

## **Executive summary**

The purpose of the study is to understand the cost reduction and control at Nuetech solar Pvt Ltd Bengaluru and to understand the financial aspects of various departments and to understand the concept of business decision in the organization and to know the level of satisfaction of the employees at nuetech solar Pvt Ltd

Learning in nuetech solar Pvt Ltd was an wonderful experience it helped to know how cost reduction and control techniques are practically applied in the organization .The theoretical informations learned in the classes was seen in practice in internship training and moreover it was an wonderful experience learning at Nuetech solar Pvt Ltd

The company has adopted various modern tecniques and equipments that would help in increasing the production speed and capacity and by increasing solar euipments in the country that would reduce the electricity requirements and could save much money and power

**CHAPTER 1**  
**INTRODUCTION**

## **1.1 INTRODUCTION:**

Internship and project work is a part of academic activity of Visvesvaraya Technological University, Belgaum. It is an initial to bridge the gap between the knowledge and its application through a series of invention to the student of MBA program that enable to achieve knowledge and explore to the industry.

A meaningful six week project has exposed me to the corporate culture at “NEUTECH SOLAR SYSTEMS PVT LTD”. This internship training served as the right platform to implement the theoretical imbibed concepts in a best possible way.

It was interesting to learn in an organization like NEUTECH SOLAR SYSTEMS LIMITED. This is committed with the society’s wellbeing and ethical standards. All though the human resources are grouped into various levels of responsibility, the company keeps an open door policy to encourage free intrapersonal interaction which I believe is real strength of any organization. It exposed to the quality of work culture, timelines and cooperativeness in the company.

The interaction with the company gave an insight and a first experience of the industrial scenario in the competitive environment outside the realms of the company. Learnt how to interact with customers, how to behave with the superiors, subordinates, and how to retain the customers. It helps students to apply their skill in practical field under the guidance of experienced practitioners.

It helps to learn company ethics, organization behaviour, rules, provision, etc., once the students finish the academy students can easily fit to the companies by learning norms through this internship program. It boosts confident level among the students. This program adds academic value and ability to earn academic credit. It also gives the opportunity to make valuable future jobs.

All together it was a good learning experience to carry the project in the company like NEUTECH SOLAR SYSTEMS LIMITED and I thankful to all the people who have helped to complete my project, without which the project would not have been success.

## **1.2 INDUSTRY PROFILE**

### **Solar power in India**

India has a thickly populated nation with the eleventh section dependent on the sun that is appropriate for lively utilization of daylight in India. India is currently spearheading at the time of air control. In the gathering of adjacent planets, some extensive plans are proposed and focused on vitality endeavors dependent on the 35,000 km<sup>2</sup> daylight of Thar Desert, which is reasonable for 700 GW to 2,100 GW. India's new and manageable power source administration has propelled the JNNS stage 2 draft framework. The organization is anticipating that 10GW should set daylight based vitality and 10 GW targets.

### **Current status**

#### **Daylight dependent on India's property portrays**

In India, the anecdotal sun's vision amasses a region of about 5,000 Petawat-year (PWh/yr) (5000 trillion kWh/yr or around 600 TW) in around 300 clear, brilliant days. Because of the general sun-based existence of the day, India is changing from 4 to 7 kWh/m<sup>2</sup>, with around 1500-multi day hours (space), which builds the by and large lively use. For instance, in spite of the way that the utmost of PV modules is 10% lower, it is still high on home control demands until 2015.

### **Presented Limit**

The absolute essentialness of daylight in India was 1% in 2007. By December 2010, the Matrix insightful sun-based power was just 10 megawatts. Government-helped sun oriented power in India was at 6.4 megawatts in 2005. Regardless, India is at the highest point of the daylight that has been presented each Wat, when each kilowatt is demolished for 1,700 to 1,900 kilowatts for each hour. (kWh/KWP). 25.1 MW in 2010 and 468.3 MW in 2011. By July 2012, the presentation of the encircled photovoltaic powerhouse extended to 1040.67 MW and India would set up an extra 10,000 MW by 2017 and 20,000 MW by 2022

## **Sun based applications**

### **Rustic zap**

The nonattendance of power fracture in the nation is one of the principal hindrances. The statistic structure of India has been fundamentally made, and the genuine zones of its populace stay in off-latis. By 2004, there were 80,000 Alterfired towns in the nation. In these towns, it is implausible to energize to 18,000 conventional framework developments. To control 5,000 towns for the tenth National Five Year Plan (2002-2007). By 2004, the greater part of the 2,700 towns and towns were in charge of sun-based photovoltaic casings. Obscure sun-based development upgrades are viewed as a potential decision, which consolidates the control establishment with the dispersal of adjacent system gatherings. Maintaining a strategic distance from the need to build up a high, contracting, long-separate, open power supply structure and more requirement for most far reaching power (or else for the appropriate response).

### **Sun based lights and light**

By 2019, 46,00,000 sun-based lights and 861,654 daylight controlled home lights were presented. These are typically involved by light oil lights and can be bought for a couple of months in front of a couple of long stretches of light fuel. The new and sustainable power source service offers 210 bps lights, home lights and strict edges. Blessing presents to 30% to 40%. By 2022, 20 million sun-controlled lights are normal.

### **Agricultural help**

Sun based PV Water Pump System is utilized for watering and drinking water. Most siphons are given 200-3,000 watts motor, constrained by the 1,800 WP PV framework, giving 140,000 liters of water each 10 meters for each day. Daylight put together PVs will be introduced with respect to 7,068 September 30, 2016. Water cyfoning structures were introduced and 7,771 presented in March 2012. Sun-based burrowing gadgets are recently utilized for dry yields.

### **Sun based water pumpers**

Bangalore has a wide scope of daylight light-based water radiators in India. These radiators convey 200 MW of imperativeness. The city of Bangalore is a noteworthy city as a main

thrust system that allows a large portion of a month a month to inhabitants utilizing a warm casing on the roof. These casings are at present obligatory for each new structure. Pune, another city on the west side of India, has postponements of daylight planned water vapors in new structures.

### **Issues and Opportunities**

Land is uncommon in India and the accessibility of land has declined. Territory Reservation achieves the necessities to face different essentials requiring an alternate get together of exhibitions dependent on daylight. Utility-scale daylight based power plants require land-intensity of 20-60 megawatts (MW) yield per 1 km. 2, it can get to the advantages that weigh to India. Most scatterings of isolated rooftop control outlines are identified with the most appropriate building neighborhood work for most pieces of India. Notwithstanding, such framework that despises the mass of the mass, utility-scale, sun oriented board position, altogether backs off the cost of the sun oriented innovation organization showcase, in this manner drawing in an individual and normal family-estimate family unit. It is conceivable later on the grounds that PV will most likely proceed with its present cost decrease for the following decade and rival petroleum derivative.

### **Government support**

New and Renewable Energy Ministry (MNRE) 51 Sun Radiological Resource Assessment Centers have been set up crosswise over India to concentrate on sunlight based vitality effectiveness. Thusly, to create a sun-driven outline book, the data will be gathered and the Center for Wind Energy Technology (C-WET) will be replied.

### **Future Wish for the Solar Energy Industry of India**

India's sun-based power is assessed at 5,000 trillion kilowatt-hours every year, and is considered by numerous individuals to be the best vitality elective in the subcontinent. In this way, India today has 9.84 megawatts of sun based power limits, decreasing the nation's absolute propelled vitality source by 0.1. As indicated by new and practical power sources in India, the all out feasible power source is 13,242.41 MW.

### **1.3 COMPANY PROFILE:**

Neutech coordinates the well off non-conventional essentialness industry with its source toward the start of sun-based warm business in India.

Neutech Solar Systems Private Limited. The hottest imperativeness association, in view of a calculated daylight, rotates around giving essential frameworks utilizing bound together development. From the earliest starting point, it is a solid spot for common and social duties, with creative, killing and balancing out. Utilizing Sun Energy as Energy, Nitek Solar Systems Private Limited. The world's biggest sun-fueled warm edges, sun-based water radiators, warm, sun-put together lights of water based with respect to lethargic daylight are at the bleeding edge.

Neutech moves in the unusual condition of individual life, improved chain of command, and the protected universe of due to conceded equipment of sun-based life.

The electrical parts dependent on daylight assume a vital job in treating the world, controlling the quickly isolating resources of the planet and raising the capability of vitalized zones. We are the supplier of Neutech Solar Systems Private Limited, the world's driving makers, exporters and sun-controlled lights, outside lights, daylight based lights, sun-based warm casings, sun-fueled water bodies, and sun-based water radiators independently. .

Street lights stay in the path of the street. We have arranged lights to set up different lanes, regions, and road lighting, and we face long life, zero consideration, sun-focused on sheets, batteries and exceptionally craftsmanship punishments for climatic conditions, warmth and sea tempests.

### **History**

#### **Sunward from begin**

Neutech coordinates the affluent business of the non-regular powerful industry with its source toward the start of a warm business dependent on daylight in India. The custom of the association was known as the Advance Portable which aggravated the Compact, Fuel Wooden Bend from 1988 to 4 years old and land business points of view.

At the interim, affiliation publicists split early morning business in their advancement zone: imperativeness dependent on daylight. Gravity was hard to oppose, so he obtained method in non-traditional non-legitimate power making a trip to Neutech frameworks in 1992 - right change is substantial! Neutech commitments are a piece of maintainable power source advancement in Indian improvement in this advancement, with more noteworthy business desires and the irregular state self-supporting co-specialist with national administration.

