiry of fourteen days from the date of service of the notice) on or before which the payment required by the notice is to be made; and
		(b) state that, in the event of non-payment on or before the day so named, the shares in respect of which the call was made shall be liable to be forfeited.
	29	If the requirements of any such notice as aforesaid are not complied with, any share in respect of which the notice has been given may, at any time thereafter, before the payment required by the notice has been made, be forfeited by a resolution of the Board to that effect.
	30	(i) A forfeited share may be sold or otherwise disposed of on such terms and in such manner as the Board thinks fit.
		(ii) At any time before a sale or disposal as aforesaid, the Board may cancel the forfeiture on such terms as it thinks fit.
	31	(i) A person whose shares have been forfeited shall cease to be a member in respect of the forfeited shares, but shall, notwithstanding the forfeiture, remain liable to pay to the company all monies which, at the date of forfeiture, were presently payable by him to the company in respect of the shares.
		(ii) The liability of such person shall cease if and when the company shall have received payment in full of all such monies in respect of the shares.
		(i) A duly verified declaration in writing that the declarant is a director, the manager or the secretary, of the company, and that a share in the company has been duly forfeited on a date stated in the declaration, shall be conclusive evidence of the facts therein stated as against all persons claiming to be entitled to the share;
	32	(ii) The company may receive the consideration, if any, given for the share on any sale or disposal thereof and may execute a transfer of the share in favour of the person to whom the share is sold or disposed of;
		(iii) The transferee shall thereupon be registered as the holder of the share; and
		(iv) The transferee shall not be bound to see to the application of the purchase money, if any, nor shall his title to the share be affected by any irregularity or invalidity in the proceedings in reference to the forfeiture, sale or disposal of the share.
	33	The provisions of these regulations as to forfeiture shall apply in the case of nonpayment of any sum which, by the terms of issue of a share, becomes payable at a fixed time, whether on account of the nominal value of the share or by way of premium, as if the same had been payable by virtue of a call duly made and notified.
		Alteration of capital
	34	The company may, from time to time, by ordinary resolution increase the share capital by such sum, to be divided into shares of such amount, as may be specified in the resolution.
		Subject to the provisions of section 61, the company may, by ordinary resolution,
		(a) consolidate and divide all or any of its share capital into shares of larger amount than its existing shares;
	35	(b) convert all or any of its fully paid-up shares into stock, and reconvert that stock into fully paid-up shares of any denomination;
		(c) sub-divide its existing shares or any of them into shares of smaller amount than is fixed by the memorandum;
		(d) cancel any shares which, at the date of the passing of the resolution, have not been taken or agreed to be taken by any person.
		Where shares are converted into stock,
--	----	---
		(a) the holders of stock may transfer the same or any part thereof in the same manner as, and subject to the
		same regulations under which, the shares from which the stock arose might before the conversion have been
		uansierred, or as near thereto as circumstances admit. Provided that the Board may, from time to time, fix the minimum amount of stock transferable, so, however,
		that such minimum shall not exceed the nominal amount of the shares from which the stock arose
	36	(b) the holders of stock shall, according to the amount of stock held by them, have the same rights, privileges
		and advantages as regards dividends, voting at meetings of the company, and other matters, as if they held
		the shares from which the stock arose; but no such privilege or advantage (except participation in the
		dividends and profits of the company and in the assets on winding up) shall be conferred by an amount of
		stock which would hot, it existing in shares, have conterred that privilege or advantage.
		(c) such of the regulations of the company as are applicable to paid-up shares shall apply to stock and the
		words "share" and "shareholder" in those regulations shall include "stock" and "stock-holder" respectively.
		The company may, by special resolution, reduce in any manner and with, and subject to, any incident
		authorised and consent required by law,
	37	(a) its share capital;
		(b) any capital redemption reserve account; or
		(c) any share premium account.
		Capitalisation of profits
		(i) The company in general meeting may, upon the recommendation of the Board, resolve
		(a) that it is desirable to capitalise any part of the amount for the time being standing to the credit of any of the
		company's reserve accounts, or to the credit of the, profit and loss account, or otherwise available for distribution; and
		distribution, and
		(b) that such sum be accordingly set free for distribution in the manner specified in clause (ii) amongst the
		members who would have been entitled thereto, if distributed by way of dividend and in the same proportions.
	38	(ii) The sum aforesaid shall not be paid in cash but shall be applied, subject to the provision contained in
		clause (iii), either in or towards
		(A) paying up any amounts for the time being unpaid on any shares held by such members respectively; (P) paying up in full, uniccurd charge of the company to be allotted and distributed, credited as fully paid up to
		(b) paying up in ruil, unissued shares of the company to be allotted and distributed, credited as rully paid-up, to and amongst such members in the proportions aforesaid.
		(C) partly in the way specified in sub-clause (A) and partly in that specified in sub-clause (B):
		(D) A securities premium account and a capital redemption reserve account may, for the purposes of this
		regulation, be applied in the paying up of unissued shares to be issued to members of the company as fully
		paid bonus shares;
		(E) The Board shall give effect to the resolution passed by the company in pursuance of this regulation.
		 whenever such a resolution as aforesaid shall have been passed, the Board shall
		(a) make all anomoniations and applications of the undivided profits resolved to be capitalised thereby, and all
		allotments and issues of fully naid shares if any: and
		(b) generally do all acts and things required to give effect thereto.
		(ii) The Board shall have power
	39	(a) to make such provisions, by the issue of fractional certificates or by payment in cash or otherwise as it
		thinks fit, for the case of shares becoming distributable in fractions; and
		(b) to authorise any person to enter, on behalf of all the members entitled thereto, into an agreement with the
		company providing for the allotment to them respectively, credited as fully paid-up, of any further shares to
		which they may be entitled upon such capitalisation, or as the case may require, for the payment by the
		company on their behalt, by the application thereto of their respective proportions of profits resolved to be
		capitalised, or the amount of any part of the amounts remaining unpaid on their existing shares,
		(iii) Any agreement made under such authority shall be effective and binding on such members.
		Buy-back of shares

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	40	Notwithstanding anything contained in these articles but subject to the provisions of sections 68 to 70 and any other applicable provision of the Act or any other law for the time being in force, the company may purchase its own shares or other specified securities.						
		General meetings						
	41	All general meetings other than annual general meeting shall be called extraordinary general meeting.						
		(i) The Board may, whenever it thinks fit, call an extraordinary general meeting.						
	42	(ii) If at any time directors capable of acting who are sufficient in number to form a quorum are not within India, any director or any two members of the company may call an extraordinary general meeting in the same manner, as nearly as possible, as that in which such a meeting may be called by the Board.						
		Proceedings at general meetings						
	43	(i) No business shall be transacted at any general meeting unless a quorum of members is present at the time when the meeting proceeds to business.						
		(ii) Save as otherwise provided herein, the quorum for the general meetings shall be as provided in section 103.						
	44	The chairperson, if any, of the Board shall preside as Chairperson at every general meeting of the company.						
	45	If there is no such Chairperson, or if he is not present within fifteen minutes after the time appointed for holding the meeting, or is unwilling to act as chairperson of the meeting, the directors present shall elect one of their members to be Chairperson of the meeting.						
	46	If at any meeting no director is willing to act as Chairperson or if no director is present within fifteen minutes after the time appointed for holding the meeting, the members present shall choose one of their members to be Chairperson of the meeting.						
		In case of a One Person Company						
		(i) the resolution required to be passed at the general meetings of the company shall be deemed to have been passed if the resolution is agreed upon by the sole member and communicated to the company and entered in the minutes book maintained under section 118;						
		(ii) such minutes book shall be signed and dated by the member;						
		(iii) the resolution shall become effective from the date of signing such minutes by the sole member.						
		Adjournment of meeting						
		(i) The Chairperson may, with the consent of any meeting at which a quorum is present, and shall, if so directed by the meeting, adjourn the meeting from time to time and from place to place.						
		(ii) No business shall be transacted at any adjourned meeting other than the business left unfinished at the						
	47	meeting from which the adjournment took place.						
	47	meeting from which the adjournment took place. (iii) When a meeting is adjourned for thirty days or more, notice of the adjourned meeting shall be given as in the case of an original meeting.						
	47	meeting from which the adjournment took place. (iii) When a meeting is adjourned for thirty days or more, notice of the adjourned meeting shall be given as in the case of an original meeting. (iv) Save as aforesaid, and as provided in section 103 of the Act, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.						
	47	meeting from which the adjournment took place. (iii) When a meeting is adjourned for thirty days or more, notice of the adjourned meeting shall be given as in the case of an original meeting. (iv) Save as aforesaid, and as provided in section 103 of the Act, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting. Voting rights						
	47	meeting from which the adjournment took place. (iii) When a meeting is adjourned for thirty days or more, notice of the adjourned meeting shall be given as in the case of an original meeting. (iv) Save as aforesaid, and as provided in section 103 of the Act, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting. Voting rights Subject to any rights or restrictions for the time being attached to any class or classes of shares,						
	47	meeting from which the adjournment took place. (iii) When a meeting is adjourned for thirty days or more, notice of the adjourned meeting shall be given as in the case of an original meeting. (iv) Save as aforesaid, and as provided in section 103 of the Act, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting. <i>Voting rights</i> Subject to any rights or restrictions for the time being attached to any class or classes of shares, (a) on a show of hands, every member present in person shall have one vote; and (b) on a poll, the voting rights of members shall be in proportion to his share in the paid-up equity share capital of the company.						

