Project Report (17MBAPR407) on

COST CONTROL AND COST CONTROL TECHNIQUES OF MATERIAL MANAGEMENT@ KGPL, KARTAGI BY NAGA MOHAN S 1AY17MBA30 Submitted to

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI



In partial fulfillment of the requirements for the award of the degree of **MASTER OF BUSINESS ADMINISTRATION** Under the guidance of

INTERNAL GUIDE Sandhya S Assitant Professor Department of MBA EXTERNAL GUIDE Mr. K Suresh Manager



Hesaragatta Main Road, Bengaluru

March- 2019

DECLARATION

I, NAGA MOHAN S, hereby declare that the Project report entitled "COST CONTROL AND COST CONTROL TECHNIQUES OF MATERIAL MANAGEMENT" with reference to "KOPPAL GREEN POWER LIMITED", Kartagi, prepared by me under the guidance of Prof. SANDHYA. S, faculty of M.B.A Department, Acharya Institute of Technology and External assistance by K SURESH, MANAGER, KOPPAL GREEN POWER LIMITED. I also declare that this Project work is towards the partial fulfilment of the University Regulations for the award of degree of Master of Business Administration by Visvesvaraya Technological University, Belagavi. I have undergone a summer project for a period of Six weeks. I further declare that this Project is based on the original study undertaken by me and has not been submitted for the award of any degree/diploma from any other University / Institution.

Place: Bengaluru Date: 04-04-2019

Signature of the student



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INTERNSHIP COMPLETION CERTIFICATE

This is to Certify that Mr Naga Mohan S, bearing Reg No:1AY17MBA30 student of Second year MBA from Acharya Institue of Technology, Soldevanahalli, Bengalore has completed 6 Weeks (3rd Jan 2019 to 16th Feb 2019) internship in our organization.

During internship period he has conducted a project Title "A Study on Cost Control and Cost Control techniques" at Koppal Green Power Ltd.

We wish him very best for his future endeavours.

For Koppal Green Power Ltd

Surexch

K Suresh PR Manager





POWER PLANT : Opp. 110KV KPTCL Substation R.G. Road, KARATAGI, Gangavathi Tq, Koppal District KARNATAKA - 583 229, Ph : 08533 - 274663, 08533 - 274674, Fax : 08533 - 275286. CIN No : U40109TG2000PLC034520



Date: 26/03/2019

CERTIFICATE

This is to certify that **Mr**. **Naga Mohan Sunkavalli** bearing USN **1AY17MBA30** is a bonafide student of Master of Business Administration course of the Institute 2017-19 batch, affiliated to Visvesvaraya Technological University, Belgaum. Project report on "A Study on Cost **Control and Cost Control Techniques of Material Management in Koppal Green Power Ltd, Kartagi, Koppal**" is prepared by him under the guidance of **Prof. Sandhya S**, in partial fulfillment of the requirements for the award of the degree of Master of Business Administration, Visvesvaraya Technological University, Belgaum, Karnataka.

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Finally, I express my sincere thanks to my Parents, Friends and all the Staff of MBA department of AIT for their valuable suggestions in completing this Project Report.

Place: Bangalore Date: 04-04-2019 Naga Mohan S USN: 1AY17MBA30

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EXECUTIVE SUMMARY

The purpose of study is to understand the cost control and cost control techniques of material management of the Koppal Green Power Limited, Kartagi, Koppal district, Karnataka. To understand the financial aspects of various departments, to learn the concept of business decision in the organization and to know the level at which employees are satisfied at KOPPALGREEN POWER LIMITED.

KOPPAL GREEN POWER LIMITED was incorporated on 29th May 2000 for setting up of Power project with an installed capacity of 6 MW, at Kartagi. Total investment for the company is 32 cores including land 23 Acres & 30 guntas. The profit of the company is increasing year by year, last year profit of the company is Rs. 3,35,93,914. The company has three functional departments namely, technical, financial and non-technical departments.

Learning in Koppal Green Power Limited was a wonderful experience. It helped me to know how cost control techniques are applied practically in the organization. Whatever theoretical information learned in the classes could be seen in practice in internship training and it was good learning experience for me to understand various financial aspects of the organization

The company has adopted modern technology of plant and machinery which helps in achieving fast production. It has only one customer i.e. KPTCL. If KPTCL becomes self-sufficient in production of power, the company may lose the whole market. It is possible to distribute Biopower to the other private customers, the collection period is long. It is important to study the whole company to get to know the activities of the company; each company is different from the other and has its own unique way of managing its affairs.

CHAPTER-1 INTRODUCTION

1.1 Introduction about Project:

Project was undertaken in Koppal Green Power Ltd. Which is a financial service provider company, in a span of six weeks of project, it provided good platform for me to experience the actual working of an organization which help me to understand the application of knowledge I gained through my classroom teaching. It also provides me a good exposure of interacting resources persons like my manager which help me to understand how he is able to manage all his responsibilities with very accuracy and on time. This was a period of knowledge addition for me to understand the functioning of banks, its dealing and operations as well as the various aspects relating to financial sector in the economy. I was given responsibility to analyze the financial performance of the bank. The internship set a strong platform for me as in my career ahead I would be able to take away the experience of the work and knowledge I acquired to deliver successfully in whatever roles assigned and responsibility is entrusted on me in future

1.2 Industry Profile in India:

Electricity is a distinguished boon to the Human Society from the Stone Age to current. In IT Era, light plays a vital role in all aspects. As the civilization developed, many changes have taken place. Even in the area of power, there are remarkable changes. Power is the most important infrastructure input for the development and growth of economy of the country. With the globalization and liberalization of the Indian economy, the potential for power sector growth has substantially improved. The Government of India and its liberalized policy is allowing private sectors to play a significant role in the power sector. Bharataratna Sir M.Vishweshwaraya the genius who produced electricity by harnessing the Hydro potential, the engineer statesman who fashioned the blue print for industrialization. The greatest Visionary and one of the makers of modern India is of course the inspiration in the pursuit of excellence.

Mainly, Power can be generated through water, that is called Hydroelectricity, but due to the lack of water resources, human Beings are using innovative new ideas to generate the power, like using sunlight to generate power is called Solar Energy, using wind to generate power is called Wind Energy, Using Cow dung to generate power is called Goober Power Energy and other methods. Using wastage from Environment like, Rice Husk, Beggars', Scrap of Plywood, Cotton stalk, etc. to generate Power is called **"Bio-Mass Power"**.

The 1970's: green power is born

Green power limited was established in United States. In the year 1978 US government has taken an initiative for PURPA for expansion and capacity enhancement of energy in home country. This institution has evaluated an enhanced there production work on renewing these resources for implementation. In the year 2000 due to hyperinflation in international crude oil prices there was an underutilization of energy in terms of barrels.

Few decades before biomass power came into picture. In 1982 infrastructure of this sector has seen a vast development in converting wooden logs into electricity generation. This technique of conversion of bio degradable resources into useful one was influenced in California two due to rapid climatically change the natural resources are getting depleted resulting in declination of saw-mills which put a big obstacle in contribution of solid waste disposal to a society. Now a days developed cities generates a whole lot of waste along with increment in deforestation

In Karnataka More Than 60 Bio-mass Power generating plants are there and almost all plants are adopting the same system of operation.

With Reference to Global scenario:

Humanity today faces the two urgent and daunting challenges those are: the pressing need for the development in many parts of world; and desire to have more effective system in the international security. Based on my opinion this two challenges are interlinked, but not always understood. For the development of the country energy is necessary. Different aspects of development from the improve health care to reducing the poverty requires the access to the modern energy service. The above developments are unaddressed the result will be violence and conflicts which effect the development efforts and it will have impact on global stability and on religion.

While considering the global energy of imbalance. Roughly 1.7 billion people are living without access to the electricity; and 2.3 billion rely on the due to no access to the other fuels. In African countries the per capital electricity is consumed is very low as 50 kilowatt-hours / year. It indicates that 6 watt of power is required is less than a normal bulb for everyone. To notice it the countries which have developed make an economic cooperation and development organization. An average, consumed electricity for the year as per capital is 8600 KW/H i.e. roughly 160 times higher.

Power Sector in India:

Today India has installed the power sector of capacity of 102,000 Mega Watt of which 25% is hyro-based and coal-based is 60% and other nuclear based and gas-based. Estimated power shortages are 15% of the peak capacity and 11% of the total energy and which are increased in future years. In the future years another 10,000 Mega-Watt of the capacity is given. The hydroelectric plant and coal thermal stations are development. Coal-based power plant leads to the pollution in the environment.

On the other side, hydro plants are leading to soil erosion and erosion, loss of forest areas, wildlife habitat and diversity of species and most important are the displacement of the people. The Indian government has made decisions to develop the countries renewable energy source.

India has made new contribution for both solar photovoltaic and solar thermal through generation of power. In order to develop solar thermal technology within India, government has allotted 35 Mega Watt solar thermal power plant in rajasthan and also increasing the private sectors by providing the financial status from ministry.