## **1.4 Vision**

Greater quality of individual life, enhanced organizational efficiency and safer world, thanks to improved harnessing of solar energy

## **1.5 Mission**

- To deliver top-of-the-line solar energy products & services and keep the customers delightfully surprised
- To sustain a cutting-edge infrastructure and an inspiring working environment, with constant investments and initiatives
- To adopt the best management practices
- To promote usage of solar and other renewable forms of energy in daily life; enable conservation of conventional energy; and support movements for a clean and green planet

## **1.6 QUALITY POLICY**

Neutech is one of the significant quality administration frameworks in the business alone. One of the soonest units in the sun powered warm enterprises is focused on quality confirmation by the reason for securing the ISI stamp by 1997. In this manner, ISO 9001: 2008 confirmation is normally found after their fulfillment with the Southern Regional Solar Energy Testing Center, their extreme item affirmation conventions, and the Bureau Veritas accreditation for the quality administration framework.

Neutech guarantees that all its working units convey an extraordinary quality-checking identification to demonstrate that their exceptional data sources, procedures and items have been checked in quality. Likewise, it empowers associations between its representatives to make thoughts for consistent quality improvement in the depiction of any item or procedure.



By embracing new advancements and strategies, the Neutech Enterprise-dependably shows the rich culture of culture by refreshing HR, upgrading development and expanding client administration.

## **1.7 Operational Areas**

Neutech Solar Systems Private Limited. An imaginative sun based warm vitality organization is engaged with giving the sun based warm vitality organization . Neutech runs high caliber and gives clients the best items to offer and the new sunlight based administration gives their administrations neighborhood and national

### **Neutech Solar has a few branches in Bangalore**






- Magadi road ,sunkadakatte Bengaluru
- Rajajinagar
- Bannerghatta main road

## **1.8 Product Profile**

### **OVERVIEW**

### **DOMESTIC MODELS**

## Apt Design for Any Demand

<p><b>Prajwal</b></p> <p>The "powder covered" show once upset the appearance of the item's commitments to the Nuetech by presenting the shading. On style as well as on the economy, it is one of the quickest moving results of the Nietzsche.</p>	 A solar water heater with a cylindrical tank and a single collector panel.
<p><b>Ujwal FPC</b></p> <p>It is a variation of the Prisma show, which offers alluring, brilliant all-tempered steel (SS) body and completion rather than shading..</p>	 A solar water heater with a cylindrical tank and two collector panels.
<p><b>Hard Belt Model</b></p> <p>This model depends on warmth exchanger innovation that is especially equipped for Nuetech. Indeed, in 2007 the Indian Army of Jammu and Kashmir favored the Nuetech to circulate a lot of 500 LPD heat exchanger sun based water warmers.</p>	 A solar water heater with a cylindrical tank and two collector panels.
<p><b>Golden Sun Model</b></p> <p>Brilliant Sun is an unmistakable item that rapidly warms up a high temp water prerequisite because of a power item. Typically, hot rolls are connected to the whole sun powered tank, however for this situation, the loop is put in the additional chamber and the water in the chamber is warmed in heated water and little imaging.</p>	 A solar water heater with a cylindrical tank and two collector panels.
<p><b>ETC Model</b></p> <p>The ETC models give a phenomenal option in contrast to regular sun oriented watercolors and Nuetech has its own central command in the ETC zone of India, with the biggest number of establishments. The</p>	 A solar water heater with a cylindrical tank and a large array of collector tubes.

principle highlight of these models is that they use vacuum glass sun oriented cylinders to accomplish high boiling water creation amid the mists and cold days. Other vital highlights of these models - they assimilate the every day most extreme sun based warmth because of the safeguard's barrel shaped shape and their self-sun-following component; They spread hard water scaling and rust; They are minimal and light and along these lines simple to introduce and transport; And they are vitality and cost-productive, upkeep free and enduring. Nietec's ETC offers come in two flavors: PC and SS.	
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## 1.9 INFRASTRUCTURE

### **Infrastructure :**

Nuetech has set up an assembling plant in Bangalore utilizing the most recent hardware and best practices with assembling, quality control, structure, advertising and committed and exceptionally energetic workers with a 23,000 sq ft store floor. Gives work to more than 1000 individuals, including customer care offices and wholesalers, merchants, free lancers, channel accomplices, originators and others.

### **Innovations :**

We presented polymer (plastic security) sunlight based hydroelectric tanks for hard water applications without precedent for India to present and utilize the vacuum tube sun powered hydrators and immunization tube sun based watercolors presented in the Indian market in the late Nuetech 2000s and in India out of the blue. What's more, the Nuetech additionally received world-class automation in the tank producing process, we grew low tanks in a sun powered water radiator for long life and survival.

## 1.10 COMPETITORS

- Anu Solar
- TATA Power Solar

- Emmvee Solar Systems
- Loom Solar Pvt. Ltd.
- Indosolar Ltd.

## **1.11 SWOT ANALYSIS**

SWOT Analysis is a study undertaken by organizations to identify internal strengths, weakness, as well as its external opportunities and threats. The method of SWOT analysis is to collect the data from an environmental analysis and separate into external (opportunities and threats) and internal issue (strengths and Weakness). Once the identification of SWOT is done, it determines out what might help the firm finishing its goal, and what impediment must be overcome accomplish coveted results.

### **STRENGTH**

- Good range of products
- Flexibility for product customization
- Large and dedicated dealer network
- Strong management and dealer relationship resulting in low dealer attrition
- Highbrand image in the local market

### **WEAKNESS**

- Lack of dealer network in North India
- All India brand image is missing
- Inadequate working capital
- Lack of funding has not allowed the company to upgrade

### **OPPORTUNITIES**

- Enormous market potential with growing population
- Institutional, industrial and OEM customers can be targeted
- Dealership network can be tapped
- With the new DGS & D registration, large government and defense market can also be tapped

## **THREATS**

- Entrance of multinational companies into the field
- Competition from un – organized sectors
- Introduction of alternatives into the market
- Increase in raw material prices

## **1.12 Future Growth and Perspective**

Nuetech has officially gotten ideas from joint makers to joint endeavors and is prepared for fare confirmation to different nations. "The world's quickest and most subtle condition and financially costly non-renewable energy sources (coal, raw petroleum and flammable gas) and a worldwide temperature alteration are progressively sun oriented on the planet's fare advertise and the joint endeavor is simply holding on to detonate worldwide vision.

## **ACCREDITATIONS**

- ISO 9001: 2000 certification from Bureau Veritas Certification (formerly BVQI)
- ISI (IS: 12933 – CM/L 6134657) certification from Bureau of Indian Standards (BIS)
- ONICRA performance and credit rating for highest performance capability and high financial strength (SE 1A)
- Products tested & approved by Southern Regional Solar Energy Testing Centre, Madurai Kamaraj University, Tamilnadu State, India
- Approved by Ministry of New and Renewable Energy (MNRE), Govt. of India and all its intermediary banks for Solar Thermal and Photovoltaic devices
- Approved by Indian Renewable Energy Development Agency (IREDA)

## **HONOURS**

- Rashtriya Rattan Award (2002) from Global Economic Council, New Delhi
- VikasRathan Award (2004) from NethajiSubhash Chandra Bose Foundation, KGF, Karnataka

**Mr. B. Prakash, Director receiving The Rashtriya Rattan Award  
from Global Economic Council, New Delhi  
on behalf of Nuetech Solar Systems Pvt. Ltd.**

- Finalist at 2007 New Ventures Business Plan Competition conducted jointly by New Ventures India, Investors Forum-07, World Resources Institute, CII and USAID
- Mention on World Map of FPC manufacturers and in the list of suppliers of BIS-certified thermosiphon systems by Sun & Wind Energy Magazine (Feb-07)

Finalist at 2007 New Ventures Business Plan Competition

## 1.13 Financial statements

### Balance sheet of nuetech solar

<b>PARTICULARS</b>	<b>2018</b>	<b>2017</b>
<b>EQUITIES AND LIABILITIES</b>		
<b>SHAREHOLDER'S FUNDS</b>		
Equity Share Capital	95.92	95.92
<b>Total Share Capital</b>	<b>95.92</b>	<b>95.92</b>
Reserves and Surplus	6,855.06	4,867.24
<b>Total Reserves and Surplus</b>	<b>6,855.06</b>	<b>4,867.24</b>
<b>Total Shareholders Funds</b>	<b>6,950.98</b>	<b>4,963.16</b>
<b>NON-CURRENT LIABILITIES</b>		
Long Term Borrowings	10.38	31.55
Deferred Tax Liabilities [Net]	261.17	207.69
Other Long Term Liabilities	5.96	1.68
Long Term Provisions	109.84	94.23

<b>Total Non-Current Liabilities</b>	<b>387.35</b>	<b>335.15</b>
<b>CURRENT LIABILITIES</b>		
Short Term Borrowings	26.83	0.00
Trade Payables	1,671.26	1,333.20
Other Current Liabilities	1,141.44	1,021.25
Short Term Provisions	36.20	711.39
<b>Total Current Liabilities</b>	<b>2,875.73</b>	<b>3,065.84</b>
<b>Total Capital And Liabilities</b>	<b>10,214.06</b>	<b>8,364.15</b>
<b>ASSETS</b>		
<b>NON-CURRENT ASSETS</b>		
Tangible Assets	2,512.01	2,532.97
Intangible Assets	92.67	92.17
Capital Work-In-Progress	219.76	92.79
<b>Fixed Assets</b>	<b>2,824.44</b>	<b>2,717.93</b>
Non-Current Investments	1,454.55	1,006.89