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	50	(i) In the case of joint holders, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint holders.				
	30	(ii) For this purpose, seniority shall be determined by the order in which the names stand in the register of members.				
	51	A member of unsound mind, or in respect of whom an order has been made by any court having jurisdiction in lunacy, may vote, whether on a show of hands or on a poll, by his committee or other legal guardian, and any such committee or guardian may, on a poll, vote by proxy.				
	52	Any business other than that upon which a poll has been demanded may be proceeded with, pending the taking of the poll.				
	53	No member shall be entitled to vote at any general meeting unless all calls or other sums presently payable by him in respect of shares in the company have been paid				
	54	 (i) No objection shall be raised to the qualification of any voter except at the meeting or adjourned meeting at which the vote objected to is given or tendered, and every vote not disallowed at such meeting shall be valid for all purposes. (ii) Any such objection made in due time shall be referred to the Chairperson of the meeting, whose decision shall be final and conclusive. 				
		Proxy				
	55	The instrument appointing a proxy and the power-of-attorney or other authority, if any, under which it is signed or a notarised copy of that power or authority, shall be deposited at the registered office of the company not less than 48 hours before the time for holding the meeting or adjourned meeting at which the person named in the instrument proposes to vote, or, in the case of a poll, not less than 24 hours before the time appointed for the taking of the poll; and in default the instrument of proxy shall not be treated as valid.				
	56	An instrument appointing a proxy shall be in the form as prescribed in the rules made under section 105				
		A vote given in accordance with the terms of an instrument of proxy shall be valid, notwithstanding the previous death or insanity of the principal or the revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given: Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used.				
	57	executed, or the transfer of the shares in respect of which the proxy or or the addrondy under which the proxy was Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used.				
	57	executed, or the transfer of the shares in respect of which the proxy or or the additionally under which the proxy was Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used. Board of Directors				
	57 58	executed, or the transfer of the shares in respect of which the proxy or or the additional under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given: Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used. Board of Directors The number of the directors and the names of the first directors shall be determined in writing by the subscribers of the memorandum or a majority of them.				
	57	executed, or the transfer of the shares in respect of which the proxy or or the additional under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given: Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used. Board of Directors The number of the directors and the names of the first directors shall be determined in writing by the subscribers of the memorandum or a majority of them. (i) The remuneration of the directors shall, in so far as it consists of a monthly payment, be deemed to accrue from day-to-day.				
	57 58 59	In addition to the remuneration payable to them in pursuance of the Act, the directors may be paid all travelling, hotel and other expenses properly incurred by them				
	57 58 59 60	It is additioned to the revocation of the provided of the proxy of of the additionary under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given: Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used. Board of Directors The number of the directors and the names of the first directors shall be determined in writing by the subscribers of the memorandum or a majority of them. (i) The remuneration of the directors shall, in so far as it consists of a monthly payment, be deemed to accrue from day-to-day. (ii) In addition to the remuneration payable to them in pursuance of the Act, the directors may be paid all travelling, hotel and other expenses properly incurred by them (a) in attending and returning from meetings of the Board of Directors or any committee thereof or general meetings of the company; or (b) in connection with the business of the company. The Board may pay all expenses incurred in getting up and registering the company.				
	57 58 59 60 61	In the provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used. Board of Directors The number of the directors and the names of the first directors shall be determined in writing by the subscribers of the memorandum or a majority of them. (i) The remuneration of the directors shall, in so far as it consists of a monthly payment, be deemed to accrue from day-to-day. (ii) In addition to the remuneration payable to them in pursuance of the Act, the directors may be paid all travelling, hotel and other expenses properly incurred by them (a) in attending and returning from meetings of the Board of Directors or any committee thereof or general meetings of the company; or (b) in connection with the business of the company. The Roard may pay all expenses incurred in getting up and registering the company. The company may exercise the powers conferred on it by section 88 with regard to the keeping of a foreign register; and the Board may (subject to the provisions of that section) make and vary such regulations as it may thinks fit respecting the keeping of any such register.				
	57 58 59 60 61 62	It is an inversion of the principal of the revocation of the proxy of of the aduitority under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given: Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used. Board of Directors The number of the directors and the names of the first directors shall be determined in writing by the subscribers of the memorandum or a majority of them. (i) The remuneration of the directors shall, in so far as it consists of a monthly payment, be deemed to accrue from day-to-day. (ii) In addition to the remuneration payable to them in pursuance of the Act, the directors may be paid all travelling, hotel and other expenses properly incurred by them (a) in attending and returning from meetings of the Board of Directors or any committee thereof or general meetings of the company; or (b) in connection with the business of the company. The Board may pay all expenses incurred in getting up and registering the company. The company may exercise the powers conferred on it by section 88 with regard to the keeping of a foreign register; and the Board may (subject to the provisions of that section) make and vary such regulations as it may thinks fit respecting the keeping of any such register. All cheques, promissory notes, drafts, hundis, bills of exchange and other negotiable instruments, and all receipts for monies paid to the company, shall be signed, drawn, accepted, endorsed, or otherwise executed, as the case may be, by such person and in such manner as the Board shall from time to time by resolution				