The primary objective of demonstration project is to build through hands on design experience and management of projects and operation under actual field conditions. In the field of energy sector the various players such as operation contractors, local industries and private project construction, central electricity authority, rajasthan energy development agency and rajasthan state electricity board and others will help to increase the solar power in india

Government support:-

Indian government has estimated the potential of 50,000 Mega Watt of capacity of power can be produced from new and the renewable energy source but due to high cost incurred in the past these are not tapped as conventional. But nevertheless, development of the alternate energy has been part of the India's strategy for expanding the energy supply and meeting the decentralized energy needs in the non-urban sector. This program is considered as one of the largest program among developed program, considered one of the largest among the different developing countries, is administered through the Indian ministry of non-conventional energy source and the energy development agencies of the various States, and the Indian renewable energy development agency Ltd.

Throughout the 1990's, there are several factors due to India's private sector interest invarious renewable energy:

- (i) In 1991 private sector participation i.e. India opened the power sector
- (ii) For renewable energy system tax incentives are offered to developers

(iii) Awareness about the environment been heightened.

Conventional forms of renewable energy are environmental benefits and are short-gestation period for alternative ways of energy development scheme. By grabbing the private sector participation, in July 1993 Indian government reconsidered its priorities by giving the technologies if renewable energy for the generation of power. Up to now wind farm capacity of power generated is 1,500 Mega Watt and also small hydro installed capacity of 1,423 Mega Watt. In the year 1995energy supply has grown from 0.4% to 34% by 2001.

1.3 Company Profile

KGPL has been established at Kartagi village, Gangavathi Taluk, Koppal District, Karnataka State. It is located at a longitude of $76^{0} 40$ ' East and latitude of $15^{0} 37$ ' North.

It was incorporation on 29 May 2000 and the age of company is 19 years since incorporated the activity is production of electricity, collection of electricity and distribution of electricity. Koppal green power limited was incorporated on 29th May 2000 for setting up of Power project with an installed capacity of 6 MW, at Kartagi. Total investment for the company is 32 cores including land and 23 Acres & 30 guntas. The profit of the company is increasing year by year, last year profit of the company is Rs. 3,35,93,914. The company has three functional departments namely, Technical, Financial and Non-Technical Departments.

It is not classified under government Company and is registered at Hyderabad in Register of companies. It has a share capital is Rs. 14,00,00,000 and has a paid up capital is Rs 9,23,63,560. It is involved in Production of electricity, collection and also distribution of electricity.

Koppal Green Power Limited's annual general meeting was last held on 29 September 2017 and as per records from ministry of corporate affairs, its balance sheet was last filed on 31st march 2018.

Fiscal Incentives Available for Biomass Power Generation

• Depreciation:

In the first year 100 % depreciation is claimed for the following biomass power generation equipment.

• Tax Holiday:

10 year tax holiday

• Central Excise Duty:

Excuse for renewable energy devices, also including the raw materials, assemblies and components.

• General Sales Tax:

Exemption is available in certain States.

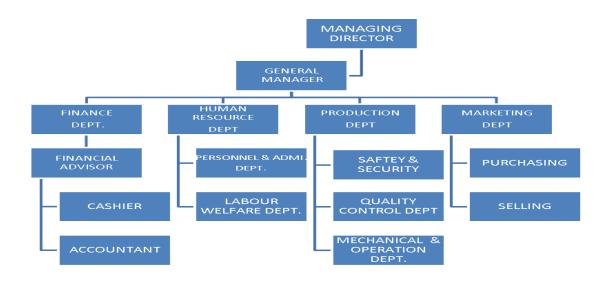
➔ In Karnataka More Than 60 Bio-mass Power generating plants are there and almost every plants are adopting the same system.

✤ Organization Structure

An organization structure indicates concrete shape of the organization. Organizations hierarchy and authority structure are also indicated. It provides stability to the organization in order to survive

An organization structure can be viewed as accomplishing four distinct functions:

- Dividing work into manageable segments.
- > Recombining work in a logical and efficient manner.
- > Distributing power to direct or coordinating work.
- Establishing channels of communication and the directive or non-directive nature of information flow.



★ Managing Director

Managing director is the head of the organization he looks all the activities of the organization. Company has appointed one more General Manager under the Managing director he is reporting daily all activities to him.

★ General Manager

General Manager he is under the Managing director of the organization he is reporting the day to day activities to organization and looking the all departments of the organization.

★ Finance Department

Finance Department is one of the main departments of Koppal Green Power Limited. For maintaining the financial records of the company. Company has appointed three financial employees and they are financial advisor, cashier and accountant.

★ Human Resource Department

Human resource is other important departments in KGPL. Human resource Manager is the head for the department and under him Manager Personnel & administration, and labor welfare manager will be working.

★ Production Department

Production department has great scope in KGPL. Plant manager is the head for the production department under plant manager there are other departments like mechanical department, safety & security department and also quality control departments.

★ Marketing Department

Marketing manager Mr. Murali krishna is the head for this department. Here the main thing is purchasing the waste raw products from the agriculture and producing the power and supplying to KPTCL.



Fig No 1 : Plant location of KOPPAL GREEN POWER LIMITED

The koppal green power limited has gain the advantage of plant location due to which the following facilities are available.

• Availability of Raw Material:

Rice Husk is sufficiently available to this Project because more than 53 Rice mills running in near of this project. Beggars also be sufficiently available to this project

• Source of Power:

The Koppal Green Power Limited., have a plant with 6 MW Bio-Mass power exportable capacity which is used in production process daily.

• Waste Disposal:

For purpose of cooling and waste disposal of water supply from the Chellur canal which is near to the project site.

• Transport and Communication facility:

The transport facility enables existence of storage handling and service facilities. Gangavathi city is distance of about 27 km from the project site. The project site well connected to Hyderabad, Hubli, NH road.

• Banking and Credit facilities:

- UCO Bank
- Syndicate Bank
- ✤ State Bank of India

• Customer of KGPL

Koppal Green Power Ltd has single channel of distribution. KPTCL is Customer of this organization. KGPL, directly sell their product to KPTCL.

1.3.1 Promoters

Brief Profile

Mr. M. Chandra Mohan

Mr. M. Chandra Mohan is a managing director of KGPL and he is holding a degree in master of business administration. He has 10years of experience in power projects, real estate and also in the field of real-estate. He also becomes a CEO in KGPL, before joining in KGPL he has worked in M/s power Nicks Limited. In the year 2005 he is appointed as managing director in KGPL.

≻ Mr. M. Subbaiah,

M. Subbaiah is a whole time director and chairman in KGPL and also he has an experience of 32 plus in the field of trading and agriculture. He was a managing partner of vijay lakshmi tobacco company, which is one of the leading trading houses in Andhra Pradesh. He is having a very good experience in the fields of Real Estate, Construction and also maintaining bio mass power projects. Presently he is running the business of tobacco and also doing trading in biomass fuels. During the construction of KGPL he personally supervised. In 2007 he is appointed as whole time director. Presently he is appointed as the chairman of the company.

Mr. B. Sridhar Shetty

Mr. B. Sridhar Shetty is a Nominee Director in KGPL. In 1969 he was working in vijay bank as direct officer and he got retired in 2002 as general manager. He worked in various posts – as branch manager in different branches, and also chief manager, asst. manager and not but least as general manager.

S. Ravindra Babu	Chairman
M. Chandra Mohan	Managing Director
S. Anji Raju	Director
S. Subba Rao	Director

→ Board of Directors:

→ Head of the Department:

Managing Director	M.Chandra Mohan
General Manager	Gopal Krishna
Manager	K Suresh
Chief Account Officer	Adhi Narayana

→ Address:

Registered Office:	Administrative Office and Plant Location:
H.No. 1-88/1/101,	Koppal Green Power Ltd.
Shanti Vanam,	State highway No. 23
Kauri Extension,	Gangavathi Road
Hyderabad-500033	KARATAGI-583229

1.3.2 Vision, Mission and Quality Profile

➔ Vision:-

- ▶ Operating profit of 12%, 14% & 16% on production values during the next 3 years.
- KGPL will maximize the production power 6 megawatts to 11 mw during the next 2 years
- KGPL is planning to supply power to Rice industries & Small scale industries apart from KPTCL, for next couple of years.

→ Mission:-

- To prevent the effect of the climatic changes by using private and public investment in the renewable energy projects.
- Technology leadership & qualitative growth. Providing greater value to the customer, the employees, and the investors & to the communities where it operates.

→ Quality Profile:-

Encourage the new innovative ideas and business.

- > There should be trust in our stakeholders and between employees.
- > There should be a proper commitment between employees and manager.
- ▶ Non-stop product overview & improvement.
- To convey the spirit of satisfactory in each employee in the organization & sell teamwork.

1.3.3 Product / Service Profile:

Bio-mass profile

Biomass is one of the renewable energy sources. It is a living and dead biological material which is a carbon based material. In the Industrial biomass is converted into a bio-product and some convert into a bio fuel. The different types of biomass are rice husk, wood, beggars, cotton stalk, sunflower stalk, sugarcane, ground nut shell and so on.

BIO-MASS	BULK DENSITY KGS/M ³	ASH CONTENT IN %	CALORIFIC VALUE KCAL/KG.
BEGGARS	74	4.00	4200
RICE HUSK	235	22.20	3200
WOOD (HARD)	330	1.50	4400
COTTON STALK	-	3.01	4200
GROUNDNU T SHELL	165	3.10	4500
SUGARCANE LEAVES	167	7.71	4200
SUNFLOWE R STALK	93	4.30	4300

Bio-Mass from Agriculture Raw Materials Contains

1.3.4 Area of Operation:

The plant has been located in the Gangavathi Taluk, Koppal District. It is producing 6megawatt to the customers. Where power is generated by using bio-mass.