Long Term Loans And Advances	70.27	111.23
Other Non-Current Assets	434.92	30.54
<b>Total Non-Current Assets</b>	<b>4,784.18</b>	<b>3,866.59</b>
<b>CURRENT ASSETS</b>		
Current Investments	1,315.40	1,432.79
Inventories	2,194.09	1,610.12
Trade Receivables	994.63	759.06
Cash And Cash Equivalents	205.27	155.02
Short Term Loans And Advances	13.55	221.91
OtherCurrentAssets	706.94	318.66
<b>Total Current Assets</b>	<b>5,429.88</b>	<b>4,497.56</b>
<b>Total Assets</b>	<b>10,214.06</b>	<b>8,364.15</b>

## Profit and loss statement of nuetech solar

<b>PARTICULARS</b>	<b>2018</b>	<b>2017</b>
<b>INCOME</b>		
<b>Revenue From Operations [Gross]</b>	<b>14,162.13</b>	<b>13,992.15</b>
Less: Excise/Sevice Tax/Other Levies	1,713.32	1,533.50
<b>Revenue From Operations [Net]</b>	<b>12,448.81</b>	<b>12,458.65</b>
Other Operating Revenues	198.30	187.23
<b>Total Operating Revenues</b>	<b>12,647.11</b>	<b>12,645.88</b>
Other Income	300.90	225.30
<b>Total Revenue</b>	<b>12,948.01</b>	<b>12,871.18</b>
<b>EXPENSES</b>		
Cost Of Materials Consumed	6,737.45	5,842.29
Purchase Of Stock-In Trade	646.53	524.42
Changes In Inventories Of FG,WIP And Stock-In Trade	-515.58	162.86
Employee Benefit Expenses	742.83	664.20

Finance Costs	18.86	23.40
Depreciation And Amortisation Expenses	295.43	238.36
Other Expenses	2,364.44	2,972.55
<b>Total Expenses</b>	<b>10,289.96</b>	<b>10,428.08</b>

#### STATEMENT SHOWING OF COST SHEET OF NEUTECH SOLAR

Particulars	2016	2017	2018
Purchase of raw material	<b>130,058,500</b>	<b>172,548,000</b>	<b>215,068,000</b>
Closing raw material	-	-	-
Raw material consumed	<b>130,058,500</b>	<b>172,548,000</b>	<b>215,068,000</b>
Freight inwards	<b>13,005,850</b>	<b>18,395,725</b>	<b>24,032,400</b>
<b>Prime cost</b>	<b>143,064,350</b>	<b>190,943,725</b>	<b>239,100,400</b>
Factory over heads	<b>9,180,600</b>	<b>15,972,950</b>	<b>23,730,000</b>
Depreciation on building	<b>1,000,000</b>	<b>1,500,000</b>	<b>2,000,000</b>
Depreciation on machinery	<b>1,200,000</b>	<b>1,700,000</b>	<b>2,200,000</b>

Depreciation on electrical's	<b>250,000</b>	<b>300,000</b>	<b>350,000</b>
Work cost	<b>154,694,950</b>	<b>210,416,675</b>	<b>267,380,400</b>
Office over heads	<b>1,530,100</b>	<b>2,381,850</b>	<b>3,744,000</b>
Depreciation on computer	<b>50,000</b>	<b>60,000</b>	<b>70,000</b>
Depreciation on office equipments	<b>150,000</b>	<b>2000,00</b>	<b>300,000</b>
<b>Cost of production</b>	<b>156,485,050</b>	<b>213,058,525</b>	<b>271,494,400</b>

## **CHAPTER 2**

### **CONCEPTUAL BACKGROUND AND LITERATURE REVIEW**

## **2.1 Theoretical background of study**

### **Introduction of cost accounting**

We have entered the region of liberalization that the advancement procedure is available to the entryways of the economy and that the globalized economy needs to keep up the premiums of shoppers, financial specialists, organizations and the nation. In the changed economy, there is no job in conventional administration in the corporate world. Proficient administration is just required to control the expense of the present calling The cutting edge territory is known as the modern zone. Here are all the across the board improvements in the business. Because of industry advancement, present day enterprises require insignificant creation expenses and boost of benefits. For this reason, they depend on fiscal summaries, for example, business advantages and misfortunes and spending plans, however these budget reports give full data. This implies the entire business is viewed as one unit. Discovering bugs is a troublesome assignment.

The cost record is the most recent improvement. This is a part of monetary bookkeeping. It deals with the accounts part of insightful, process savvy, wise, departmental knowledge, and toward the end, we can without much of a stretch control the announcements to diminish costs for the unit wise or employment astute. So bookkeeping costs are basically created to evacuate the cutoff points of money related reviews

### **The importance of the expense**

In basic words, all expenses are comprehended. Cost is characterized as the expense of spending on the given subject. So it's something to get or give.

ICMA London "The expense is the measure of expense or cost that a specific thing causes."

Deals and circulation expenses can be determined in a genuinely ostensible business paying little heed to the deals and conveyance overheads. At the point when it's good to go, the expense of the item is extravagant for business without considering the enormous deals and conveyance expenses of PC deals and dissemination costs. At that point the expense is called production line cost, office costs, deals cost and cost thing cost.

The foremost expense incorporates direct material, direct work and cost of direct expenses. The cash spent on materials is known as the expense of work and the expense of

merchandise spent on it. In this manner, the expense is likewise utilized erroneously without the benefits of the word. Once more, extraordinary expenses are resolved for various purposes. At the point when important at plant cost for work preparing, items are significant products at office cost. Numerous different precedents can be given to demonstrate the term spending des that does not mean the equivalent for all cases and all reasons. Numerous results of the item are worked in a discretionary manner, which may cost distinctive preparations or work in any capacity of cost review.

### **Cost factors**

Cost factors mean the segments or segments of merchandise or administrations or employments. As such, cost factors are a piece of the absolute cost, which incorporates the primary thing of expense for the merchandise, administrations and occupations generation.

### **Grouping of examination and cost**

Consumption is exorbitant for the creation of products and enterprises. Hence the expense is of three components, material, material, work and costs.

### **Cost Classification**

Cost arrangement is the way toward gathering costs as per their basic qualities or attributes. Order is fundamental for finding the expense of generation.

### **The reason for the cost grouping**

1. It oversees cost control and basic leadership.
2. Computes the expense of generation.
3. It is in advancement that assesses work.

### **Element wise classification**

Cost classified on the basis of element wise is as follows

1. Material cost
2. Labor cost
3. Expenses

### **Material expense:**

It is "the cost of products for a risk." (I.C.M.A) Materials are additionally separated into two sections (1) direct materials (2) Indirect materials.

**1) Direct materials:** materials that enter directly into the production of a completed item. The expense of direct materials can be advantageously distinguished and allocated to cost units.

**2) Indirect materials:** Items that are effectively recognizable with roundabout items cost units.

### **Laborer's Cost:**

These are the potential expenses of pay compensation, pay rates, commission, rewards and so forth.

**1) Direct Salary:** Workers who are associated with changing over crude materials into full items are paid. This is called direct work, beneficial work and prime expenses.

**2) Indirect Labor:** Not legitimately associated with the creation of circuitous work merchandise yet to help or aid the generation of products or administrations

### **Expenses:**

The expense is the expense related to the administrations given and the utilization of restrictive resources. At the end of the day, cost costs are known as material and work.

**Direct Costs:** The Cost Expenses are explicitly the expenses for the cost unit. For example Extraordinary plant lease for explicit work.

**Indirect expenses:** Indirect expenses can not explicitly determine explicit costs.

### **Overheads:**

An overhead contains round about material, backhanded work and aberrant expenses. All in all terms, Overhead includes all expenses related with the general or whole association of the entire association, including cost of working supplies and working expenses and support of capital resources. The principle bunches are separated into overheads.



1. Generation Overheads
2. Managerial overheads
3. Overheads are being sold
4. Overheads of innovative work
5. Appropriation Overheads.

**Usefulness order of capacity: -**

Costs ordered dependent on the capacity's shrewdness are:

- Generation cost or creation cost or work cost
- Administrative expense
- Sales cost
- Sharing expense

**1 Production cost::**

It is the expense of products, work and administration supplies and the plant overhead is the point at which different words utilized in this association are finished.

Examples:

**1) Indirect work**

- Foreman's compensation
- Cleaner compensation and pay
- Salary for young ladies
- Time Department Salary
- Salary of the Tools Operator
- Store division keeping compensation

**2) Factory Rental and Rates**

**3) Factory Insurance**

**4) Consumer Shops**

- 5) Cost of aberrant products like cotton waste, seeds and jolts, greasing up oil, nails.
- 6) Gas, fuel and water, article to the manufacturing plant
- 7) Factory hardware, processing plant building, consumption on plant and apparatus
- 8) Factory hardware, industrial facility building and fix of apparatus
- 9) Depreciation on free hardware
- 10) Laboratory costs
- 11) Labor Welfare Costs
- 12) Canteen costs
- 13) Pay after some time
- 14) Contribution to Workers' Compensation Fund

## **2 Administrative expense:**

It takes care of all expenses in the control and the executives of dependable orders.