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	84	(i) Subject to the provisions of section 149, the Board shall have power at any time, and from time to time, to appoint a person as an additional director, provided the number of the directors and additional directors together shall not at any time exceed the maximum strength fixed for the Board by the articles.
	04	(ii) Such person shall hold office only up to the date of the next annual general meeting of the company but shall be eligible for appointment by the company as a director at that meeting subject to the provisions of the Act.
		Proceedings of the Board
	65	(i) The Board of Directors may meet for the conduct of business, adjourn and otherwise regulate its meetings, as it thinks fit.
	5	(ii) A director may, and the manager or secretary on the requisition of a director shall, at any time, summon a meeting of the Board.
	66	(i) Save as otherwise expressly provided in the Act, questions arising at any meeting of the Board shall be decided by a majority of votes.
		(ii) In case of an equality of votes, the Chairperson of the Board, if any, shall have a second or casting vote. The continuing directors may act notwithstanding any vacancy in the Board; but, if and so long as their number
	67	is reduced below the quorum fixed by the Act for a meeting of the Board, the continuing directors or director may act for the purpose of increasing the number of directors to that fixed for the quorum, or of summoning a general meeting of the company, but for no other purpose.
		(i) The Board may elect a Chairperson of its meetings and determine the period for which he is to hold office.
	68	(ii) If no such Chairperson is elected, or if at any meeting the Chairperson is not present within five minutes after the time appointed for holding the meeting, the directors present may choose one of their number to be Chairperson of the meeting.
		(i) The Board may, subject to the provisions of the Act, delegate any of its powers to committees consisting of such member or members of its body as it thinks fit.
	69	(ii) Any committee so formed shall, in the exercise of the powers so delegated, conform to any regulations that may be imposed on it by the Board.
		(i) A committee may elect a Chairperson of its meetings.
	70	(ii) If no such Chairperson is elected, or if at any meeting the Chairperson is not present within five minutes after the time appointed for holding the meeting, the members present may choose one of their members to be Chairperson of the meeting.
	71	(i) A committee may meet and adjourn as it thinks fit.
		(ii) Questions arising at any meeting of a committee shall be determined by a majority of votes of the members present, and in case of an equality of votes, the Chairperson shall have a second or casting vote.
	72	All acts done in any meeting of the Board or of a committee thereof or by any person acting as a director, shall, notwithstanding that it may be afterwards discovered that there was some defect in the appointment of any one or more of such directors or of any person acting as aforesaid, or that they or any of them were disqualified, be as valid as if every such director or such person bad been duly appointed and was qualified to be a director
	73	Save as otherwise expressly provided in the Act, a resolution in writing, signed by all the members of the Board or of a committee thereof, for the time being entitled to receive notice of a meeting of the Board or committee, shall be valid and effective as if it had been passed at a meeting of the Board or committee, duly
		convened and held. In case of a One Person Company
		(i) where the company is having only one director, all the businesses to be transacted at the meeting of the Board shall be entered into minutes book maintained under section 118;
		(ii) such minutes book shall be signed and dated by the director;
		(iii) the resolution shall become effective from the date of signing such minutes by the director.
		Chief Executive Officer, Manager, Company Secretary or Chief Financial Officer

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	_		Outline is the two sectors of the Ast
			Subject to the provisions of the Act,
			(i) A chief executive officer, manager, company secretary or chief financial officer may be appointed by the
			Board for such term, at such remuneration and upon such conditions as it may thinks fit; and any chief
		74	executive officer, manager, company secretary or chief financial officer so appointed may be removed by
			means of a resolution of the Board;
			 (ii) A director may be appointed as chief executive officer, manager, company secretary or chief financial officer
		75	A provision of the Act or these regulations requiring or authorising a thing to be done by or to a director and chief executive officer, manager, company secretary or chief financial officer shall not be satisfied by its being done by or to the same person acting both as director and as, or in place of, chief executive officer, manager, company secretary or chief financial officer.
			The Seal
			(i) The Board shall provide for the safe custody of the seal.
			(ii) The seal of the company shall not be affixed to any instrument except by the authority of a resolution of the
		76	Board or of a committee of the Board authorised by it in that behalf, and except in the presence of at least two
			directors and of the secretary or such other person as the Board may appoint for the purpose; and those two
			directors and the secretary or other person aforesaid shall sign every instrument to which the seal of the
	\vdash		Dividends and Receive
		77	recommended by the Board.
		78	Subject to the provisions of section 123, the Board may from time to time pay to the members such interim
	-	10	dividends as appear to it to be justified by the profits of the company.
			 I he Board may, before recommending any dividend, set aside out of the profits of the company such sums as it thinks fit as a reserve or receives which shall, at the discretion of the Board, he applicable for any number
			to which the profits of the company may be properly applied, including provision for meeting contingencies or
			for equalizing dividends; and pending such application, may, at the like discretion, either be employed in the
		79	business of the company or be invested in such investments (other than shares of the company) as the Board
			may, from time to time, thinks fit.
			(ii) The Board may also carry forward any profits which it may consider necessary not to divide, without setting
			them aside as a reserve
			(i) Subject to the rights of persons, if any, entitled to shares with special rights as to dividends, all dividends
			shall be declared and paid according to the amounts paid or credited as paid on the shares in respect whereof
			may be declared and naid according to the amounts of the shares
			may be declared and paid according to the announce of the shares.
		80	(ii) No amount paid or credited as paid on a share in advance of calls shall be treated for the purposes of this
			regulation as paid on the share.
			(iii) All dividends shall be apportioned and paid proportionately to the amounts paid or credited as paid on the
			shares during any portion or portions of the period in respect of which the dividend is paid; but if any share is
			issued on terms providing that it shall rank for dividend as from a particular date such share shall rank for
			dividend accordingly.
		81	by him to the company on account of calls or otherwise in relation to the shares of the company.
			(i) Any dividend, interest or other monies payable in cash in respect of shares may be paid by cheque or
			warrant sent through the post directed to the registered address of the holder or, in the case of joint holders, to
		82	the registered address of that one of the joint holders who is first named on the register of members, or to such
			person and to such address as the holder or joint holders may in writing direct.
			(ii) Every such cheque or warrant shall be made payable to the order of the person to whom it is sent.
_		00	Any one of two or more joint holders of a share may give effective receipts for any dividends, bonuses or other
		63	monies payable in respect of such share.

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	84	Notice of any dividend that may have been declared shall be given to the persons entitled to share therein in the manner mentioned in the Act.
	85	No dividend shall bear interest against the company.
		Accounts
	86	(i) The Board shall from time to time determine whether and to what extent and at what times and places and under what conditions or regulations, the accounts and books of the company, or any of them, shall be open to the inspection of members not being directors.
	 	(ii) No member (not being a director) shall have any right of inspecting any account or book or document of the company except as conferred by law or authorised by the Board or by the company in general meeting.
		Winding up
	87	Subject to the provisions of Chapter XX of the Act and rules made thereunder (i) If the company shall be wound up, the liquidator may, with the sanction of a special resolution of the company and any other sanction required by the Act, divide amongst the members, in specie or kind, the whole or any part of the assets of the company, whether they shall consist of property of the same kind or not. (ii) For the purpose aforesaid, the liquidator may set such value as he deems fair upon any property to be divided as aforesaid and may determine how such division shall be carried out as between the members or different classes of members. (iii) The liquidator may, with the like sanction, vest the whole or any part of such assets in trustees upon such trusts for the benefit of the contributories if he considers necessary, but so that no member shall be compelled to accept any shares or other securities whereon there is any liability.
		Indemnity
	88	Every officer of the company shall be indemnified out of the assets of the company against any liability incurred by him in defending any proceedings, whether civil or criminal, in which judgment is given in his favour or in which he is acquitted or in which relief is granted to him by the court or the Tribunal.
Tab	 ADTI	A REAL ASSOCIATION OF A COMPANY UNITED BY CUMPANYEE AND UNMARCH SUBSECTORY

Table G- ARTICLES OF ASSOCIATION OF A COMPANY LIMITED BY GUARANTEE AND HAVING A SHARE CAPITAL

Ĩ	Number of members
à	All the articles of Table F in Schedule I annexed to the Companies Act, 2013 shall be deemed to be incorporated with these articles and to apply to the company.
	The number of members with which the company proposes to be registered is hundred, but the Board of Directors may, from time to time, register an increase of members.

Table I-ARTICLES OF ASSOCIATION OF AN UNLIMITED COMPANY AND HAVING A SHARE CAPITAL

	Number of members	
	All the articles of Table F in Schedule I annexed to the Companies Act, 2013 shall be deemed to be incorporated with these articles and to apply to the company.	
	The number of members with which the company proposes to be registered is hundred, but the Board of Directors may, from time to time, register an increase of members.	