1.3.5 Infrastructure Facilities:

KGPL has been established at Kartagi village, Gangavathi Taluk, Koppal District, Karnataka State. It is located at a longitude of $76^{0} 40$ ' East and latitude of $15^{0} 37$ ' North.

- Employees are given main priority towards healthcare.
- Safety precautions are instructed and to be followed.
- ✤ Rest rooms and wash rooms are provided.
- ✤ Mask equipment's are given to employees.
- ✤ High quality drinking water is provided.
- ✤ Free Wi-Fi facility is there.

1.3.6 Competitors Information

➔ Direct Competitors

Direct competition means the plants are based on the Bio-mass power plant similar to

KGPL. The following companies are the competitors for the KGPL Locally:

- Indira Power Plant, Gangavathi
- Ravi Kirin Biomass Plant, Gangavathi
- Pottnaal (kogantti) Power Plant, Pottnaal

→ Indirect competitors:-

Indirect competitors are companies producing power from other raw materials and for their own captive use,

Some of the indirect competitors are

- Sirguppa Sugar Factory, Sirguppa
- Sovereign Distilleries, Kartagi

1.4 Swot Analysis

→ Strength:

- The company has adopted modern technology of plant and machinery which helps in achieving fast production.
- > Credibility of the company among financial institutions and banks is very good.
- ➤ Gangavathi taluk has considerable population of livestock.
- ▶ Increasing focus on renewable sources of energy.
- > Conducive environment to attract private investments.
- ➤ The taluk has 145 Rice mills.

→ Weakness:

- ▶ It has only one customer i.e. KPTCL.
- ► Lack of skilled employees.
- ➢ Risk on shortage of fuel.
- ▶ Lengthy collection period.
- ▶ Lack of training programmes to the employees
- ➤ No export and import facilities.
- ▶ Lack of railway facility for the transportation of people and goods.

→ Opportunities:

- > The company can utilize the available resource to the optimum extent.
- > It is possible to distribute Bio-power to other customer (other than KPTCL).
- ▶ In future electricity can be generated from different sources.
- Scope for the future modernization of rice mills.

→ Threats:

- ▶ Frequent changes in the government policies.
- > Many competitors are entering to the market.
- ▶ Unable to supply the power to other industries apart from KPTCL.
- If KPTCL becomes self-sufficient in production of power, the company may lose whole of the market.

- ▶ Weather conditions also play a main role.
- ➤ Global warming is also threat.

1.5 Future Growth and Prospects:

In India there is a scope for the biomass power generation industries and as well as in global economy. The company focus on the reducing the cost of the biomass so that in order to get maximum efficiency by the effective utilization of the raw material.

- Adoption of modern technology so that there will be reducing the wastage.
- Expansion of the company in different areas where biomass is available.
- KGPL will maximize the production of power capacity from 6MW to 11MW during the next 2 years.
- KGPL planning to supply power to other industries also.
- Planning to construct different biomass fuel equipment's in order generate power through different operations.

1.6 Financial Statement:

BALANCE SHEET FOR THE YEAR ENDED 2014-2017:

IN LAKHS

PARTICULARS	2017	2016	2015	2014
EQUITIES AND LIABILITIES				
SHAREHOLDER'S FUNDS	-			
Equity Share Capital	3.79	3.79	3.79	3.79
Total Share Capital	3.79	3.79	3.79	3.79
Revaluation Reserve	0	2.81	2.82	2.86
Reserve and Surplus	62.28	66.71	68.4	57.08
Total Reserve and Surplus	62.28	69.52	71.22	59.94
Total Shareholders Fund	66.07	73.3	75.01	63.72
LIABILITIES				
NON-CURRENT LIABILITIES				
Long Term Borrowings	33.57	13.45	7.05	0.03
Deferred Tax Liabilities(Net)	0	1.77	2.58	2.83
Other Long Term Liabilities	0.3	0.34	0.54	0.34
Long Term Provision	7.72	7.78	6.97	6.27
Total Non-Current Liabilities	41.59	23.34	17.15	9.48
CURRENT LIABILITIES				
Short Term Borrowings	94.02	96.5	81.05	68.81
Trade Payables	156.88	161.82	164.34	131.58
Other Current Liabilities	32.28	26.19	27.47	21.41
Short Term Provision	0.05	0.1	1.69	8.23
Total Current Liabilities	283.23	284.61	274.55	230.03
TOTAL CAPITAL AND LIABILITIES	390.89	381.25	366.71	303.23
ASSETS				
NON-CURRENT ASSETS	-			
Tangible Assets	64.87	29.47	30.68	30.29

Intangible Assets	2.57	1.9	1.2	1.9
Capital Work-In-Progress	5.53	17.64	7.88	0.91
Fixed Assets	72.97	49	39.75	33.1
Non-Current Investment	0.85	0.85	0.81	0.8
Deferred Tax Assets(Net)	3.45	0	0	0
Long Term Loans and Advances	8.25	1.82	1.27	1.22
Total Non-Current Assets	85.53	51.68	41.83	35.11
CURRENT ASSETS				
Inventories	110.92	121.35	131.97	105.81
Trade Receivables	143.24	159.67	154.48	138.21
Cash and Cash Equivalents	8.96	4.46	15.16	13.26
Short Term Loans and Advances	9.62	13.31	11.95	5.72
Other Current Assets	32.62	30.79	11.32	5.12
Total Current Assets	305.36	329.58	324.88	268.12
	I	1	1	1
TOTAL ASSETS	390.89	381.25	366.71	303.23

CHAPTER -2 CONCEPTUAL BACKGROUND AND LITERATURE REVIEW

2.1 Conceptual Background

What is Cost Accounting?

It is the process of classifying, recording & suitable allocation of expenditure for the dedication of the prices of merchandise/offerings, & for the presentation of suitability organized statistics for the cause of control & steerage of management. It consists of the ascertainment of the cost of every order, task settlement, system, service or unit as can be suitable and additionally offers with the cost of manufacturing, promoting & distribution.

Why Cost Accounting developed?

Cost book-keeping is a division of accounting & it advanced for the reason that of the restrictions of financial accounting. Financial accounting by and large concerned with the practice of profit & loss account and balance sheet indicates that the financial position of the commercial enterprise, however, details regarding operating efficiency of these divisions are lacking. Due to the improvement of cost accounting, it's beneficial for the management to evaluate the working performance and to manual management decisions with the help of facts provided by the financial accounting.

Advantages of Cost Accounting:

- It facilitates in growing profits
- Cost accounting helpful to clients.
- Profitable and unprofitable information are disclosed.
- It gives statistics upon which estimates and tenders are based totally.
- The accurate root of a decline or an raise in earnings or slaughter.

Cost Control:

According to management cost control is a search for best and completing each operation in more economical ways. Cost control helps in prevention of wastage with in the environment.

Features of Cost Control:

- Costs are optimized earlier than they may be incurred.
- It is normally relevant near objects which cover requirements.
- It incorporates recommendations as well as dictates control, including the way to do an issue.
- It pursuits next to achieving same old.
- It is a precautionary action.
- Control procedure of cost includes placing goals and requirements, ascertaining the real performance, evaluating the actual performance with trendy, investigating the variances and taking corrective action.

Aspects of Cost Control:

Preparation:

To start with a preparation or set of objectives is set up with the estimation of budgets & requirements.

Message:

The following stage is to speak the arrangement to the ones whose duty is to put into effect the preparation.

Inspiration:

It is described because the manner with the intention of initiates courses in addition to continues intention-oriented behaviors.

Assessment & Reporting:

Disparity has to be completed with the prearranged targets & definite overall presentation. Deficiencies are mentioned and conversation is commenced towards achievement over deficiency.

Judgment:

Ultimately, remedial actions & corrective process are occupied or the set of goals are revised, relying ahead the management's information of the setback.

Benefits of Cost Control:

- Cost control allows the company in lowering its charges & consequently reduces its prices.
- It enables the firm to enhance its profitability and competitiveness.
- It's indispensable for attaining greater productiveness.
- If the charge of the item for consumption is constant and realistic, it may preserve better sales and hence service of exertion pressure.

Negative aspect of Cost Control:

- Requirement of skillful personnel to set requirements.
- Limit on innovation.

Necessities for the success of Cost Control:

- A arrangement and a set of well-distinct responsibilities to all executives are necessary.
- Obvious explanation of tasks for routine and cost to carry out those tasks.
- A set responsibility, in case of variation among targeted and real.
- Timely assortment of routine data from each section of an organization as the delay in information equals to no information and the administration is not capable to take exact decision due to lack of total information.
- Highlights of superior and horrific, both performances to enable the administration to take remedial steps.
- Incentive for superior performances and penalty for the reduced ones.

Cost Control Techniques:

To permit managers successfully control the organizational activities, a large wide variety of controlling techniques are available.

A manager must understand the costs manage techniques and in which situation it must be

applied.