Examples:

- 1) Salaries, Accounts, MD, GM of Office staff
- 2) Director's charge
- 3) Bank charges
- 4) Postage Stationary Telephone
- 5) Rent Rental Rates
- 6) Office building and gear protection
- 7) Depreciation of place of business instruments and goods
- 8) Printing Fees for the Office

9) Audit Fees

10) Legal charges

### **3 Sales Cost:**

Different expenses are sought after available to be purchased and advancement and requests are known as deals costs for security.

Examples:

1. Commission of Salaries and Dealers
2. Show room costs
3. Models, Free Gifts
4. Commission to Agent or Distributor
5. Publicizing and Promotion Cost
6. Promoting Costs
7. Recuperation Costs for Bad Debt
8. Membership to exchange diaries and business diaries

### **4 Delivery Cost:**

It expenses to disperse products

Examples:

- Packaging cost
- Out of the carriage
- Warehouse costs, for example, fixes, stockroom exhaustion light
- Load charges
- Dispatch costs

- Completed merchandise store stockroom
- Shipping shipments are harmed

### **Conduct Classification:**

A few expenses legitimately increment or lessening underway; Some expenses don't influence, yet others change yet the immediate rate of progress of yield isn't in extent.

These are:

1. Variable Cost
2. Fixed Costs.
3. Semi-variable or semi-fixed expenses

### **Variable Cost:**

These expense legitimately to the rate of yield. The expense of every unit is the equivalent. On the off chance that the yield builds, the all out factor cost will likewise increment and the yield diminishes if the absolute variable cost diminishes.

E.g.: direct articles.

Direct Salaries

Power

### **Fixed cost:**

All out booked costs don't influence the ascent or abatement underway. Be that as it may, the expense of every unit is evolving.

- Rental and building rates.
- Building Depreciation.

- Insurance.
- Interest on capital
- Municipal Taxes.

Fixed expense can be additionally characterized

- 1) The endorsed expenses are saved
- 2) Fixed expense of rational soundness
  - 1) The endorsed expense is fixed:

The plant, gear, and those of the firm hierarchical structure regularly have those particular expenses. For instance, when a structure is chosen and nothing can be introduced on the plant to decrease the expense of deterioration.

## **2) Discretionary Cost:**

The fixed sum is fixed for a particular time of support amid the spending procedure. This expense legitimately mirrors the high administration strategies of a specific association with the volume of generation. This expense is so low or totally disposed of, in circumstances where it is required. Instances of such costs incorporate innovative work.

## **Semi-Variable cost:**

These costs are incompletely steady and mostly fluctuate. This expense is somewhat influenced by variances at action levels.

Examples:

Depreciation, fix and upkeep, phone costs.

Different kinds of costs:

Other type of costs:

Decision Costs are an uncommon reason cost that applies just when they don't have widespread applications. They don't compare to ordinary money related records for bookkeeping terms.

### **Controllable and uncontrolled expense:**

Controlling expenses can be affected by the activity of specific individuals from the expenses of comprehension and are called wild expenses.

The expense from the room, for example, the room is constrained by the responsible for that fragment however the cost rabbit isn't shrunk by the machine store armada relating to the machine store.

### **Differential, Incremental or Decrement Cost:**

These are the costs that are excluded in real money capital. They are excluded in cost accounts but rather it is imperative to contemplate when settling on the executives choices. For instance, the enthusiasm on the capital is overlooked in the record of the cost, which is considered in cost money related records. On the off chance that two undertakings require unequal venture, and premium ought to be mulled over of capital for cash the executives to evaluate the overall returns of the activities.

As per ICMA London, "spending is a procedure of strategies and cost" These techniques are guidelines and guidelines that oversee or control the way toward guaranteeing expenses or administrations. So these Terms and Conditions will be taken from the unit to the unit promptly to the arrangement of industry and strategy. So spending is a normal occupation of cost approval.

Destinations of Cost Accounting:

- A) cost examination.
- B) Determine the business cost.
- C) cost control and cost decrease.
- D) Consider the advantage of every movement.
- E) Maintenance help in basic leadership.

### **Preferences of Cost Accounting:**

- A) Reveals the advantages of exercises.
- B) It helps in cost control.
- C) It helps in detailing arrangements.
- D) This will help in settling on a choice.
- E) It guides at consistent decision rates.
- F) This will address the productivity of laborers.
- G) It makes charge assessment simpler.
- H) It decides the monetary status of the business and the credit qualification.

### **Impediments of Cost Accounting:**

- A) The nonattendance of an instant framework.
- B) cost contrasts.
- C) Expenditure information does not have any utility in them.
- D) This isn't valid or exact expense.

### **Cost unit and cost focus:**

Use unit: What expenses can be found or communicated based on item, administration or time. We can compute the expense per ton of steel, cost per ton per kilometer or long stretches of transportation administration.

### **Kinds of cost segments:**

#### **Single expense:**

One unit cost for every ton per kilogram.

**Member Costs:** It is a blend of at least two basic cost parts. It is utilized in light of the fact that the straightforward expense can not be made for the careful expense. Cost units are

generally physical units, for example, number, weight, territory, volume, length, time and esteem.

### **Cost focus:**

It is characterized as the area of the gadget, individual or gadget that can be identified and utilized for control purposes. Cost Centers are two sorts.

### **Generation Cost Center:**

The expense of taking care of crude materials is the focal point of the progress to full item. Here are immediate and aberrant expenses. Machine Shops, Welding Shops and Assembly Shops are instances of the expense of assembling cost.

### **Administration Cost Center:**

It is the cost focus working as a reciprocal unit for the assembling cost focus. Power House, Gas Production Shop, Material Service Centers, Plant Management Centers are instances of administration cost focuses.

### **Blended Cost Centers:**

It is the cost focus, which is engaged with both assembling and administration. For instance, craftsman's shop making and fix work.

**Cost estimation and cost affirmation:** Evaluating the expense of the way toward anticipating the expense of a specific item's work or request. The pre-decided execution spending estimation, readiness of fiscal summaries (assessment of stock and so on.), item deals cost might be required for a few purposes, for example, fixing basic leadership or purchasing.

Cost estimation and cost affirmation are both associated and if the worry has a sound cost framework, gigantic use for the executives, basic expenses can significantly aid a basic cost estimation process. The different goals referenced previously.

Cost affirmation is the way toward deciding cost dependent on genuine information. In this way, the expense of recorded expense is cost affirmation, and the expense of figuring of future expenses is assessed.



## **Cost sharing and cost stipends**

The cost sharing and cost index are two systems, which depict the cost acknowledgment and cost of the expense to the cost focuses. The cost sharing cost alludes to the expense of the whole thing cost to the cost focuses or the cost units, demonstrating the dispersion of the expense of cost sharing expenses or the cost units. This incorporates the way toward charging previous direct cost mind-boggling expense focuses or cost units. At that point includes the way toward charging aberrant expenses to cost focuses or cost units, for instance, the expense of work engaged with the administration division can be forced altogether and legitimately.

Plant flask costs are not legitimately and uncertainly charged. Its relating offer ought to be a wellspring. Changing expense in the past case is designated "assignment of expenses" and after that called the "costs informative supplement".

## **Cost decrease and cost control:**

The cost control is characterized as "the control of the official capacity of the cost working expense is explicitly given to such a measure by cost bookkeeping direction".

Cost control is used by setting benchmarks or models or objectives and guaranteeing remedial measures to guarantee set-up gauges or criteria or objectives to fulfill the guideline ideas of standard objectives or principles or criteria and taking legitimate measures.

## **Cost control methodologies:**

Among the systems that ensure cost control

Article control.

Work control.

Overhead control.

Spending control.

Standard control

Capital cost control.

Efficiency and Accounting Ration.

**Cost decrease:**

The cost decrease can be characterized as "genuine and perpetual cuts" in the generation of merchandise or the expense of the administration unit without debilitating their risk to reduce the item quality.

**Money saving advantage Benefits:**

- A) For a different organization, cost decrease can prompt benefit improvement. The more advantages, the more steady the organization is.
- B) The benefit profit by the most reduced costs conceivable by sparing from cost lessening software engineers.
- C) Employees and industry staff can profit by expanded wages and improved welfare offices.
- D) The nation stands to pick up immensely through cost-cutting developers.
- E) Internal salary increments with higher assessable pay.

**Cost decrease zones:**

Cost decrease strategies can be connected to the accompanying zones:

**Item Design:**

Cost decrease starts with progress in item plan. Explore the likelihood of cost decrease. Both are presented when the new structure is presented and the current plan is improved.

**Industrial facility Organization and Production Methods:**

All endeavors are to be done to decrease costs by receiving another technique for methodology and new generation strategies.

Plant design

Organization

Advertising

Monetary devices and cost decrease systems

**The contrast between cost control and cost decrease is:**

- 1) The cost control focus for foreordained costs, where cost decrease is gone for lessening costs.
- 2) Spending control is a runtime practice that is done to accomplish operational proficiency, where a decrease in expense is gone for a lasting and reasonable pursuit of genuine investment funds.
- 3) Abandoning the objective of the cost control process, characterizing practical execution, contrasting it and objectives and making a move to address. Then again, cost-slicing isn't identified with execution the board according to foreordained criteria.
- 4) Cost control is liable to norms, where cost decrease is a test to models. Cost finding expect that there are potential outcomes for upgrades in foreordained criteria.
- 5) The cost control objective is to maintain a strategic distance from the expense of pre-cost, so it is a preventive undertaking. Then again, cost decrease is a fix since it provokes foreordained expenses and endeavors to improve execution by lessening the expense of expanding generation.