			Subscriber Details				
S. NO	Name, Address, Descrip	tion and Occupation	DIN/PAN/Passpor Number	t Place	2	DSC	Dated
1	DINESH SAINI S/o R R/o HOUSE NO.125-P SECT Haryana-HR-125001 OCCUPATION: BUSINESS	AM PRATAP SAINI 'OR 13, PART-2, HISAR,	08033328	GURGAON			30/12/2017
2	RAKESH KUMAR S/o (R/o HOUSE NO. 269 ,SAI Haryana-HR- 12 OCCUPATION: BUSINESS	DM PRAKSAH SAINI NI KHERA, GURGAON, 2001, INDIA	08033318	GURGAON			30/12/2017
		S	igned Before Me				
	Name	Address, Description	and Occupation	DIN/PAN/ Passport Number/ Membership Number	Place	DSC	Dated
AC	DIGVUAY SINGH	515A, 3RD FLOOR DISTRICT COURT, GUR	, DEEP PLAZA, 3 GAON-122001	38771	GURGA ON		30/12/2017

Table H- ARTICLES OF ASSOCIATION OF A COMPANY LIMITED BY GUARANTEE AND NOT HAVING SHARE CAPITAL

	Articl e No	Description			
		Interpretation			
	I	 (1) In these regulations— (a) "the Act" means the Companies Act, 2013; (b) "the seal" means the common seal of the company. (2) Unless the context otherwise requires, words or expressions contained in these regulations shall have the same meaning as in the Act or any statutory modification thereof in force at the date at which these regulations become binding on the company. 			
		Members			

	II 1	The number of members with which the company proposes to be registered is hundred, but the Board of Directors may, from time to time, whenever the company or the business of the company requires it, register an increase of members.				
	2	The subscribers to the memorandum and such other persons as the Board shall admit to membership shall be members of the company.				
		General meetings				
	3	All general meetings other than annual general meeting shall be called extraordinary general meeting.				
		(i) No business shall be transacted at any general meeting unless a quorum of members is present at the time when the meeting proceeds to business.				
	4	(ii) Save as otherwise provided herein, the quorum for the general meetings shall be as provided in section 103.				
		Proceedings at general meetings				
	-	(i) No business shall be transacted at any general meeting unless a quorum of members is present at the time when the meeting proceeds to business.				
	5	(ii) Save as otherwise provided herein, the quorum for the general meetings shall be as provided in section 103.				
	6	The Chairperson, if any, of the Board shall preside as Chairperson at every general meeting of the company.				
	7	If there is no such Chairperson, or if he is not present within fifteen minutes after the time appointed for holding the meeting, or is unwilling to act as Chairperson of the meeting, the directors present shall elect one of their				
	1	members to be Chairperson of the meeting.				
	8	If at any meeting no director is willing to act as Chairperson or if no director is present within fifteen minutes after the time appointed for holding the meeting, the members present shall choose one of their members to be				
<u> </u>		Chairperson of the meeting.				
		Adjournment of meeting				
		(i) The Chairperson may, with the consent of any meeting at which a quorum is present, and shall, if so directed by the meeting, adjourn the meeting from time to time and from place to place.				
		(ii) No business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.				
	9	(iii) When a meeting is adjourned for thirty days or more, notice of the adjourned meeting shall be given as in the case of an original meeting.				
		(iv) Save as aforesaid, and as provided in section 103 of the Act, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.				
		Voting rights				
	10	Every member shall have one vote.				
	11	A member of unsound mind, or in respect of whom an order has been made by any Court having jurisdiction in lunacy, may vote, whether on a show of hands or on a poll, by his committee or other legal guardian, and any such committee or guardian may, on a poll, vote by proxy.				
	12	No member shall be entitled to vote at any general meeting unless all sums presently payable by him to the company have been paid.				
		(i) No objection shall be raised to the qualification of any voter except at the meeting or adjourned meeting at which the vote objected to is given or tendered, and every vote not disallowed at such meeting shall be valid.				
	13	(i) No objection shall be raised to the qualification of any voter except at the meeting or adjourned meeting at which the vote objected to is given or tendered, and every vote not disallowed at such meeting shall be valid for all purposes.				

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	14	A vote given in accordance with the terms of an instrument of proxy shall be valid, notwithstanding the previous death or insanity of the principal or the revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given:
		Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used.
	15	A member may exercise his vote at a meeting by electronic means in accordance with section 108 and shall vote only once.
	16	Any business other than that upon which a poll has been demanded may be proceeded with, pending the taking of the poll.
		Board of Directors
	17	The number of the directors and the names of the first directors shall be determined in writing by the subscribers of the memorandum or a majority of them.
		(i) The remuneration of the directors shall, in so far as it consists of a monthly payment, be deemed to accrue from day-to-day.
	18	 (ii) In addition to the remuneration payable to them in pursuance of the Act, the directors may be paid all travelling, hotel and other expenses properly incurred by them— (a) in attending and returning from meetings of the Board of Directors or any committee thereof or general meetings of the company; or (b) in connection with the husiness of the company.
		Proceedings of the Board
	19	(i) The Board of Directors may meet for the conduct of business, adjourn and otherwise regulate its meetings, as it thinks fit.
		(ii) A director may, and the manager or secretary on the requisition of a director shall, at any time, summon a meeting of the Board.
	20	 Save as otherwise expressly provided in the Act, questions arising at any meeting of the Board shall be decided by a majority of votes.
		(ii) In case of an equality of votes, the Chairperson of the Board, if any, shall have a second or casting vote. The continuing directors may act notwithstanding any vacancy in the Board; but, if and so long as their number is not being the provide the based of the provide the p
	21	may act for the purpose of increasing the number of directors to that fixed for the quorum, or of summoning a general meeting of the company, but for no other purpose.
		(i) The Board may elect a Chairperson of its meetings and determine the period for which he is to hold office.
	22	(ii) If no such chairperson is elected, or if at any meeting the Chairperson is not present within five minutes after the time appointed for holding the meeting, the directors present may choose one of their members to be Chairperson of the meeting.
		 (i) The Board may, subject to the provisions of the Act, delegate any of its powers to committees consisting of such members or members of its body as it thinks fit
	23	(ii) Any committee so formed shall, in the exercise of the powers so delegated, conform to any regulations that
		(i) A committee may elect a Chairperson of its meetings.
	24	(ii) If no such Chairperson is elected, or if at any meeting the chairperson is not present within five minutes after the time appointed for holding the meeting, the members present may choose one of their members to be Chairperson of the meeting.
		i) A committee may meet and adjourn as it thinks proper.
	25	(ii) Questions arising at any meeting of a committee shall be determined by a majority of votes of the members present, and in case of an equality of votes, the chairman shall have a second or casting vote.

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	26	All acts done by any meeting of the Board or of a committee thereof or by any person acting as a director, shall, notwithstanding that it may be afterwards discovered that there was some defect in the appointment of any one or more of such directors or of any person acting as aforesaid, or that they or any of them were disqualified, be as valid as if every such director or such person had been duly appointed and was qualified to be a director.
	27	Save as otherwise expressly provided in the Act, a resolution in writing, signed by all the members of the Board or of a committee thereof, for the time being entitled to receive notice of a meeting of the Board or committee, shall be as valid and effective as if it had been passed at a meeting of the Board or committee, duly convened and held.
		Chief Executive Officer, Manager, Company Secretary or Chief Financial Officer
	28	Subject to the provisions of the Act,— (i) A chief executive officer, manager, company secretary or chief financial officer may be appointed by the Board for such term, at such remuneration and upon such conditions as it thinks fit; and any chief executive officer, manager, company secretary or chief financial officer so appointed may be removed by means of a resolution of the Board. (ii) A director may be appointed as chief executive officer, manager, company secretary or chief financial officer.
	29	A provision of the Act or these regulations requiring or authorising a thing to be done by or to a director and chief executive officer, manager, company secretary or chief financial officer shall not be satisfied by its being done by or to the same person acting both as director and as, or in place of, chief executive officer, manager, company secretary or chief financial officer.
		The Seal
		(i) The Board shall provide for the safe custody of the seal.
	30	(ii) The seal of the company shall not be affixed to any instrument except by the authority of a resolution of the Board or of a committee of the Board authorised by it in that behalf, and except in the presence of at least two directors and of the secretary or such other person as the Board may appoint for the purpose; and those two directors and the secretary or other person aforesaid shall sign every instrument to which the seal of the company is so affixed in their presence.