→ Inventory Control:

Stock control entails the procurement, care, and dispatch of materials. In line with a walker, inventory isn't always simply a material management/warehouse problem. The shopping, receiving, engineering, manufacturing and accounting departments all contribute to the accuracy of the stock techniques and data.

There are 3 forms of stock which might be the subject to managers:

- Raw-material
- Semi-completed items
- Finished goods

Inventory control is the supervision of delivery, storage, and accessibility of items so that it will ensure an ok deliver without immoderate/over deliver.

Techniques of inventory control:

- **1.** Level Setting.
- **2.** EOQ.
- 3. ABC Analysis.

Level Setting:

• Re-order level.

Re-order level is also known as ordering level or ordering limit or ordering point. Point at which the order for the supply of materials should made. This level is somewhere fixed between minimum level and maximum level. Re-order level mainly depends on order lead time and maximum rate of consumption. Store keeper will initiate purchase requisition when the level is reached.

• Maximum level.

Maximum level is also called as maximum stock or maximum limit. Maximum level is the level above which the stock should never reach. Maximum level function is to avoid unnecessary blocking up of capital in inventories, extra overheads, obsolescence of materials etc.

• Minimum level.

Minimum level represents lowest quantity of the particular materials below which fall in stock should not be allowed. This level is to be maintained every time so that the production is not held up due to the shortage of any material.

• Danger level.

A degree in which ordinary problems of material are stopped and the issues are made most effective below unique commands. The acquisition person will make unique preparations to get substances which attain at the danger degree in order that the production might not jump in before because of the scarcity of materials.

EOQ:

The quantity of the material to be ordered only one time is referred to as EOQ. This quantity is fixed in there sort of way as to the limit the cost of carrying and ordering the stock.

ABC Analysis:

In order to exercise the effective control over the materials, A.B.C method is of immense use. Under which materials are classified into three different categories in accordance with those respected values. Group A contains costly items which are 10-20% of the total items but account for almost 50% of total value of the stores. Group B consists of 20-30% of the store items but account for 30% of value of the store and group C consists of 70-80% of the items about 20% of total value.

Labor Control:

Introduction:

Tough work is the second one important detail of cost and for standard cost control. Labor is the most perishable commodity and such it should be efficaciously applied. Exertions cannot be recouped and it's certain to increase the value of manufacturing.

Control over Labor Cost:

labor price constitutes a prime portion of the whole cost of producing and it is able to be immoderate due to excessive turnover, idle time, and inefficiency of hard paintings, greater wastage of material with the resource of labor and absence of supervision. The inefficiency of hard work is likewise a cause for excessive material and overhead price. Therefore, financial utilization of exertions is a want of the present day industry to reduce the fee for producing the products manufactured/carrier rendered.

Overhead control:

Overhead value manage is used by Small-enterprise owners to reveal, distribute and decrease their overheads. An expense that cannot be with no trouble identified with a selected product or pastime is called as overhead. Not like material and production exertions, overhead is indirect and invisible part of generating product and carrier. Overhead cost can include administrative and higher prices, delivery charges, subcontractors, utilities, office supplies, depreciation, and marketing. And at the same time as some of these costs appear every day, it does now not mean they're fundamental.

The control of overhead charges is mainly complicated. But, by way of determining direct labor and material prices it becomes simpler consequently, managers generally tend to awareness on those charges. The successful control of overhead charges desires ordinary attention. A few managers do now not agree with overhead costs when formulating pricing strategies. This can bring about some products or activities not fully recovering their overhead prices. In long time duration, except different products are offsetting this insufficiency, this form of pricing method will not provide profits to offer a go back to the capital, control, and risk involved. It's far necessary to recognize the idea of overhead expenses while considering adjustments in the production method.

It may be understood that overhead cost are prices which can't be directly diagnosed with a product or production pastime. Overhead prices can be either constant or variable. A few examples of constant manufacturing facility overhead prices consist of depreciation, interest, hire, insurance, taxes, marketing, maintenance, and the manager's profits. Variable overhead fees may encompass some classes of materials, utilities, communique expenses, receiving fees and miscellaneous exertions prices. For the small enterprise operation, most overhead costs have a tendency to be constant.

There are various strategies to decrease overhead expenses. Those include:

- 1. Decreasing running capital
- 2. Implementing overall fine management

- 3. Controlling sales expenses
- 4. Reading preservation expenses
- 5. Decreasing transportation charges

Control of Capital Expenditure:

Techniques to exercise control over Capital Expenditure

The universal decided on proposals may be obsolescence due to development in generation inside the quick run. Therefore, funding made in constant property cannot be recovered very easily despite the fact that the task is carried out after thinking about profitability. In other phrases, the heavy investment in constant property affects the profitability of the firm in the long run i.e. before stop of the financial existence of the venture. As a result, a cost accountant can manage the capital expenditure with the assist of the following techniques.

1. Continuous look for new techniques and merchandise: A control can discover new techniques, method, and merchandise by trial and error approach or thru studies and development technique. In that case, the investment in constant property won't be affected the long-term profitability to a degree.

2. Deliberate improvement: A valid organizational structure has to be established for reading, screening and implementing numerous capital expenditure proposals. If so, there may be a possibility of planned development of all of the departments of the firm thru capital budgeting.

3. Capital Budgeting: An anticipated resources and makes use of finances may be organized in a declaration form. In that case, how a great deal amounts received and used for a selected duration is thought to the control. In this way, capital expenditure managed through capital budgeting. Consequently, capital budgeting needs to be perpetually followed the company.

4. Use of Rational methods of evaluation: The chosen evaluation technique should be the rational one. It considers enter and output in conjunction with non-financial subjects also. The be resources of the employer are well applied for wealth maximization. It is feasible most effective via using of rational approach for undertaking assessment.

5. Progress record: A proper progress document ought to be maintained to demonstrate the development made via a capital expenditure. A capital assignment sheet ought to be maintained for each challenge for this purpose. The predicted expenditure and real expenditure have to be as compared and variances have to be collected.

2.2 Literature Review:

Author/ researcher	Title of the	Objective Outcomes or	Gaps identified
	Article /Study	Findings	
R. Jayaraman	Project cost	Re-engineered method of	Difficult in estimating
Department of	control: a new	cost control well worked	resources requirement in
Operations	method to plan	and better than expected	making available not at the
Management, SP Jain	and control costs	yield.	right time.
Institute of	in large projects		
Management and			
Research, Mumbai,			
India			
Hathaway, Bruce R.	Controlling new	Management control of	Making maximum use of
Management Accounting;	facilities cost	construction projects are	the cost control technique.
Montvale Vol. 56, Iss.		initial planning through	
10, (APR. 1975): 47.		job completing is key to	
		cost control.	
Abdul-Rahman,	Capturing the	Design and construction	Project needs and
Hamzah. The	cost of quality	caused failure.	requirements are failure.
International Journal	failures in civil	Potential of using quality	Minimize factor associated
of Quality &	engineering	in the civil engineering	with risk and
Reliability		construction.	communication problem.
Management;			
Bradford			
Vol. 10, Iss. 3,			
(1993): 20.			
Watson, R B.	Construction	Difficult to establish a	Recognize the important
Cost Engineering; Cost Control Techniques i		reliable index combined	difference in between
Morgantown Vol. 30, the United		for material and labor.	engineering, design and
Iss. 4, (Apr 1988):	Kingdom		actual construction

27			essential.
Ali Mohammed	Simulation	It reveals that usage of	Many professors heard
Alashwal; Min Yi	techniques for	the cost simulation	about similarities but they
Chew. Built	cost	technique in the	do not have skill to how to
Environment Project	management	construction industry is	use it.
and Asset	and performance	very low.	
Management;	in construction		
Bingley Vol. 7, Iss. 5,	projects in		
(2017): 534-	Malaysia		
545. DOI:10.1108/BE			
PAM-			
Christine, Brian. Risk	Medical cost	Several implications are	Moderate popularity among
Management; New	control techniques	derived for the survey	respondents.
York Vol. 40, Iss. 4, (teeninques	results. Cost control	Implementation of stress
Apr 1993): 102.		techniques are very	reduction program.
		popular among the	
		operator.	
Kim, Yong-Woo.	The implications	Resource based costing	Research deal with only
University of	of a new production	and volume based	cost control process.
California, Berkeley,	paradigm for	allocations.	Studies limited to
Pro-Quest	project cost control	Techniques based on	implementation for project
Dissertations		managed by results and	management costs.
Publishing, 2002.		transformation view.	
3082255.			
Sudhakar, Samuel.	Examining the	Investment in IT has	Control cost and generate
North central University, Pro Quest	Potential of Information	helped many institutions	new source of the revenue.
Dissertations	Technologies to	go online enrollment,	
Publishing, 2013. 3537687	Improve Cost Control in	improved productivity	
	Community Colleges	and improved efficiency.	