**Practical & difficulties of cost accounting system:**

**1) Lack of help from superior:**

The chief or MD does not bolster the cost bookkeeping framework since they think cost bookkeeping is a hindrance and trouble with the activity. So superior does not bolster the entire personality.

## **2) Resistance to existing bookkeeping staff:**

The current money related bookkeeping staff can be impervious to the framework due to the outflows reported under the new framework.

This dread can be maintained a strategic distance from by clarifying the staff, the cost bookkeeping framework does not change but rather fortifies the current framework.

## **3) Non-collaboration at different dimensions:**

Pioneers and other supervisory staff can annoy extra desk work and I don't bolster the basic information required for the framework's prosperity.

It requires re-introduction and work instruction. They have to state about the advantages of going along with them and associations.

## **4) Lack of prepared staff:**

Cost bookkeeping itself is a unique assignment. Early qualified staff may not be accessible. Be that as it may, this issue can be illuminated by existing staff required preparing and extra staff if important.

## **5) Heavy Expenses:**

Pointless magnificence and convention cause colossal expenses. The cost bookkeeping office should fill in as a valuable administration office.

## **Main consideration:**

### **1) Product:**

The organization of the item decides one of the cost bookkeeping frameworks to be embraced. For example The item that requires a high estimation of material substance requires a thorough article control framework.

### **2) The organization:**

The current foundation ought to disturb however much as could reasonably be expected. Before presenting a cost bookkeeping framework, it is a high update that requires the size and sort of association.

### **3) Purpose:**

The goal and data expected to accomplish and get the executives should likewise be kept up.

### **4) Technical Details:**

The framework ought to be presented after definite investigation of the specialized parts of business endeavors to get thoughtful help and backing of key individuals from the supervisory staff and laborers.

### **5) Knowing and straightforward:**

The framework ought to be instructive and straightforward.

## **All out cost introduction:**

The first is delegated articles, work and different costs dependent on nature. Further contrasts must be produced using immediate and circuitous expenses. Every single direct expense are grouped under the headings of the fundamental expense and backhanded expenses are alluded to as overheads. These expenses are grouped under discrete heads and cost information is given to the board in explanation.

### **Cost sheet:**

A cost sheet or cost articulation is a "report that gives point by point cost amassing of the cost focus or cost element". A point by point proclamation delineating the sub-division of the cost orchestrated in coherent mode under different heads.

- Prime expense.
- Employment cost.
- Production cost
- Total expense.
- It partitions the expense and sub-divisions
- It uncovers the expense and cost of every unit of creation.
- Helps fix the business cost.

The fundamental points of interest of the cost sheet are as per the following:

- 1) It gives all out cost measurements and the expense of creation cost.
- 2) It helps in cost examination.
- 3) It is helpful for the cost estimation to submit tenders.
- 4) It gives a lot of assistance to get a deal cost.
- 5) It makes cost control simpler by uncovering operational effectiveness.

## **2.2 LITERATURE REVIEW AND RESEARCH GAP:**

### **LITERATURE REVIEW**

On the off chance that the expenses are excessively high, the net revenue diminishes, and the organization will be hard to prevail against its rivals. Brumbug (2008) has felt that organizations should take a gander at expenses and exploit themselves.

Hamilton and Martha (2007) said the monetary allowance would give a standard expense to cost control. Organization the executives ought to adjust to spending plan and sensible expenses and attempt to guarantee that the task will dependably stay in the venture.

Sicka (2003) trusts that cost control frameworks have methodology, approaches, P/roids and frameworks that assistance guarantee the expense of activity and guarantee that they don't surpass the cost of specific dimensions.

Kaizen Casting (2010), the administration systems concentrating on worker contribution, and newcomer to improving strengthening and work plan through collaboration approach and correspondences interchanges, yet Japanese organizations have actualized more viable strategies than others

Expenses are worked and normally exhibited to the board, the impact of cost reviews is controlled by the degree conceivable to bring command over assembling and different expenses, Sica (2003)

Anthony et al (2005) treats cost the executives as cost upkeep or cost content and characterizes cost bookkeeping techniques and the board aptitudes with the objective of improving the expense of business by decreasing expenses or confining the base development rate. .

In their announcements, Lockier (2002) treats the expense of exchanging with an essential expense to believe the expense to be considered as a training to analyze.

Sicka (2003) is additionally examined, under cost control, the initial step is to set objectives, for example, accomplishing objectives or destinations, and managing the cost control framework to achieve that objective. For this reason, spending plan or quality will be utilized to give practical expenses and execution versus yards against equivalent execution.

Storage (2002) further sees that cost control and going through frameworks are synonymous with basic qualities and the framework cost framework includes control, arranging and plan of the association that has three dimensions; Operation and reaction levels:

Cooper et al (2000) recommends that convoluted business needs visit data about tasks to control tentative arrangements, control existing exercises, and assess past execution of administrators, representatives and related business offices.

Sikka (2003) Effective office and cost control framework activities are accepted to incorporate the accompanying advances: • Setting objectives; • genuine estimation; • A genuine correlation with objectives to guarantee contrasts; • Analysis of differences for their causes; • Take restorative measures to take out changes.

Biggs (2005) accepts viable usage of cost control in any association is a group of viable administration. By doing as such the accompanying advantages can be watched: Provides financially savvy and framework explicit data to control the organization's exercises in a focused domain;

Harris and Hazard (2006) remarked from the bookkeeping viewpoint, the most widely recognized basic factor in all organizations is the profile of the cost structure.

Khera (2007) has expressed that each undertaking's objective is beneficial and most entrepreneurs trust it's a decent method to do it by expanding deals. In any case, it brings another problem - to expand deals, because of expanded measure of work, there must be a comparing increment in expense

Cooper and others (2000) Cost Control Reports state that reports of data uncover the board of the exercises of a solitary element. The administration demand reports for inner use, and hence guides examining divisions to create detailing designs

Hamilton and Martha (2012) controlled control reports asserting that adequate data ought to be given, which could prompt the expenses of any cost change from the first spending plan.

Hamilton and Martha (2012) have proposed that the spending will give a standard expense to cost control purposes. An administration fabricates a financial plan and demonstrates a guide to manage its endeavors. It educates various suspicions concerning the relations and



cooperations between the capacity of the economy, the market elements, its business limit abilities, the correct quality and the capacity to give the measure of items.

## **CHAPTER 3**

### **RESEARCH DESIGN**

## **Title of the study :**

“A study on cost reduction and control at Neutech Solar Power Products Company Limited”

### **3.1 Statement of the Problem:**

Most companies require a cost reduction to fight global competition and less economics. One way to recover control over their costs is not only to assess these costs, but systematically identify classification and product costs. The systematic method of maintaining cost reduction is not only the improvement of yield costs, but also provides a jury with the trade-off involved in achieving these deductions.

Modified Value-Engineering Method requires alarm information collection and analysis, product cost recognition and redesign and implementation

### **3.2 Need for study**

Administrators who make short-term financial decisions based on determining the cost reduction and control analysis cost and the breakaway points of the volume of goods. The cost reduction and control analysis unit makes many assumptions, including price, fixed costs, and variable costs. Analysis is to use several equations using cost, cost, and other variables and make them economically viable.

A comprehensive study is required to understand and determine the cost reduction and control to understand the company's condition.

### **3.3 The objectives of the study are:**

1. To analyze the overhead cost of the company
2. To Find out the administrative cost of the company
3. To know the controlling techniques adopted by company
4. To know the financial position of the company

### **3.4 Scope of the Study**

The scope of running a meaningful application of theory for actual implementation. As the study focuses on identifying the current potential of company budgeting strategies and goals, we recognize the best cost control method to improve the company's policy to determine their budget.

This study provides insight into high value materials and low-value materials. This study also gives an idea of the purpose of managing industrial attention and effective cost measurements.

### **Research Design**

Initially, I suggest that you conduct serious secondary research to understand the full impact and influence of the industry, to review industry norms and reports and to select some issues that I am responsible to remain or change. Further on the next stage of exploratory research can be taken. This step helps me to restrict and select only the key question and problem that resides in growth and division in the industry.

Here are a number of things I've done in the research design process:

- Defining the need for information information
- Explore exploratory, descriptive and occasional research.

### **3.5 Research method**

The method I used for research

#### **Secondary information**

#### **Secondary data:**

Secondary data can be stored

- Internet resources
- Company Annual Report
- The object provided by the material
- Deposit homes

- Sheets of truth, brochures etc.