TABLE J - ARTICLES OF ASSOCIATION OF AN UNLIMITED COMPANY AND NOT HAVING SHARE CAPITAL

All the articles of Table H in Schedule I annexed to the Companies Act, 2013 shall be deemed to be incorporated with these articles and to apply to the company.

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Annexure 3: Verification of units by DIC, Gurugram

Annexure 4: Building Availability Proof

28th November, 2017

To,

The Director, Industries Department of Industries & Commerce Govt. of Haryana Sector 17, Chandigarh

Subject: Regarding building lease for Centre of Decorative Lighting Cluster, Gurugram

Reference: Cluster project to establish Common Facility Centre (CFC) under State Mini Cluster scheme of Government of Haryana

Dear Sir,

This is to confirm that I, Rakesh Kumar Saini am willing to provide the first floor of my building at Plot no. 952, Sector-37, Near JBM Gurugram on a 10 year irrevocable lease to the Centre of Vyaso Gurugaon Decorative Lighting Cluster Pvt.Ltd.for the establishment of a Common Facility Centre, provided the cluster is approved by the Government of Haryana. The area which will be provided is 3000 sq ft (333.33) square yards) and shall be provided on a lease basis with rent of Rs. 45,000 per month for the first year, with a standard annual increase as per the market norms.

Yours sincerely,

Rakesh Kumar Saini

Plot No. - 952, Near JBM, Gurugram

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Annexure 5: Machinery Quotations

SHIMADZU ANALYTICAL (INDIA) PVT. LTD. Plot No. 2, Sethi Chambers, DDA Local Shopping Centre, M.O.R Land,

New Rajendra Nagar, New Delhi – 110 060

Date: November 22, 2017

DINMANS.COM

1143 A, SEC 52 Gurgaon, Haryana INDIA Kind Attn.: Mr. Dinesh Saini Mobile: 9896029036

SUB: OFFER FOR SHIMADZU "EDX-LE"

Dear Sir,

With reference to our discussion, we are pleased to provide the Quotation for Shimadzu Energy Dispersive X-ray Fluorescence Spectrometer.

<u>Shimadzu Corporation</u>, <u>Japan</u>: Established in 1875, has a long and successful history in manufacturing of various types of Testing and Scientific equipment. Shimadzu is a global company catering to Industries in Japan and in International markets since over 130 years now. Shimadzu has been offering Solutions by developing products as per the market requirements.

<u>Shimadzu in India</u>: Shimadzu entered the Indian market offering a range of Analytical instruments and subsequently introduced range of Testing Machines and Scientific Instruments. For the past three decades, Shimadzu has been providing cost effective solutions to its customers backed by relentless technical support, application support and user training.

In-line with Shimadzu's philosophy of customer satisfaction and the compelling demand of the industry, Shimadzu has established direct operations in India. This ensures, you receive quicker response, improved technical and parts support with local stocking.

<u>Shimadzu Analytical (India) Pyt. Ltd.</u> is a group company of Shimadzu Corporation Japan with head office at Mumbai. The main objective of this company is to provide Application and Technical support to our customers in line with the corporate commitment.

As part of this set up we have established a laboratory (Customer Support Center) at Marol, Mumbai and Delhi. This facility will provide customer training, demonstration and method development support to our customers all over India.

Hope our offer is competitive and if you require any clarifications, please do contact us.

Thanking and assuring you of our best services at all times.

Yours faithfully

For SHIMADZU ANALYTICAL (INDIA) PVT. LTD.,

Samably.

SAURABH SHRIVASTAVA Executive – Sales Mob: 8287471626 E-Mail: <u>saurabh@shimadzu.in</u>

🔁 SHIMADZU ANALYTICAL (INDIA) PVT. LTD.

Plot No. 2, Sethi Chambers, DDA Local Shopping Centre, M.O.R Land, New Rajendra Nagar, New Delhi – 110 060

DINMANS.COM	Date: November 22, 2017
1143 A, SEC 52 Gurgaon, Haryana INDIA	
Kind Attn.: Mr. Dinesh Saini	

Quotation

Description	<u>Qty.</u>	<u>Total Price</u> USD
Shimadzu Energy Dispersive X-Ray		
Fluorescence Spectrometer		
EDX-LE 230V with PCEDX 2 Sample Type: Solid, Liquid, Powder Method : Energy Dispersive Sample size: max. 320mm x 370mm x 155mm Check Sample Automatic Collimators Exchanger, 3 types (3, 5 and 10mm)	1 Set	
Mylar For sample cells, 500 sheets/set	1 Set	USD 45,000
Type 3571, for general use, without cover, 100 pcs/set	1 Set	
RoHS Screening Analysis Kit	1 Set	
Total Price FCA, JAPAN		USD 45,000
Air Freight charges and Insurance Charges (Air Freight)		USD 1000
Total CIP, Delhi		USD 46,000

Note 1: Custom Duty, PC / Printer will be in Customer Scope. Note 2: Standard for Platting thickness arrange by customer.

For Shimadzu Analytical (India) Private Limited

SAURABH SHRIVASTAVA Executive – Sales Mob: 8287471626 E-Mail: saurabh@shimadzu.in

Page 2|3

🔁 SHIMADZU ANALYTICAL (INDIA) PVT. LTD.

Plot No. 2, Sethi Chambers, DDA Local Shopping Centre, M.O.R Land, New Rajendra Nagar, New Delhi – 110 060

Date: November 22, 2017

Terms and Conditions Price: The above prices are in US Dollars and on CIP, Delhi.

Purchase Order to be placed in favour of:-

M/s SHIMADZU (ASIA PACIFIC) PTE. LTD 79, Science Park Drive #02-01/08 Cintech IV, Singapore Science Park 1, Singapore 118264 Tel No (65) 67786280

BANK DETAILS:

Beneficiary Name:

Shimadzu (Asia Pacific) Pte Ltd Co. Reg No. 198904521 – E

Account No. :

Bank Name and bank Address:

USD A / C No. 059572

The bank of Tokyo-Mitsubhishi UFJ, Ltd. Singapore Branch, 9 raffles Place #01-01 Republic plaza Singapore 048619

Swift No.:

BOTKSGSX

Payment Terms:

100% through confirmed and irrevocable letter of credit in favor of SHIMADZU ASIA PACIFIC PTE LTD., SINGAPORE.

Shipment: 3 Month after opening of confirmed LC.

Validity: This offer is valid for three months.

Installation:

Installation, Demonstration and training will be provided at no extra cost. Standard Samples or Known Value samples need to be provided by customer for calibration.

Warranty: The instrument carries 12 months warranty from the date of installation or 15 months from the date of the shipment whichever is earlier.

SHIPMENT: FROM JAPAN / SINGAPORE

COUNTRY OF ORIGIN: JAPAN

For Shimadzu Analytical (India) Private. Limited

Samash.

SAURABH SHRIVASTAVA

Page 3|3



QUOTATION							
CM Envirosystems Pvt. Ltd. Plot No. 18, 19, 1st Main, 1st Cross, KIADB Industrial Area, Dabaspet, Nelamangala Taluk,Karnataka,INDIA-562111 Phone No.:+91 888 000 7700 Fax:+91 80 27734010 E-mail:info@cmenvirosystems.com			Quotation No. Date 2017180773 1 22/11/2017				
To Dinmans Gurgaon,Haryana, India, 122001 E-mail : dineshsaini.02@gmail.com			Ship To : Dinmans Gurgaon Haryana, India	a, 122001			
S.No	Description of Goods	HSN/SAC	Qty	Unit	Rate (INR)	Amount (INR)	
1	SF-450-CCT	84798999	1	Nos	9,87,958.00	9,87,958.00	
2 Transportation charges 84798999			1	Nos	45,000.00	45,000.00	
Total 2.00						10,32,958.00	

Amount Chargeable (in words) : INR Ten Lakh Thirty Two Thousand Nine Hundred Fifty Eight Only