Mani, Nirajan. University of Nevada,	Impact of design	It is to determine	Unavailability of detailed
Las Vegas, Pro Quest	cost on project	relationship of design	data. Total design cost data
Dissertations	performance of	duration and design cost	are not available.
Publishing, 2011. 1494997	design bid build	with parameter of project	
	projects	performance.	
Zyskowski, Matthew	Cost density-	Fixed number of cost	Lagrange multiplier theory
J. University of Notre Dame, Pro Quest	shaping for stochastic	cumulates and target	are applied.
Dissertations	optimal control	cumulates.	
Publishing, 2010. 3442067			
Pannu, Aman.	An economic	Design of DMEWMA	Economic statistical design
University of Northern Colorado,	statistical design	control charts is using	is needed.
ProQuest	of double	economic criteria.	
Dissertations Publishing, 2013.	multivariate		
3589417.	exponentially		
	weighted		
	moving average		
	(dmewma)		
	control chart		
Jagtap, Pankaj	Structured	Thesis should be applied	Research was not applied
Anant.Michigan State University, Pro Quest	methodology for developing	to all system	or communicated in
Dissertations	construction	development of efforts	construction industry.
Publishing, 1998. 1393528.	management cost control	with some changes based	
10,0020	system	on the system variables	
		and project.	
Sobie, Christopher E.	Life cycle cost	Life cycle cost analysis	Need the user inputs and
Northern Arizona University, Pro Quest Dissertations Publishing, 2016. 10126247	analysis of vehicle	provides an comparison	equation used to calculate
	detection	between the different	the results.
	technologies and their impact on	combination of the	
	adaptive traffic	vehicle detection	
	control systems	technology and ASCT	
		technologies.	
	I	I	1

Rajiv, Joy. Stanford University, Pro Quest Dissertations Publishing, 2007. 3292407.	Computing bounds via duality for singular stochastic control problems	Theoretical framework for constructing a sequence of increasing lower bounds.	Exogenous parameters of problem are restrictive.
Gamble, Geoffrey George .University of California, San Diego, Pro Quest Dissertations Publishing, 2016. 10011428.	Biologically Plausible Control of Fast Reaching Movements Using Non- Traditional Cost Functions	Techniques to uncover the mathematical principle which is been observed regularity in dynamics of the human movement.	Results comparable to or better than standard approach.
Åström, Stefan; Kiesewetter, Gregor; Schöpp, Wolfgang; Sander, Robert; Andersson, Sofia.Clean Technologies and Environmental Policy; Berlin (Dec 2018): 1- 11. DOI:10.1007/s100 98-018-1658-4	Investment perspectives on costs for air pollution control affect the optimal use of emission control measures	Difference in investment perspectives.	Minimization of cost in 2030.
Khongja, Nuchira; Botmart, Thongchai; Niamsup, Piyapong; Weera, Wajaree.Advances in Difference Equations; New York Vol. 2018, Iss. 1 , (Nov 2018): 1- 23. DOI:10.1186/s136 62-018-1898-y	Guaranteed cost control for exponential stability of a nonlinear system with mixed time- varying delays in states and controls	Design of the state feedback controllers which stabilize the closed loop system.	Non-linear system and the mixed delays in time- varying.
Mukherjee, Alok; Ray, Susanta; Das, Arabinda.Acta	Microcontroller based speed control and speed regulation	The design of a low cost, yet effective controllers and efficient in system.	Low cost micro controller for low power application. No maximum speed

Technica Corviniensis - Bulletin of Engineering; Hunedoara Vol. 11, Is s. 3, (Jul-Sep 2018): 47-56.	scheme for BLDC motor under variable loading conditions		regulation.
Baird, Kevin; Su, Sophia. International Journal of Productivity and Performance Management; Bradford Vol. 67, Iss. 6, (2018): 967- 984.DOI:10.1108/IJP PM-03-2017-0059	The association between controls, performance measures and performance	Additional analysis suggests that use of financial and quality measure the associate between the cost performance and intensity of cost.	Interdependency between different controls.
Keng, Tan Chin; Mansor, Norizzati; Ching, Yeoh Kah.Global Business and Management Research, suppl. Special Issue; Boca Raton Vol. 10, Iss. 3, (2018): 638.	An Exploration of Cost Overrun in Building Construction Projects	Cost overrum in the building construction of project is determined. Strategies proposed to overcome the cost overrum.	Major causes of cost overrum in the building construction projects.

CHAPTER-3 RESEARCH DESIGN

Meaning of Research Design:

Research design is the blue print for the collection, measurement and analysis of data. It is the map developed to guide the research. It is the part of the planning stage of research. A research design is a set of methods and procedures used in the collecting and analyzing the measures of the specified variables in the research problem of research.

Title of the Study:

"A STUDY ON COST CONTROL AND COST CONTROL TECHNIQUES OF MATERIAL MANAGEMENT AT KGPL LTD"

3.1 Statement of the Problem:

The main problem of the company is increasing cost of production. If they are not using effective cost techniques then it will become a huge problem for the company. In this project I tried to investigate problems and practices associated with cost analysis of **KOPPAL GREEN POWER LIMITED.** In this organization so many studies are grown on but only few has studied about cost control techniques. So I tried to fill this gap of study beyond my best level.

3.2 Need for the Study:

The significance of cost control within a company cannot be overstated. Businesses are dropping money, want to growth profits or should emerge as more competitive to cut charges in an effort to prevail. Knowing a way to put into effective cost manage techniques can be the figuring out component inside the survival of a commercial enterprise. When a company desires to generate extra money as short as feasible, management will decide which expenses might be most efficaciously controlled. If the control is wanted speedy, costs are cut first which might be usually the ones which might be constant or immediately tied to production. It isn't always an awesome concept to extensively control expenses that produce the agency service or product without cautious evaluation. If the enterprise understands the significance of cost manages as a tool to increase profitability, the company will have a much better hazard of ultimate worthwhile regardless of what degree of the monetary cycle is happening. That is due to the fact cost control

is a powerful tool that may be attentive to an organization's want. Coping with expenses is just as critical as dealing with revenue. There for turn is a need to study the Cost Control and Cost Control Techniques of Material Management adopted in the organization.

3.3 Objectives of the Study:

- To understand cost control techniques adopted by the koppal green power plant.
- To know the impact of cost control on productivity of the organization.
- To analyses the material management system adopted in the organization.
- To give the suggestions on the management of cost and its control.

3.4 Scope of the Study:

- This study helps in identifying, classifying and ascertaining cost overheads, which in turn helps the management in fixing the selling price effectively and efficiently.
- The scope of this study is to cover the effect of cost control techniques.
- The areas of study are materials, labor, fixed overheads and sales.
- The study will not cover budgeting or budgetary control techniques.

3.5 Research Methodology:

Descriptive type of research is adopted. For the preparation of this report, essential data has been collected from the secondary source i.e., company website, periodicals, magazines, journals, and financial statement of the company.

The project mainly focuses on analysis of Cost Control and Cost Control Techniques of Material Management. Trend analysis method has been chosen for the study purpose. The study implies that, calculating the material cost required for period of one year. working of existing costing system was clearly observed and additional data was collected. These data are collected through informal interviews and observations. Data collected was analyzed and interpreted. Charts, Tables, Graphs were used for analysis and interpretation.

Sources of Data:

- ➔ Primary Data
- → Secondary Data

Primary Data

- Face to face interaction / Interview.
- Observation

Secondary Data

Secondary Data are the data which is already available and the same collected from the existing records.

Data collected from secondary sources are.

- Company's web sites
- Periodicals
- Magazines
- Journals
- Financial statements of the company.

3.6 Limitations of the Study:

- No longer possible to have the in-depth observe because of restrained information furnished via KOPPAL GREEN POWER LTD.
- Despite the fact that there are numerous different cost control techniques available, but simplest the trend analysis has been decided on for the study due to the compatibility of the facts provided by the company.

- Cost control cannot lessen the managerial feature to a method. It's far only a managerial control.
- The use of value can be to the restrained use of sources. Expenses are often taken as limits.
- Trouble to attain the crucial corners of the records due to corporation's confidentiality.

3.7 Chapter Scheme:

This report on "A study conducted on Cost Control and Cost Control techniques at KOPPAL GREEN POWERLTD. is divided into five chapters and Annexure component. The info referring to every five specific chapters are given underneath:

CHAPTER-1

This chapter consists of the general introduction of the file, industry profile and organization information concerning vision, mission, and quality polices, areas of operation, an infrastructure facility, competitor's data, SWOT evaluation, future boom and prospectus and financial statement.

CHAPTER-2

Chapter two provides information regarding theoretical background of the study in addition to literature evaluate.

CHAPTER-3

This chapter consists of the information consisting of the title, assertion of the problem, need for the study, objectives, scope of the study, study's methodology, limitations and additionally an overview of the project.

CHAPTER-4

This chapter deals with analysis and interpretation of the various primary and secondary data

collected which has been collected in the organization for the study.

CHAPTER-5

This chapter offers records about the findings, conclusion and some suggestions.