Secondary data is obtained from various mutual fund schemes and investors' magazines and websites. Monthly truth sheets of mutual fund companies are the main sources of secondary information; Data obtained is analyzed using mathematical models

Secondary data derived from various schemes such as

Fact Sheets of the Companies

- Business Line
- Moneycontrol.com
- Indiainfoline.com
- Financial magazines

### **3.6 Limitations of study**

All research projects have been interrupted by some unexpected problems in their smooth flow. Problems arise as a result of budget, time and study coverage. The current plan also has some problem. Here are some of the issues that happened during research:

- Part of the officers of various departments is not strong enough to participate in research and help.
- Boredom and shaking concentration among respondents when answering a long question: thus leading to the difficulty of blocking incomplete questionnaires.
- Study was limited to the Neutech solar company's environment

## **CHAPTER 4**

### **ANALYSIS AND INTERPRETATION**

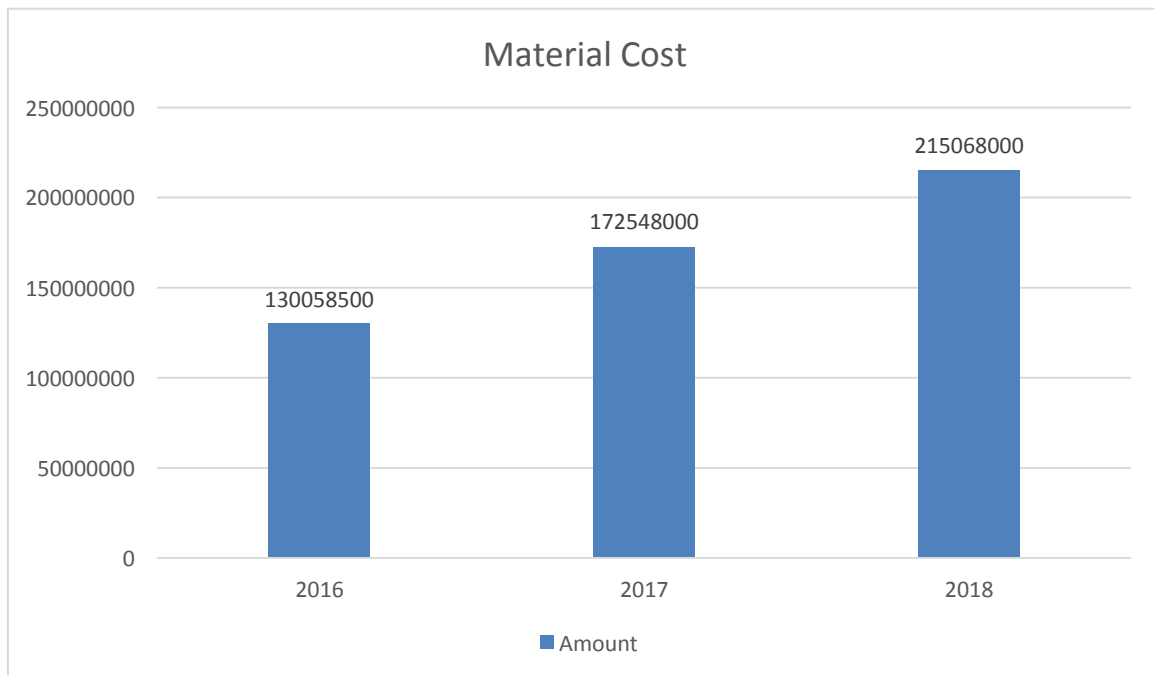
**TABLE 4.1: showing Material cost**

Year	Tons consumed	Rate per ton	Amount
2016	136903.6842	950	130058500
2017	202997.6470	850	172548000
2018	215068	1000	215068000

Analysis :

From the above table we can see that the tons of material consumed for 2016 was 136903.6842, for 2017 it was 202997.6470, and for 2018 it is 215068

**Graph 4.1 showing material cost**



**Interpretation :**

From the above graph we can see that the material consumed for the production has been increasing over the years and it stood highest in the current financial year.



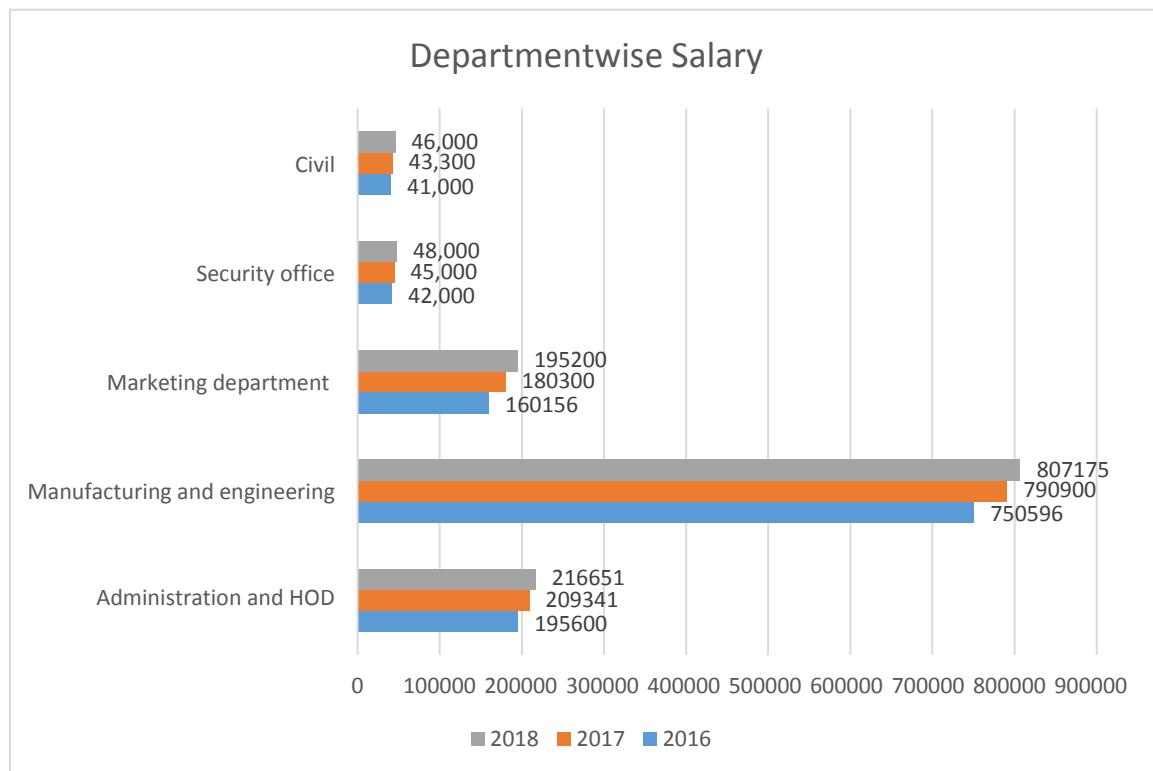
**Table 4.2 showing Department wise salary per annum**

Particulars	2016	2017	2018
Administration and HOD	1,95,600	2,09,341	2,16,651
Manufacturing and engineering	7,50,596	7,90,900	8,07,175
Marketing department	1,60,156	1,80,300	1,95,200
Security office	42,000	45,000	48,000
Civil	41,000	43,300	46,000

**Analysis :**

From the above table we can see that the salary of administration and HOD department is 2,16,651, in manufacturing and engineering department it is 8,07,175, in marketing department it is 1,95,200, in security office it is 48,000 and in civil department it is 46,000.

**Graph 4.2 showing department wise salary per annum**



**Interpretation :**

From the above graph we can see that the maximum amount of salary expenses is happening in the manufacturing and engineering department which is mainly due the number of employees being more in this department followed by admin and HOD department.

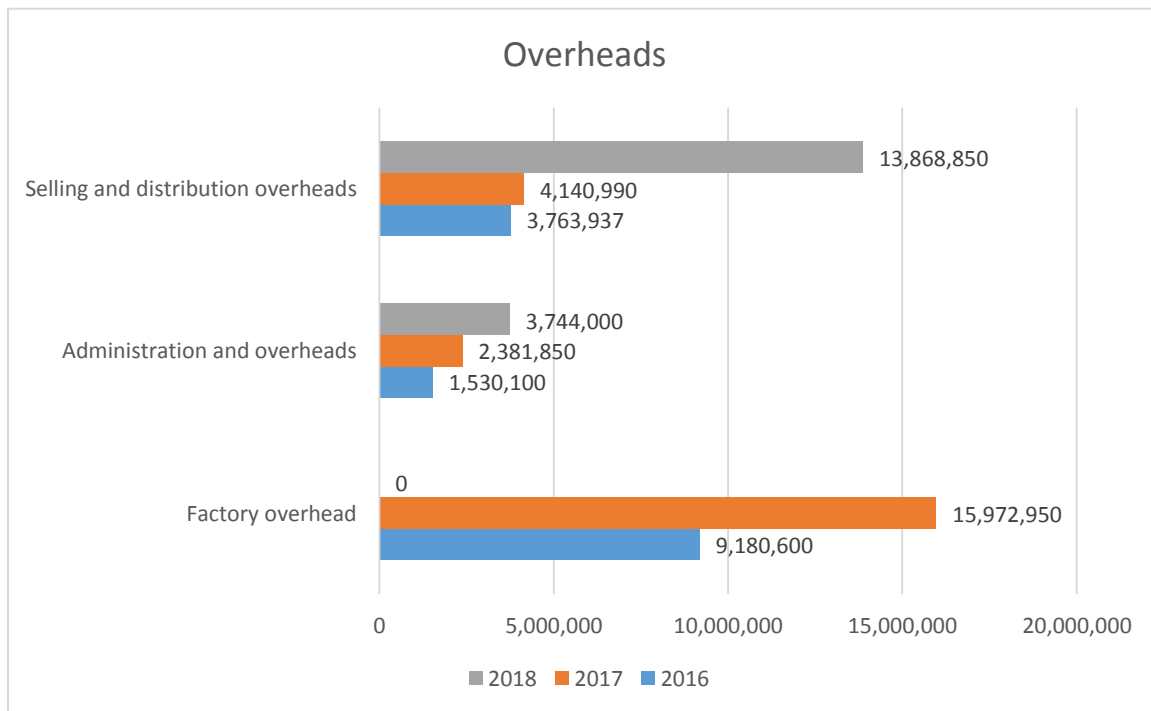
**Table 4.3 showing Over heads**

Particulars	2016	2017	2018
Factory overhead	<b>9,180,600</b>	<b>15,972,950</b>	<b>237,300,00</b>
Administration and overheads	<b>1,530,100</b>	<b>2,381,850</b>	<b>3,744,000</b>
Selling and distribution overheads	<b>3,763,937</b>	<b>4,140,990</b>	<b>13,868,850</b>
Total	<b>14,474,637</b>	<b>22,495,790</b>	<b>41,342,850</b>

**Analysis :**

From the above table we can see that overhead of factory is 237,300,00, administration overheads is 3,744,000, selling and distribution overheads is 13,868,850

**Graph 4.3 showing overheads**



**Interpretation :**

Seeing the table the factory over heads increasing considerably it indicates growth in production. Since the manufacturing and engineering department constitutes major part in total number of employees and wages the factory overheads also forms major part in total overheads.