Quotation No: 2017180773 | 1

Date: 22/11/2017

TERMS AND CONDITIONS				
Prices	FOR			
Validity	120 Days			
Tax and Duties	IGST Extra 18%			
Payment Term	60% advance, 40% against readiness of the chamber/Predispatch inspection			
Mode of Payment	Electronic Fund Transfer or RTGS (Real Time Gross Settlement or it should be in the form of demand draft/par cheque payable at Bangalore			
Our Banker	Federal Bank Ltd, Gandhinagar, Bangalore			
A/c Name	M/s CM Envirosystems Pvt. Ltd.			
A/c No.	11895500003769			
IFSC Code	FDRL0001189			
Supply	12 weeks from the date of acceptance of Order			
Pre-Dispatch Inspection	If failed to conduct PDI within 15 days as date intimated, interest will be charged @			
(If applicable)	15% on the invoice value for the number of days the delay occurs for the PDI beyond the stipulated 15 days			
Warranty	12 months from the date of installation and commissioning or 15 Months from the date of shipment, whichever is earlier. Transit damages will not be covered under warranty. Note : During warranty period, replacement of defective componen ts due to any manufacturing defect will be done at free of cost, however, the freight & customs clearance if any shall be borne by the customer			
Transit Insurance	Not included			
Packing Charges	Extra 2% on the offered value			
1) Taxes and duties will be extra as applica	able at the time of supply			
2) Acceptance of order is issued only again	nst receipt of advance payment			
Note () The Durchase Order and effect and encoded as a should be address to an Endorse Was (a OM Endorse Det 114, DistMar 40.940				

Note:i) The Purchase Order and other correspondence should be address to our factory office i.e CM Envirosystems Pvt. Ltd., Plot No. 18 &19, 1st Main, 1st Cross, KIADB Industrial Area, Dobaspet, Nelamangala Taluk, Bangalore – 562 111. If any legal disputes arises out of this contract, is subjected to Bangalore Jurisdiction only

CIN	: U27109KA1981PTC004249
MSME No	: 290201100465 DATED 04/06/2007
GSTIN	: 29AAACC5910C1Z3
IEC No.	: 0701007567 Dated: 28-08-2001

For CM Envirosystems Pvt. Ltd.

Sales - NCR

Ĵ LMW.

QUOTATION

		Ref: Date:	
S.No.	Descripti	on Price each R	is.Ex-Works
1	LX20T L5 CNC LATHE, with and including the following:	standard accessories	1,957,000
1.1	30/0 degrees slant saddle / be	ed	
1.2	Variable speed 7.5 kW (cont)	/ 11 kW (cont. / 15 min.)	
	AC spindle drive, Spindle spe	ed 3500 rpm	
1.3	200 mm x 3 jaw hollow hydrai	uic chuck (Samchully) with one set	
14	of naro a soft jaws Through hole (hollow) hydrau	ic cylinder (Breast)	
15	Coolant nozzie above headst	nck (Fragau)	
1.6	Linear motion bearing guidew	avs for axis traverses	
1.7	Pitch error and backlash com	pensation	
1.8	Manual pulse generator		
1.9	Eight-station vertically indexin	g hydraulic turret	
1.10	One set of general purpose tu	met tool holders	
1.11	Talistock with add-on rotating	centre (Programmable quill IN-OUT)	
1.12	Coolant system, 50ipm @ 1.9	5 bar	
1.13	Automatic centralized lubricat	ion system	
1.14	Built-in AC for control cubicle	(Indigenous)	
1.15	Pootswitch for operation of ch Process completion lamp (2.8	uck and talistock	
1.10	Process completion ramp (3 o	EI)	
1.18	One set of machine manuals		
1.19	CNC system FANUC 0I Mate	TD with Fanuc Operator Panel	
2	CNC System Slemens 828D		
2.1	LX20T L6 CNC LATHE, with	standard accessories with	1,957,000
	Variable speed 7 kW (cont) /	10.5 kW (36-40%) AC spindle drive,	
	Spindle speed 3500 rpm		
	Colour:		
	GREY WHITE (Machine) as	per RAL 9002 & Alfalfa GREEN (Sliding Door)	
3	PACKING CHARGES		50,000
E.8.0.8	E		
Terms (& conditions:		
1	Price	: The prices are Ex-works, Coimbatore	
2	Validity	: 30 days from date.	
3	Delivery	: 8 weeks from date of receipt of technically and commercially clear order.	
4	Payment Terms	: 30% alongwith Purchase Order as non-refundable	
		advance and balance 70% before despatch through RTGS / DD	
5	Taxes & Duties	: Extra as applicable at the time of despatch.	
6	Transporation & Insurance	: To be arranged by Purchaser	
7	General Conditions of Sale	: Refer Form No.781/2009 enclosed.	
8	Order once placed, cannot be	cancelled by you.	
9	Our system will not accept ch	anges after scheduling of your machine for manufacture.	
	Please check through your so	ope of supply carefully before placement of order.	
10	Please note if any optinal iten	is selected delivery to be discussed before order finalisation	

Thanking you for your enquiry and looking forward to receiving your valued order, we remain.

Yours faithfully, for LAKSHMI MACHINE WORKS LIMITED



ANNEXURE - I

LX20T L5 CNC LATHE

GENERAL PURPOSE TURRET TOOL HOLDERS FOR 8 STATION TURRET

SI.No.	Description	Quantity
1	U Drill & Boring bar holder, ID 40 mm with cap	4 Nos.
2	U Drill & Boring bar sleeve, dia 32 mm	1 No.
3	U Drill & Boring bar sleeve, dia 25 mm	1 No.
4	U Drill & Boring bar sleeve, dia 20 mm	1 No.
5	U Drill & Boring bar sleeve, dia 16 mm	1 No.
6	Face cutter holder with glb	1 No.
7	Cutting tool fastening plate	6 Sets.
8	Coolant guide block	6 Nos.

Issue No.4.0 Date: 01/06/2015

GSTIN: 07AAKPA0910D1ZI MOB(O)-9810143669

Email: ranjitengineeringworksmsg@yahoo.co.in/rew_1974@yahoo.in

RANJIT ENGINEERING WORKS

OFFICE – FA-310 MANSAROVAR GARDEN NEW DELHI - 110015 FACTORY: PLOT 47/5 SAFFIPUR, RANHOLLA (BACKSIDE OF SHIVA DHARMAKANTA) <u>NANGLOI, NAJAGARH ROAD, DELHI - 41</u>

20-11-2017

M/S DINESH SAINI Gurugram Decorative Lighting Cluster

NOIDA

SUB: Electroplating plant

No.	PATICULAR	Quantity	Rate	Amount
01.	Soak cleaning PP tank size 4*2.5*3 ft	01	35,000.00	35,000.00
	thickness 15mm with reinforce MS square			
	pipe with 4mm pp sheet covered fitted			
02.	Water rinse tank size 2.5*2.5*3ft pp	01	25,000.00	25,000.00
	thickness 12mm			
03.	Anodic cleaning tank size 3*2.5*3ft	01	29,000.00	29,000.00
	thickness 15mm			
04.	Cathodic cleaning tank size 3*2.5*3ft	01	29,000.00	29,000.00
	thickness 15mm			
05.	Cascade water rinse tank size 5.5*2.5*3ft	01	45,000.00	45,000.00
	thickness 12mm			
06.	Acid dip tank size 2.5*2.5*3ft thickness	01	25,000.00	25,000.00
	12mm			
07.	Water rinse tank size 2.5*2.5*3ft thickness	01	25,000.00	25,000.00
	12mm			
08.	Cynade copper tank size 3*2.5*3ft thickness	01	29,000.00	29,000.00
	15mm			
09.	Cascade water rinse tank size 5.5*2.5*3ft	01	45,000.00	45,000.00
	thickness 12mm			
10.	Acid copper tank size 6*4*3ft pp thickness	01	63,000.00	63,000.00
	15mm			
11.	Cascade water rinse 5.5*2.5*3ft thickness	01	45,000.00	45,000.00
	12mm			
12.	Nickel plating size 8*4*3ft pp thickness	01	72,000.00	72,000.00
	15mm			
13.	Drag out tank size 2.5*2.5*3ft pp thickness	01	25,000.00	25,000.00
	12mm			
14.	Cascade water rinse size 5.5*2.5*3ft pp	01	45,000.00	45,000.00
	thickness 12mm			
15.	Chrome tank 4*2.5*3ft M.S rubber pvc lining	01	35,000.00	35,000.00
	and outside frp			