CHAPTER-4

ANALYSIS AND INTERPRETATION

4.1 Financial Analysis

Cost sheet can be analyze by using Trend Analysis

Particulars	2014-15		2015-16		2016-17	
	Amount	%	Amount	%	Amount	%
Material Consumed	1,31,45,54,895	100	91,94,89,121	69.94	1,16,72,41,064	88.79
Utilities	51,10,756	100	40,89,722	80.02	47,34,732	92.69
Direct Employees Cost	8,10,99,176	100	7,83,12,939	96.56	8,6863188	107.10
Consumable Stores and Spares	91,302	100	94,935	103.9	1,09,642	120.0
Repairs and Maintenance	17,44,049	100	12,69,382	72.78	12,79,277	73.06
Depreciation/ Amortization	13,68,498	100	10,87,574	79.47	30,80,723	225.1
Other	2,30,74,061	100	1,91,79,417	83.12	2,96,16,073	128.3

Production						
Overheads						
Decrease in	2,20,82,705	100	21,90,687	9.92	2,93,56,860	132.94
Work in						
Progress						
Cost of	1,40,49,60,031	100	1,02,57,13,777	73.00	1,32,22,76,559	94.11
Production/						
Operation						
Increase /	2,00,78,172	100	5,49,04,314	273	1,93,17,900	96.21
Decrease in						
Stock of						
Financial						
Goods						
Cost of	1,38,48,81,859	100	97,08,04,463	70.10	1,34,18,94,459	96.89
Production /						
Operation of						
Product sold						
Administration	2,58,66,146	100	2,58,99,990	100.13	2,99,58,662	115.8
Overheads						
Selling and	1,94,51,634	100	1,53,06,186	78.68	1,75,76,116	90.35

Distribution						
Overheads						
Cost of sales	1,43,01,99,639	100	1,01,20,15,639	70.76	1,38,91,29,237	97.13
before						
Interest and	97,11,901	100	1,03,62,696	106.7	96,14,008	98.99
Financing						
charges						
Cost of Sales	1,43,99,11,540	100	1,02,23,78,335	71.00	1,39,87,43,245	97.14
Net sales	1,56,68,17,047	100	1,09,19,81,070	69.69	1,60,34,39,300	102.33
Realization						
Margin Profit	12,69,05,507	100	6,96,02,735	54.85	20,46,96,055	161.2
as per Cost						
Accounts						

Prime Cost:

In the base year the prime cost is 100% i.e. 59,346.37, but in the next consecutive year the prime cost is increased by 105.74% i.e. 62,750.47 and next following year it is very clear that the decrease in prime cost is 95.23% i.e. 56,513.67 and this is due to the increase in the effective use of the raw-material.

Factory Cost:

In base year the factory cost is 100% i.e. 58,505.42, but in the next consecutive year the factory cost is increased by 107.05% due to increase in the prime cost during 2015-16 and the following year it is very clear that the decrease in the factory cost is 98.88% i.e. 57,852.28 and this is due to variation in prime cost.

Office and Administrative Cost:

In the base year the office and administrative cost is 100% i.e. 1,092.74, but in the next consecutive year the office and administration cost is increased by 152.91% i.e.1, 670.97 and the following year it is very clear that the increased in office and administration cost is 118.22% i.e. 1,291.88 and this is due to minimization of wastage.

Net Sales:

In the base year the net sales is 100% i.e. 66,191.42 but in the next consecutive year the net sales is increased by 106.43% i.e. 70,450.39 due to decrease in the material consumed in 2015-16 and the following year it is very clear that the increase in net sales is 104.46% i.e. 69,143.57 and this is due to reduction in the cost of overhead and cost of sales also decrease.

Margin Profit:

In the base year the margin profit is 100% i.e. 5,361.22 but in the next consecutive year the margin profit is decreased by 83.76% i.e. 4,490.50 due to decrease in sales during 2015-16 and the following year it is very clear that the increase in margin profit is 164.64% i.e. 8,826.91 and this is due to increase in sales.

Tool: - 1

4.2 Ratio Analysis:

1. Current ratio

Current ratio= Current assets to the Current liabilities

Year	Current Assets	Current Liabilities	Current Ratio
2014	268.12	230.03	1.16 : 1
2015	324.88	274.55	1.18 : 1
2016	329.58	284.61	1.16 : 1
2017	305.36	283.23	1.08 : 1

Table No 1: Chart showing the current ratio for the four year.

Analysis:-

The table above shows the position of current asset and current liabilities has been shown from the year 2014 - 2017. Table indicates that the values of current asset and current liabilities changes every year. As in the current assets the value is increased from 2014 to 2016 but at the year 2017 the value decreased as shown in above table. And also the value of current liabilities also increase for the year 2014 - 2017, but there is a slightly change in last year. At the end of the 2017 there is a decrease in the values of current assets and increase in the values of the current liabilities.

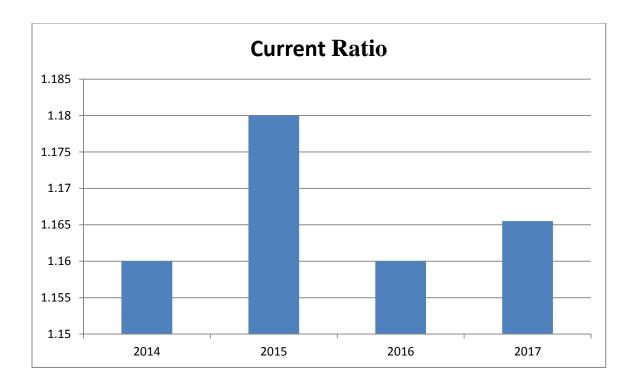


Chart No 1: Chart showing the current ratio for the four year.

***** Interpretation:

The standard current ratio of the firm should be 2:1.

From the table it is observed that the Current Ratio is instable and fluctuating. In 2014 the ratio is 1.165 times, and in 2015 the ratio is 1.18 times. In 2016 the ratio is 1.16 times, 2017 the ratio is 1.078 times. But still it is not satisfactory.

2. Quick Ratio:

Quick Ratio =Quick assets to the Quick liabilities

Year	Quick Assets	Quick Liabilities	Quick Ratio
2014	162.31	98.45	1.65 : 1
2015	192.91	110.21	1.75 : 1
2016	208.23	122.79	1.69 : 1
2017	194.44	126.35	1.54 : 1

Table No 2: Table showing the quick ratio for the four years.

Analysis:-

The table above shows the position of quick asset and quick liabilities has been shown from the year 2014 - 2017. Table indicates that the values of quick asset and quick liabilities changes every year. As in the quick assets the value is increased from 2014 to 2016 but at the year 2017 the value increased as shown in above table. And also the value of quick liabilities also increases for the year 2014 - 2017. At the end of the 2017 there is an increase in the current assets and also increase in the current liabilities

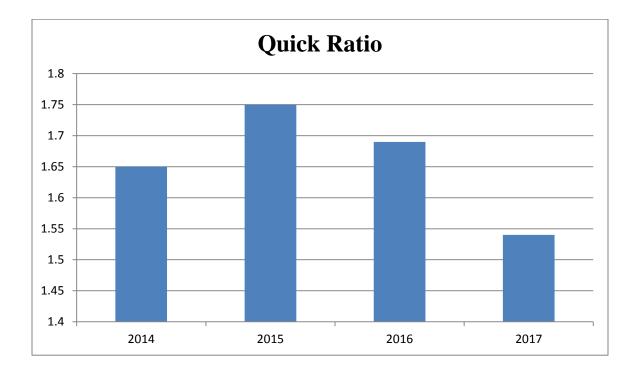


Chart No 2: Chart showing the quick ratio for the four years.

Interpretation:

The standard quick ratio of the firm should be 1:1. From the above table it is observed that the Quick Ratio is instable and fluctuating. In the year 2014 the ratio 1.65 times, 2015 the ratio is 1.75 times. In the year 2016 the ratio is 1.69 times, 2017 the ratio is 1.54 times. But it is satisfactory.

3. Debt Equity Ratio

Debt equity ratio = debt/ shareholders fund

Year	Debt(Long term funds)	Equity(Shareholder funds)	Debt Equity Ratio
2014	0.37	3.79	0.09
2015	7.59	3.79	2.00
2016	13.79	3.79	3.64
2017	33.87	3.79	8.94

Table No 3: Table showing the debt equity ratio for the four years.

Analysis:-

The table above shows the position of long term funds and shareholders' funds has been shown from the year 2014 - 2017. Table indicates that the values of debt and equity changes every year. As the values of debt got increased from 2014 to 2017. And also the value of equity remains same for the year 2014 - 2017. At the end of the 2017 there is a decrease in debt and equity foe the four years remain same

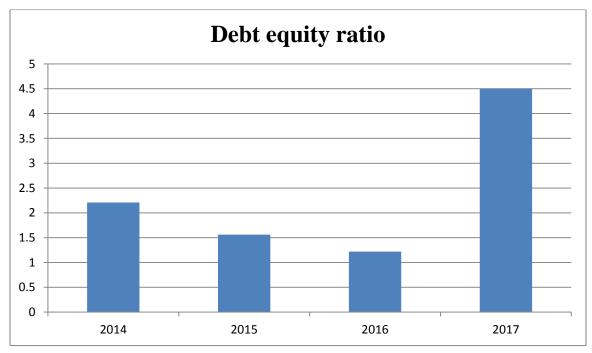


Chart No 3: Chart showing the debt equity ratio for four years.

From the above table it is observed that it Debt Equity Ratio is instable and fluctuating. In the year 2014 the ratio is 0.09 times, 2015 the ratio is 2.00 times, 2016 the ratio is 3.64 times, and 2017 the ratio is 8.93 times.

4. Absolute Liquid Ratio

Absolute liquid ratio= Marketable Investment+ cash to the Current Liabilities

Year	Marketable investment + cash	Current liabilities	Absolute liquid ratio
2014	13.26	230.03	0.0576
2015	15.16	274.55	0.0552
2016	4.46	284.61	0.0157
2017	8.96	283.23	0.0316

Table no 4: The table showing the absolute liquid ratio for four years.