**Table 4.4 showing cost of production and other items**

Opening stock of finished goods	<b>1,534,065</b>	<b>3,928,720</b>	<b>4,149,800</b>
Less :closing stock of finished goods	<b>4,090,840</b>	<b>8,839,620</b>	<b>17,337,000</b>
<b>Cost of goods sold</b>	<b>153,928,275</b>	<b>208,147,625</b>	<b>258,307,200</b>
Selling over heads	<b>3,763,937</b>	<b>4,140,990</b>	<b>13,868,850</b>
<b>Cost of sales</b>	<b>157,692,212</b>	<b>212,288,615</b>	<b>272,176,050</b>

**Analysis of cost sheet:**

**Prime cost:** The prime cost in 2016 **143,064,350** and in 2017 it was increased to **190,943,725** and 2018 it was increased to **239,100,400** .This cost is increase to year by year .

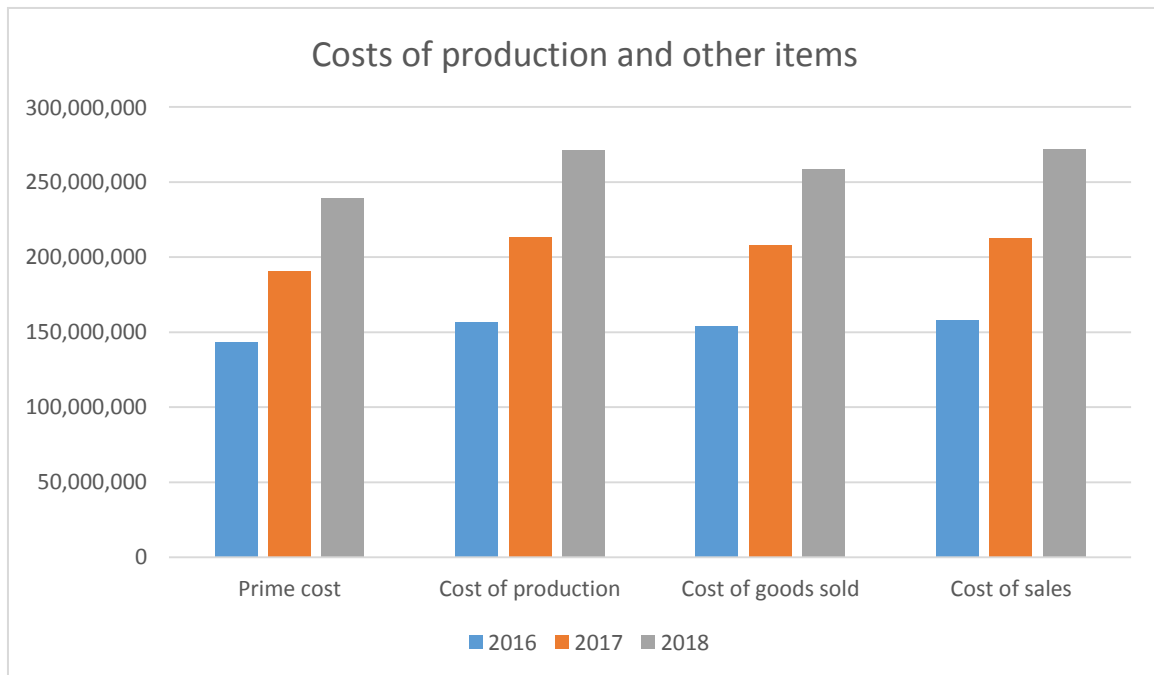
**Work cost:** The work cost in 2016 **154,694,950** and in 2017 it was increased to **210,416,675** and 2018 it was increased to **267,380,400**.

**Cost of production:** The cost of production in 2016 **156,485,050** and in 2017it was increased to **213,058,525** and 2018 it was increased to **213,058,525**.

**Cost of goods sold:** The cost of goods sold in 2016 **153,928,275** and in 2017 it was increased to **208,147,625** and 2018 it was increased to **258,307,200**.

**Cost of sales:** The cost of sales in 2016 **157,692,212** and in 2017 it was increased to **212,288,615** and in 2018 it was increased to **272,176,050**.

**Table 4.4 Showing cost of production and other items**



**Interpretation :**

1. The increasing prime cost is because of increasing material consumed by the company.
2. The work cost is increasing by year to year because in factory over heads also increasing.
3. The cost of production is to increasing because office overheads and depreciation of office equipments.
4. The cost of goods sold is high increasing in year to year.
5. The cost of sales year by year due to increasing in sales.

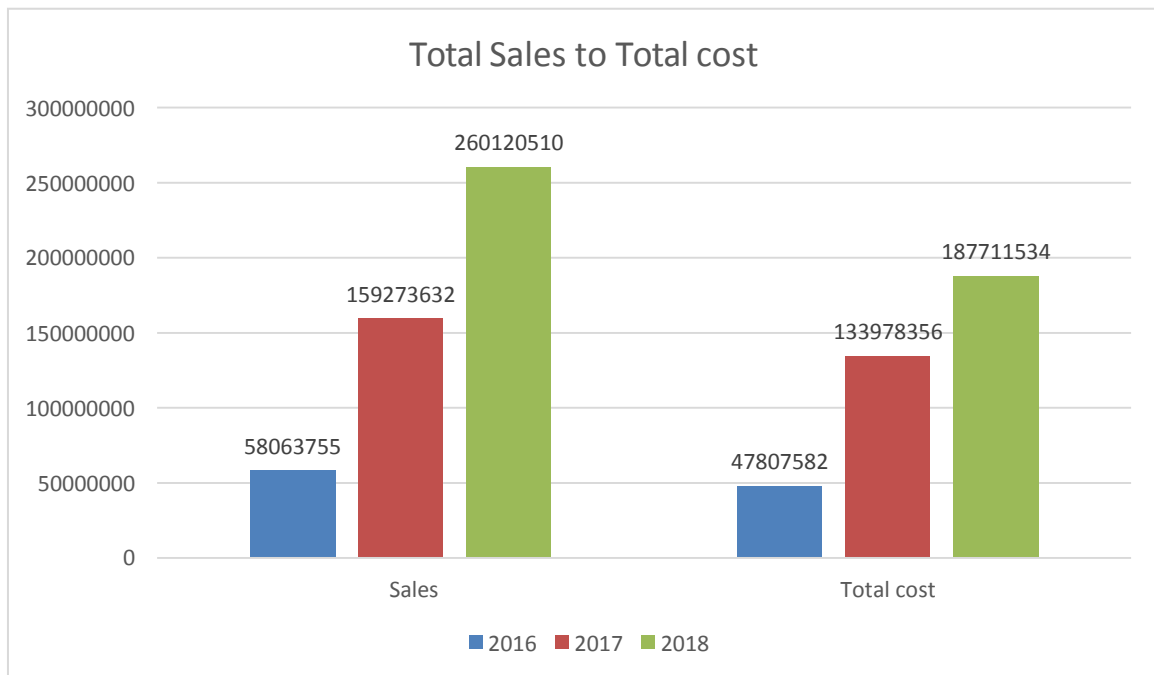
**Table 4.5 Showing total sales to total cost**

<b>Particulars</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Sales</b>	58063755	159273632	260120510
<b>Less: variable cost</b>	45818596	130849400	183355675
<b>Contribution</b>	12245159	28424232	76764835
<b>Less: fixed cost</b>	1988986	3128956	4355859
<b>E.B.I.T.</b>	10256173	25295276	72408976
<b>Total cost</b>	47807582	133978356	187711534

**Analysis :**

From the above table we can see that the total cost for 2016 is 47807582, for the year 2017 is 133978356 and for the year 2018 it is 187711534

**Graph 4.5 showing total sales to total cost**



**Interpretation :**

**The total sales for the financial year of 2018 has drastically increased between the financial years under study and the total sales to total cost has almost remained same.**