16.	Drag out tank size 2.5*2.5*3ft pp thickness 12mm	01	25,000.00	25,000.00
17.	Cascade water rinse tank size 5.5*2.5*3ft pp thickness 12mm	01	45,000.00	45,000.00
18.	Hot water tank size 2.5*2.5*3ft pp thickness 15mm	01	29,000.00	29,000.00
19.	Brass plating tank size 4*2.5*3ft pp thickness 15mm	01	35,000.00	35,000.00
20.	Drag out 2.5*2.5*3ft pp thickness 12mm	01	25,000.00	25,000.00
21.	Water rinse tank size 2.5*2.5*3ft pp thickness 12mm	01	25,000.00	25,000.00
22.	Antic plating tank size 3*2.5*3ft pp thickness 15mm	01	29,000.00	29,000.00
23.	Cascade Water rinse 5*2.5*3ft pp thickness 12mm	01	45,000.00	45,000.00
24.	Filter unit capacity 9000ltr per hr double doom with magnet pump and filter doom on mounted pp trolly	02	1,10,000.00	2,20,000.00
25.	Filter unit capacity 6000ltr per hr with magnet pump filter chamber mounted on pp trolly	02	45,000.00	90,000.00
26.	Soundproof blower 3hp	02	55,000.00	1,10,000.00
27.	Rectifier 12volt/1000amp 3 phase 380/440 50hz ac supply	03	2,10,000.00	6,30,000.00
28.	Rectifier 12volt/500amp 3 phase 380/440 50hz ac supply	01	1,45,000.00	1,45,000.00
29.	Titanium heater 3kw with stand	10	3,000.00	30,000.00
30.	Temperature controller	08	9,000.00	72,000.00
31.	DM water and raw water and drain pipe line	01lot	1,50,000.00	1,50,000.00
32.	Copper pipe and copper and aluminium busbar and hardware	01lot	2,50,000.00	2,50,000.00
33.	Jigs	100	1,500.00	1,50,000.00
34.	Scrabber unit 6500 cmf	01lot	4,50,000.00	4,50,000.00
35.	ETP unit capacity 5000ltr per day	01	12,00,000.00	12,00,000.00
36.	Chemicals and metal and titanium basket			18,00,000.00(approx)
37.	Electrophoretic plant	01lot	11,00,000.00	11,00,000.00

Total = Rs.72,23,000.00

Terms & Conditions: -

Prices : Ex-works, unpacked	Validity: 30 days	Payment: 50% 50% against INVOICE.	advance PERFORMA
GST : 18% mechanical & 28% electrical	Delivery : 90 days, against confirm order.		
Freight: Provided by you.			
Errection & commission	Guarantee:		
6.5% extra of total cost	1. One year from the date of supply against mfg.defect.		

THANKING YOU FROM RANJIT ENGINEERING WORKS PS ANAND

LAKSHMI MACHINE WORKS LIMITED

de

	(Mechine Too Livison), IP.O - Areauz, Compatore - 641 407		Date: Dec 04 , 2017
LI	RECOMMENDED SCOPE OF SU	PPLY	
Customer Methine	: M/s DINMANS LIGHTUP (GURGAON) : JV-55 Vertical Machining Center		
\$.No.	Description	Qny	Price Rs. Ex-Works
1	JV - 55 VMC with standard features and accessories	T. No.	₹ 2,472,225
31.603	including the following.		
1.1	Variable speed 7.5 kW (cost) /11 kW (15 min.)		
12	AC spindle drive, speed range 150 - 6000 RPM		
13	Area drives including precision, preloaded ball screw and nut assembles		
1.4	Pitch error and backlash compensation		
1.5	U Frame design		-
1.0	Automatic centralized lubrication system		
12	Automatic centralized grease lubrication system.		
1.0	Coolant system including pump, capacity 60 pm (g 4 bar		A CONTRACTOR OF
1.2	Costant truth (for chip cleaning)	1 mm 1	TAX BOARD
1. 10	Locast ing aband spinds	1 100	A CONTRACTOR
1.11	Automatic tool changer 20 1008	1 1	Canada Dar
1.12	Full Cover		
1.13	Rigid Tapping	-	And and a second second
1.14	Graphics		11
1,10	Process competion amp (piter)		
4.47	T such for table	10000	
4.45	Marhina Ente	1000	
4.40	Sharehold a second as an V V S 7 source		6
1.00	Manufacture of A, T is 2 along		
1.20	Participation of the second stability		
4 99	Chas not of maintenance train in a loss		
4.75	i scaller bisde		
1.34	One set of marking manuals		
1.05	CINC sectors Factor & ME with 8 of Colour LOD		
1.00	Colour OPETN (Machine) & BEGE /Siding Doort	1	
2	Packaging		₹ 50,000 D
	Price - Total (Ex-Work	(s, CBE) =	₹ 2,522,225

100

18 % GST will be applicable as per revised govt norms & regulations, at the time of Billing

Note:	
1	Validity: 4 Weeks from the date of offer
2	Delivery: 5-6 weeks from the date of receipt of technically and commercially clear order
3	Payment terms: 10% of the order value along with Purchase Order as non refundable and balance 90% with full taxes & duties against Proforma invoice before despatch through RTGS / D.D.
4	Taxes & Duties: As applicable at the time of dapatch
5	Transportation & Transit insurance : To be arranged by customer. Transit insurance by LMW
	For conducting blats during machine inspection, toolings will be used from this
7	package. Necessary gauges for inspection to be brought by the purchaser. General Conditions of sale:
	The General conditions of sale 7810006 stacted herewith forms part of this quotation Please Note: Once placed cannot be cancelled by you after accepted by us after the scheduling of the manufacture of the machine against your order, change in specification of the machine cannot be accepted to specification of machine/Scheduling of specification
	checked by you before placement of order.
8	Machine will be in warranty for a period of 12 months from the date of commissioning or 15 months from the date of despatch, whichever is earlier excluding Special tooling.
	for LAKSHMI MACHINE WORKS LTD
	Pankaj Gengeor
	Engineer - Sales & Marketing
	Cell No. +91-8470945050

Annexare AR1

Quotation							
Rajdhani electronics old gurgaon ,shop no 5 sec-14 Gurgaon-122001 Mob:+91-9896029036,9354459889 E-mail :dineshsalni.02@gmail.com Tin No. 067332456878							
Buyer	Details	Quotaion n	o -201/08/1:	2/17			
Gurge	on decorative cluster	Dated -	13/12/2017				
Gurga	on decorative cluster	Order Date - Vendor Code-					
Sr. No.	Particulars	Quantity	Unit	Price	VAT/CST	VAT/CST AmL	Amount(Rs.)
1	Voltas 2 Ton 5 Star Split AC (245 DYI, White)	1	Nos	45,400.00	0.00%	0.00	45400.00
	This item: Voltas 2 Ton 5 Star Split AC (245 DYI, White) 45,700.00 V-Guard VG 500 Voltage Stabilizer for AC up to 2 Ton (170 – 270 V) (Grey) 1,755.00 AMPEREUS High Quality Air Conditioner Wall Mounting Outdoor Unit Stand 550.00						
2	Voltes 1.5 Ton 5 Star Window AC (185 DY, V	1	Nos	29,600.00	0.00%	0.00	29600.00
	with sliding structure Texes Extre						
з	TORAGE FRIDGE	1		32,500.00	0.00%	0.00	32500.00
	KIEIS Metal Hard Top Chest Freezer (BD418, Off-White)	(+) P & F					
		(+) P & F Evaluate at Autoral					0.00
	TOTAL				107500.00		
Amour One la	t Chargable In words kh seven thousand five hundered only						
Buyer	Buyer TIN Number- 08320852279						
Terms (1) Go	Terms and Conditions:-				Receiver's Signature		
(2) in a (3) if p	(2) In case 'C' form is not received tax will be charged extra as applicable (3) If the bill is not paid on presentation 24% interest will be charged nor Anum						
(4) All Disputes are Subject to Only Harvana Jurisdiction					Authorised Signatory		

Annexure 6: Building Estimate



INDUSTRIAL EQUIPMENTS COMPANY AN ISO 9001, 14001, 50001 & OHSAS 18001 Certified Company Corporate Office: S.C.O 36, Sector 26, Madhya Marg, Chandigarh – 160019 Tel: +91 172 4374444, 4374455 . Fax: +91 172 4374466 E – mail: iec.chandigarh@iecgensets.com . www.iecgensets.com



Ref No.: IEC/2017-18/KGD/360

Date: 07/12/2017

M/S. DINMANS.COM, GURUGRAM.