Analysis:-

The table above shows the position of marketable investment and current liabilities has been shown from the year 2014 - 2017. Table indicates that the values of marketable investment and current liabilities changes every year. As in the marketable investment the value is decrease from 2014 to 2017. And also the value of current liabilities also increases for the year 2014 - 2017. At the end of the 2017 there is a decrease in marketable investment and increase in current liabilities.

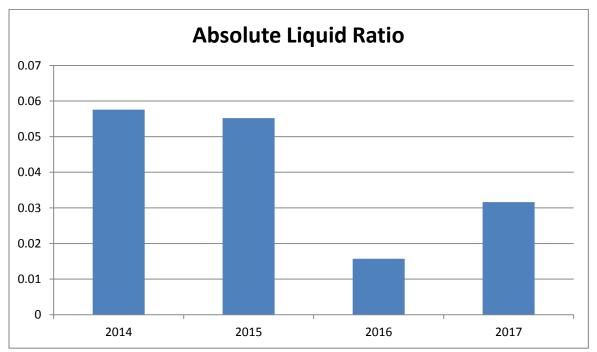


Chart No 4: Chart showing the absolute liquid ratio for 4 years.

Interpretation:

From the above table it is observed that it Absolute Liquid Ratio is instable and fluctuating. In the year 2014 the ratio is 0.057 times, 2015 the ratio is 0.055 times, 2016 the ratio is 0.015 times, and 2017 the ratio is 0.0316 times.

5. Stock Turnover Ratio:

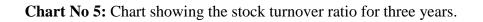
Stock Turnover Ratio = Cost of goods sold to the Average stock

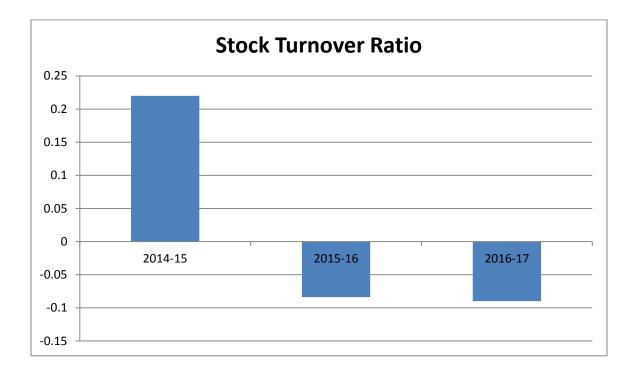
Year	Cost of goods sold	Average stock	Stock turnover ratio
2014-15	26.16	118.89	0.22
2015-16	-10.62	126.66	-0.0838
2016-17	-10.43	116.23	-0.0898

Table No 5: Table showing the stock turnover ratio for the three years.

Analysis:-

The table above shows the cost of goods sold and average stock has been shown from the year 2014 - 2017. Table indicates that the values of the cost of goods sold and the average stock changes every year. Cost of goods sold the value is decrease from 2014 to 2017. And also the value of average stock also decreased for the year 2014 - 2017, but there is a slightly change in last year. At the end of the 2017 there is a decrease in the values of cost of goods sold and there is a decrease in the average stock.





From the table it is observed that Stock Turn-over Ratio is instable and fluctuation. In the year 2014-15 the ratio is 0.22 times, 2015-16 the ratio is -0.0838, and 2016-17 the ratio is -0.0898 times.

Tool: 2

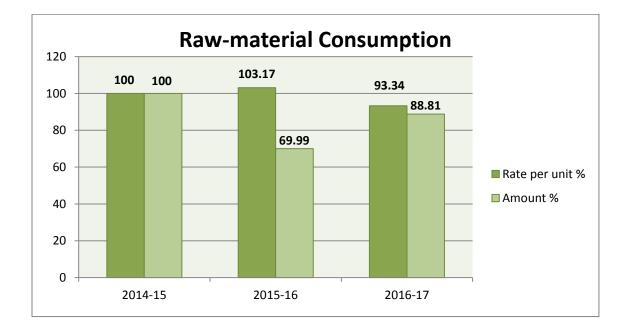
Cost Sheet Ratios

1. Raw-Material Consumption:

Table No 6: Table showing Raw- Material Consumption for three years.

Year	Rate per unit	%	Amount(Rs)	%
2014-15	54,880.88	100	1,31,96,65,651	100
2015-16	56,623.06	103.17	92,35,78,843	69.99
2016-17	51,227.2	93.34	1,17,19,75,796	88.81

Chart No 6: Chart showing Raw-Material Consumption for three years.



We can observe, there is a fluctuation in the amount as well as in rate per unit compared to base year 2014-15 in 2015-16 percentage amount has been decreased 30.01% and in the year 2016-17 it has been decreased to 11.19. While next coming to the percentages of rate per unit also has variations compared to the base year in the year 2015-16 rate per unit increased up-to 3.17 and during the year 2016-17 it's again decreased to 6.66%.

Consequently there is a rise and fall in the amount and rate per unit in raw-material consumption.

2. Labor Cost:

Year	Rate per unit	%	Amount(Rs)	%
2014-15	3,372.67	100	8,10,99,176	100
2015-16	4,801.23	142.36	7,83,12,939	96.56
2016-17	3,796.80	112.58	8,68,63,188	107.11

Table No 7: Table showing Labor cost for three years.



Chart No 7:- Chart showing the labor cost for three years.

Labor cost amount increased in the year 2016-17 up-to 7.11% and in 2015-16 it has been decreased to 3.44% compared to the base year. On the other side rate per unit in 2015-16 increased up-to 42.36 and in the year 2016-17 increased up-to 12.58%.

Therefore the amount and rate per unit of labor cost fluctuating from year to year.

3. Prime Cost:

Year	Rate per unit	%	Amount(Rs)	%
2014-15	58,257.35	100	1,40,08,56,129	100
2015-16	61,430.11	105.45	1,00,19,86,717	71.53
2016-17	55,028.79	94.46	1,25,89,48,626	89.87

Table No 8: Table showing Prime Cost for three years.

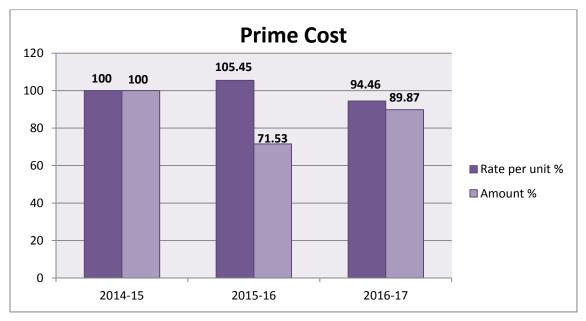


Chart No 8: Chart showing Prime Cost for three years.

The amount of prime cost during the year 2015-16 decreased to 28.47% and in 2016-17 also decreased to 10.13% compared to the base year, whereas percentage of rate per unit of prime cost increased up-to 5.45%, and decreased to 5.54% respectively in the year 2015-16 and 2016-17 compared to the base year.

We can interpret there is variation in the amount as well as in the rate per unit of prime cost.

4. Factory Expenses:

Year	Rate per unit	%	Amount(Rs)	%
2014-15	59,346.37	100	1,42,70,42,736	100
2015-16	62,750.47	105.74	1,02,35,23,090	71.72
2016-17	56,513.67	95.23	1,29,29,19,699	90.60

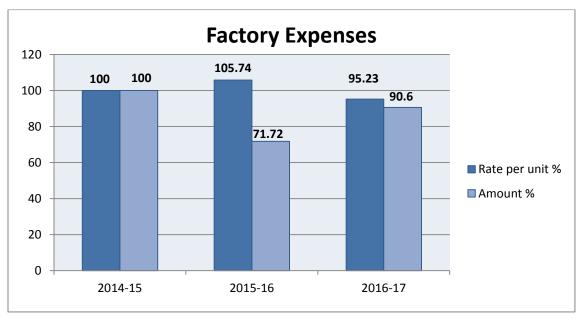


Chart No 9: Chart showing the Factory Expenses for three years.

The cost of factory expenses has been decreased to 28.28% & 9.4% in 2015-16 & 2016-17 while comparing to the year 2014-15. On other hand rate per unit for factory expenses increased up-to 5.74% in year 2015-16 and again in year 2016-17 decreased by 4.77% comparatively to the base year.

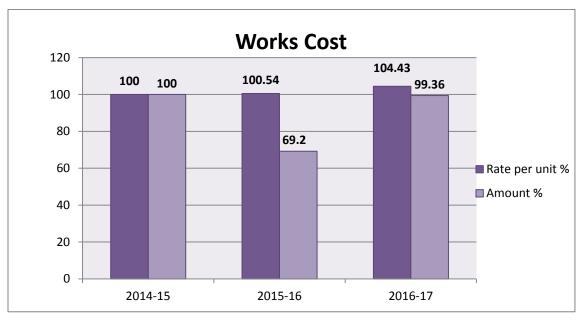
Amount and rate per unit of factory expenses has lot of difference over the period.

5. Expenses or Works Cost:

Year	Rate per unit	%	Amount(Rs)	%
2014-15	65,258.44	100	1,56,92,04,437	100
2015-16	65,609.93	100.54	1,07,01,63,532	69.20
2016-17	68,151.16	104.43	1,55,91,62,311	99.36

Table No 10: Table showing the Works Cost for three years.

Chart No 10: Chart showing the Works Cost for three years.



Interpretation:

The amount of works cost decreased to 30.8% & 0.64% during the year 2015-16 as well as in the year 2016-17 compared to the base year, whereas rate per unit for cost increased up-to 0.54% & 4.43% in the year 2015-16 and 2016-17 compared to the base year.

Rate per unit of works cost slowly increasing and amount of works cost has lot of difference from year to year.

CHAPTER-5

SUMMARY OF FINDINGS, CONCLUSION AND SUGGESTION

5.1 Findings:

In my study of cost control techniques at KGPL. I came to find the following information

- KGPL being Pvt. Ltd sector is continuously making profits over the year.
- KGPL supply 6megawatt of power to KPTCL.
- KGPL procures its required raw material from within and outside Karnataka.
- The company is paying salaries to employees a monthly basis. They maintain proper attendance system and records and wages are paid on the basis of attendance records.
- The company has introduced voluntary retirement scheme and recruiting new employees with good skills.
- The company's raw material consumption and expenditure on overhead and labour are increased.
- Direct labour has increased year by year. Compared to base year because the labour recruited every year production.

5.2 Conclusion:

This study helps to express clear opinion about the organization and it help the management to hear the employee's opinion & bring them in to action. So it is necessary to study the organization" on whole, which intends to improve the organizational effectiveness. I have learned a lot about the techniques to control the cost in varies aspect in material management so that in order controls the cost of material for the financial growth of the company.

5.3 Suggestions:

- > It is better to improved awareness in the minds of employee through systematic training.
- > It is better if the company provide bus facility to its employee.
- > Company should concentrate on systematic inventory management.
- Company should provide better welfare facilities to the employee's like Canteen, Dust Protection Glass, etc.
- The factory should make the arrangement of payments to the Middlemen at a proper time.
- The management should take care towards increasing the direct cost and indirect cost through following the proper methods for controlling inventory.
- A proper implication of cost control would lead to increase financial status of KGPL
- Company should practice new technology methods to save Time, Money, and Manpower.
- ▶ Biomass is not available if the basic crops are no longer grown.
- > New techniques should be utilized to harvest the crops.
- Other biomass utilization projects are using animal wastes which are relatively small and limited.
- > Cost of production of the biomass fuel should be reduced by conducting research.
- Pollution of the environment is increasing day by day should be a major cause.

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Annexure:-

A cost sheet is a report on which is accumulated all of the costs associated with a product or production job. A cost sheet is used to compile the margin earned on a product or job, and can form the basis for the setting of prices on similar products in the future. It can also be used as the basis for a variety of cost control measures. Despite the name, a cost sheet can be compiled and viewed on a computer screen, as well as being manually developed on paper. The costs listed on the report are usually aggregated into the following categories:

- Direct Material
- Direct Labor
- Allocated Factory Overhead.

COST SHEET AS ON 2014-17.....

S.N	Particulars	Amount (Rs.)	Amount (Rs.)	Amount (Rs.)
		2014-15	2015-16	2016-17
1	Material consumed (specify details as	1,31,45,54,895	91,94,89,121	1,16,72,41,064
	per Para 2A)			
2	Process Materials / chemicals			
3	Utilities(specify details as per Para2B)	51,10,756	40,89,722	47,34,732
	Power Charges			
4	Direct Employees Cost	8,10,99,176	7,83,12,939	8,68,63,188
5	Direct Expenses			
6	Consumable Stores & Spares	91,302	94,935	1,09,642
7	Repairs & Maintenance	17,44,049	12,69,382	12,74,277
8	Quality Control Expenses			
9	R & D			
10	Technical knowhow fee / Royalty			
11	Depreciation / Amortization	13,68,498	10,87,574	30,80,723
12	Other Production Overheads	2,30,74,061	1,91,79,417	2,96,16,073
13	Total (1 to 12)	1,42,70,42,736	1,02,35,23,090	1292919699

14	Decrease in Work in Progress	(2,20,82,705)	21,90,687	29356860
15	Less: Credit for Recoveries, if any			
16	Primary Packing Cost			
17	Cost of Production / Operations	1,40,49,60,031	1,02,57,13,777	1,32,22,76,559
	(14+15 to 16)			
18	Cost of Finished Goods Purchased			
19	Total Cost of Production &	1,40,49,60,031	1,02,57,13,777	1,32,22,76,559
	Purchases (17+18)			
20	Increase /Decrease in stock of Finished	(2,00,78,172)	(5,49,04,314)	1,93,17,900
	goods			
21	Less: Self/Captive Consumption (Incl.			
	Samples etc)			
22	Cost of Production/Operation of	1,38,48,81,859	97,08,09,463	1,34,15,94,459
	Product Sold (19+20 to 21)			
23	Administrative Overheads	2,58,66,146	2,58,99,990	2,99,58,662
24	Secondary Packing Cost			
25	Selling & Distribution Overheads	1,94,51,634	1,53,06,186	1,75,76,116
26	Cost of Sales before Interest (22 to	1,43,01,99,639	1,01,20,15,639	1,38,91,29,237
	26)			
27	Interest & Financing Charges	97,11,901	1,03,62,696	96,14,008
28	Cost of Sales (26+27)	1,43,99,11,540	1,02,23,78,335	1,39,87,43,245
29	Net Sales Realization (Net of Taxes &	1,56,68,17,047	1,09,19,81,070	1,60,34,39,300
	Duties)			
30	Margin Profit as per Cost Accounts	12,69,05,507	6,96,02,735	20,46,96,055
	(29-28)			
S.N	Particulars	Rate per unit	Rate per unit	Rate per unit
		2014-15	2015-16	2016-17
1	Material consumed (specify details as	54,668.34	56,372.33	51,020.24
	per Para 2A)			
2	Process Materials / chemicals			

3	Utilities(specify details as per Para2B)	212.54	250.73	206.96
	Power Charges			
4	Direct Employees Cost	3,372.67	4,801.23	3,796.80
5	Direct Expenses			
6	Consumable Stores & Spares	3.80	5.82	4.79
7	Repairs & Maintenance	72.53	77.82	55.70
8	Quality Control Expenses			
9	R & D			
10	Technical knowhow fee / Royalty			
11	Depreciation / Amortization	56.91	66.68	134.66
12	Other Production Overheads	959.58	1,175.86	1,294.52
13	Total (1 to 12)	59346.37	62,750.47	56,513.67
14	Decrease in Work in Progress	(918.36)	134.31	1,283.19
15	Less: Credit for Recoveries, if any			
16	Primary Packing Cost			
17	Cost of Production / Operations	58,428.01	62,884.78	57,796.86
	(14+15 to 16)			
18	Cost of Finished Goods Purchased			
19	Total Cost of Production &	58,428.01	62,884.78	57,796.86
	Purchases (17+18)			
20	Increase /Decrease in stock of Finished	77.41	(251.92)	55.42
	goods			
21	Less: Self/Captive Consumption (Incl.			
	Samples etc)			
22	Cost of Production/Operation of	58,505.42	62,632.86	57,852.28
	Product Sold (19+20 to 21)			
23	Administrative Overheads	1,092.74	1,670.97	1,291.88
24	Secondary Packing Cost			
25	Selling & Distribution Overheads	821.75	987.50	757.92
26	Cost of Sales before Interest (22 to	60,419.91	65,291.33	59,902.08

	26)			
27	Interest & Financing Charges	410.29	668.56	414.58
28	Cost of Sales (26+27)	60,830.19	65,959.89	60,316.66
29	Net Sales Realization (Net of Taxes &	66,191.42	70,450.39	69,143.57
	Duties)			
30	Margin Profit as per Cost Accounts	5,361.22	4,490.50	8,826.91
	(29-28)			



ACHARYA INSTITUTE OF TECHNOLOGY DEPARTMENT OF MBA

PROJECT (17MBAPR407) -WEEKLY REPORT

NAME OF THE STUDENT: NAGA MOHANS INTERNAL GUIDE: SANDHYAS USN: IAYI7MBA30 COMPANY NAME: KOPPAL GREEN POWLER LIMITED.

WEEK	WORK UNDERTAKEN	EXTERNAL GUIDE SIGNATURE	INTERNAL GUIDE SIGNATURE
3 rd Jan 2019 – 9 th Jan 2019	Industry Profile and Company Profile	* Surcey	andujo
10 th Jan 2019 – 17 th Jan 2019	Preparation of Research instrument for data collection	Fisuraxy	quiding
18 th Jan 2019 – 25 th Jan 201 9	Data collection	t. Surexu.	Judungol
26 th Jan 2019 – 2 nd Feb 2019	Analysis and finalization of report	Z. Susexy	afundingo
3 rd Feb 2019 – 9 th Feb 2019	Findings and Suggestions	Z Surexh,	Judingor
10 th Feb 2019 – 16 th Feb 2019	Conclusion and Final Report	K. Surexu,	Judnyog



College Seal

HOD Sig Head of the Depa harya Institute Joinevanahlii, Banga