SUB: OFFER FOR 45 & 62.5 KVA KIRLOSKAR (KOEL GREEN) ELECTRIC GEN SET

Dear Sir,

We acknowledge with thanks the receipt of your valued enquiry referred to above. We are accordingly submitting our most competitive offer for your favorable consideration.

SPECIFICATON:

Supply of Silent Diesel Generating Set (CPCB NORMS COMPLIANT) comprising KIRLOSKAR Engine and KIRLOSKAR GREEN Alternator mounted and aligned on a common base frame complete with all standard accessories like Fuel tank, Manual Control Panel, AVM Pads fitted on Base Frame, 12 VDC Battery (Koel Green Make), Leads & Sound Proof Acoustic Enclosure.

RATING	ENGINE / MODEL	BHP @ 1500 RPM	UNIT PRICE
45 KVA	KIRLOSKAR/4R1040TAG1	56	3,65,000.00
62.5 KVA	KIRLOSKAR/4R810TAG1	83	4,10,000.00

The above offer is made subject to following:

TERMS & CONDITIONS:

- **PRICE** : Freight inclusive upto your site at Gurugram.
- **EX-DUTY** : N/A
- SALES TAX : GST Extra @18%.

STATE ENTRY TAX: N/A

DELIVERY : 1 Week from the date of receipt of Techno-commercially clear order.







INDUSTRIAL EQUIPMENTS COMPANY AN ISO 9001, 14001, 50001 & OHSAS 18001 Certified Company Corporate Office: S.C.O 36, Sector 26, Madhya Marg, Chandigarh – 160019 Tel: +91 172 4374444, 4374455 . Fax: +91 172 4374466 E – mail: iec.chandigarh@iecgensets.com . www.iecgensets.com



PAYMENT : 25% advance along with confirmed order and balance against Performa Invoice prior to dispatch.

ERECTION : As the order is for supply of material, the Erection of the same including material like Earthing, Cable, Civil Work, Exhaust Pipe, etc is not our scope. However we will undertake <u>Commissioning of the set free of cost after you complete installation work.</u>

- **WARRANTY**: The Warranty of the offered dg set is applicable as per KOEL Policy. However The dg set comprising of Engine & Alternator carries a Warranty against defective material Manufacturing defects for a Period of 24 months from the date of supply or 5000 hrs. whichever occurs earlier. The terms of KOEL Warranty will have precedence under all circumstances & Warranty will be applicable if customer sources K-OIL,K-COOL and avail the services from Authorised Service Dealers.
- VALIDITY : 15 Days.
- NOTE : Please note that the order should placed on <u>M/S INDUSTRIAL</u> <u>EQUIPMENTS COMPANY. PLOTNO.255-256,HSIIDC,ALIPUR</u> <u>BARWALA,PANCHKULA (HARYANA).</u>However all correspondence should be addressed to our booking office.

Should you need any further clarification(s), please feel free to contact the undersigned.

We look forward for an opportunity to serve you.

Thanking you,

Yours faithfully,

For INDUSTRIAL EQUIPMENTS COMPANY.

Pardeep Khetarpal

9312706510

ENCLOSED: - Technical specifications as per annexture 'A'



INDUSTRIAL EQUIPMENTS COMPANY AN ISO 9001, 14001, 50001 & OHSAS 18001 Certified Company Corporate Office: S.C.O 36, Sector 26, Madhya Marg, Chandigarh – 160019 Tel: +91 172 4374444, 4374455 . Fax: +91 172 4374466 E – mail: iec.chandigarh@iecgensets.com . www.iecgensets.com



ANNEXTURE 'A'

A. DIESEL ENGINE

KIRLOSKAR make – ECO Friendly (CPCB NORMS COMPLIANCE) 4 – stroke, Water Cooled, Diesel Engine Model 3R1040TAG1 & 4R810TAG1 developing **56 & 83 BHP**, Designed to run continuously at 1500 RPM, Turbocharged aspirated complete with following major arrangements:

- Flywheel with Starter Ring for Generating Set.
- Air filter.
- Lube oil cooler assembly with accessories.
- Exhaust air manifold.
- Exhaust Silencer.
- Expansion bellow.
- Fuel filter.
- Lube oil filter.
- Exhaust gas turbocharger.
- Radiator with pusher type fan, with fan guard, coolant pump.
- 12 V electrical starting system with starter motor and battery charging alternator
- In-line monoblock Fuel Injection Pump with Mechanical Governor and fuel feed pump.
- Engine mounting supports.
- Microprocessor based controller KG 934
- Safeties and Indications against Low Lube Oil Pressure & High Coolant Temperature.
- K Cool super plus corrosion inhibitor coolant for cooling.
- Engine Operator/Maintenance & Spare parts Manual.
- Engine Spare parts Manual.
- Engine Warranty Certificate.

• Engine test certificate.



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B. <u>ALTERNATOR</u>

KIRLOSKAR GREEN make rated at 45 & 62.5 KVA, 415 Volts, 3 Phase, 4 wire, 0.8 p.f. (lag),50Hz, 1500 RPM, in accordance with IS 4722 as per following specifications:

- Type: Salient poles, Single bearing, Brushless type, suitable for direct coupling to engine.
- Suitable for an over-load of 10% for 1 hour in every 12 hours operation.
- Voltage Regulation: Provided with fast response thyristor type electronic automatic voltage regulator, which holds output voltage within desired limits. (+/- 1%)
- Excitation: Self excited-self regulated.
- Alternator Loading: Suitable for taking rated load immediately after machine reaches rated voltage and speed.
- Vibration: Suitable for direct coupling with Engine and mounted on common M.S. Channel base frame.
- Enclosure: Screen protected drip proof enclosure with IP 23 degree of protection.
- Cooling: Air Cooled type with radial fan mounted on Rotor.
- Winding and Insulation: Insulation class H as defined in IS 4722.

C. ESSENTIAL ACCESSORIES

One Following set of essential accessories are supplied with each DG set.

- One No. MS Base Frame suitable for mounting of the offered engine and alternator.
- One No. Day fuel tank of standard capacity complete fuel gauge, inlet/outlet connections, drains plug, etc.
- 1 No. 12 Volts DC Battery Koel Green make of suitable capacity with leads.
- 1 Set of AVM Pads fitted in Base Frame.

D. MANUAL CONTROL PANEL

The Control Panel body will be fabricated out of 16 SWG MS sheet. Panel will be suitable for Canopy mounting, Indoor Installation, dust & vermin proof, Control cable of copper size 1.5 sq. mm is used. Cables are ferruled for proper maintenance/checking/wiring of panel. Detachable cable gland plates are provided. The panel will be equipped as follows:

- One No. Moulded Case Circuit Breaker of suitable capacity.
- Aluminium Bus Bars of suitable capacity provided with termination.
- 3 Nos. Current Transformers of suitable ratio.
- One set of Indication lamps for 'Load ON', 'Set running'.
- One set of instrument MCB'S.
- Microprocessor based DG controller KG 934

Annexure 7: Machinery Quotations

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