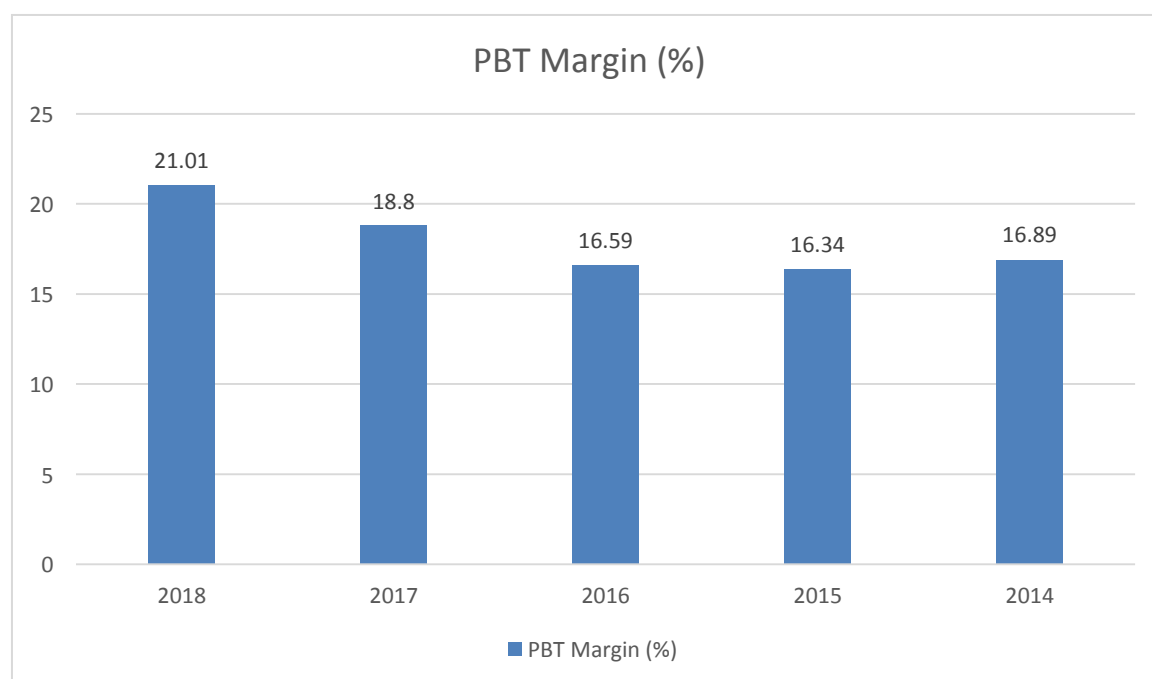
**Table 4.6 showing PBT Margin**

Particulars	2018	2017	2016	2015	2014
PBT Margin (%)	21.01	18.80	16.59	16.34	16.89

**Analysis :**

From the above table we can see that the PBT margin is 21.01 in 2018, it was 18.80 in 2017, it was 16.59 in 2016, it was 16.34 in 2015 and it was 16.89 in 2014.

**Graph 4.6 showing PBT Margin**



**Interpretation :**

From the above graph we can see that the PBT margin percentage of the company has increased for the current financial year and it stands at about 21.01 for the year.

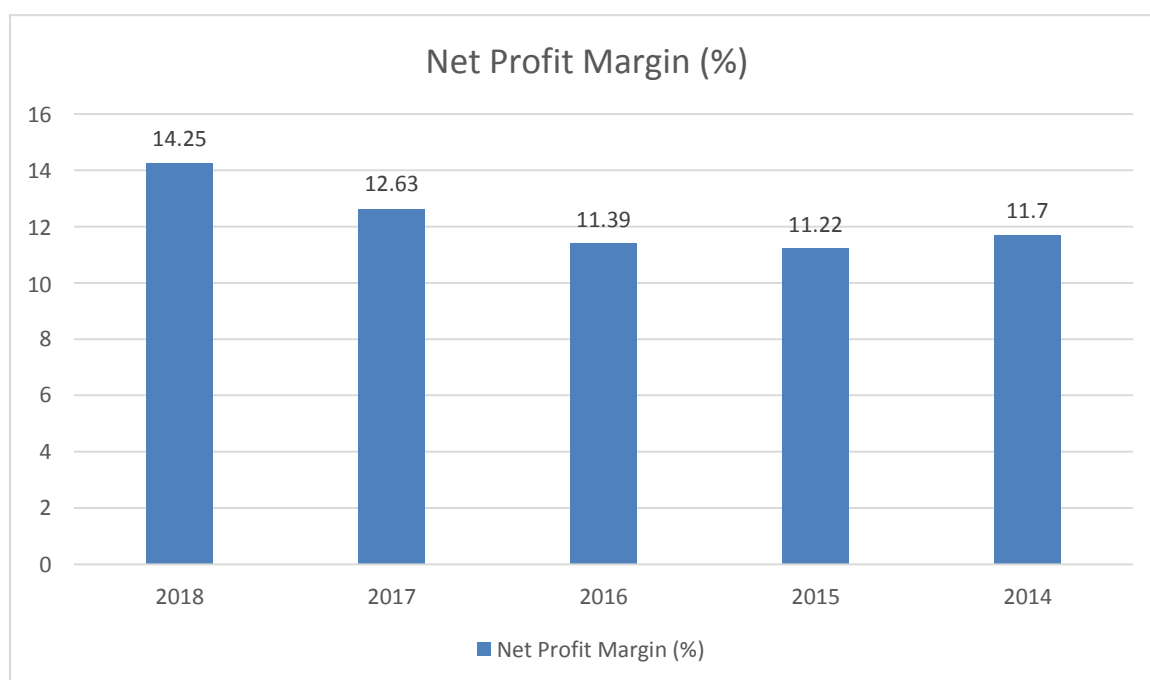
**Table 4.7 showing net profit margin**

Particulars	2018	2017	2016	2015	2014
Net Profit Margin (%)	14.25	12.63	11.39	11.22	11.70

**Analysis :**

From the above table we can see that the net profit margin is 14.25 in 2018, it was 12.63 in 2017, it was 11.39 in 2016, it was 11.22 in 2015 and it was 11.70 in 2014

**Graph 4.7 showing net profit margin**



**Interpretation :**

From the above graph we can see that the net profit margin percentage of the Neutech Solar company has been showing a curvy graph which started to decrease after 2014 and started to increase after the year 2016 and for the current financial year it has stood highest at about 14.25.

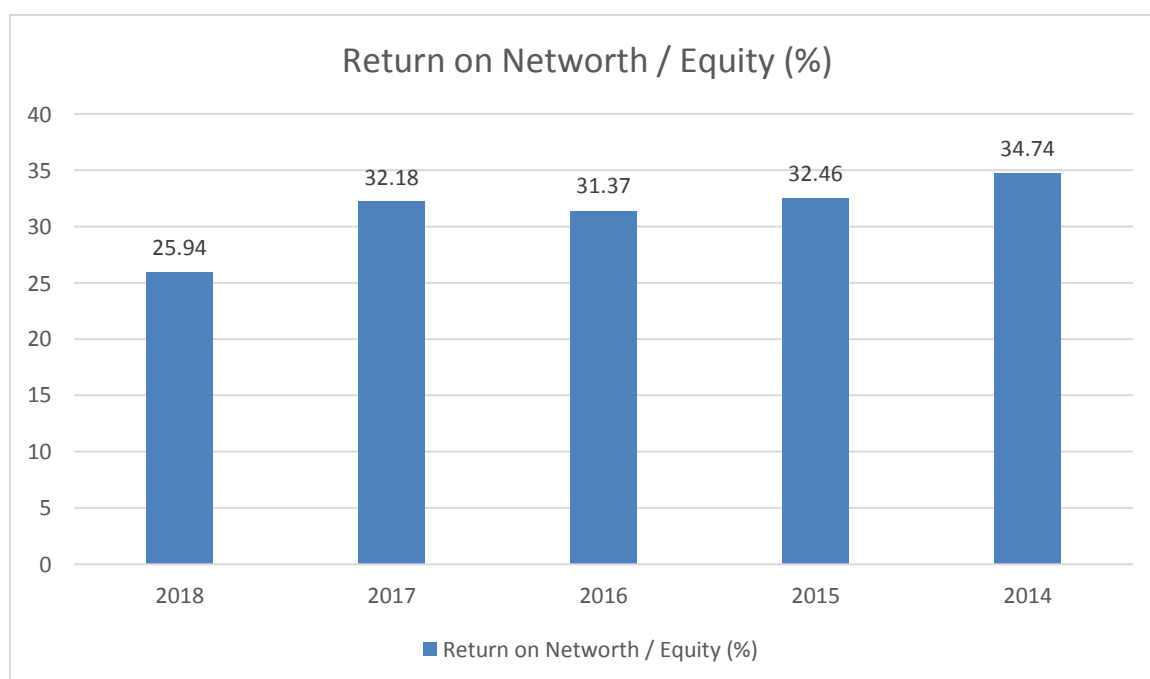
**Table 4.8 showing return on net worth**

Particulars	2018	2017	2016	2015	2014
Return on Networth / Equity (%)	25.94	32.18	31.37	32.46	34.74

**Analysis :**

From the above table we can see that the return on networth is 25.94 in 2018, it was 32.18 in 2017, it was 31.37 in 2016, it was 32.46 in 2015 and it was 34.74 in 2014

**Graph 4.8 showing return on net worth**



**Interpretation :**

From the above graph we can see that the return on networth / equity percentage has decreased for the current financial year and stood at 25.94 which is the lowest in comparison of financial years under study.

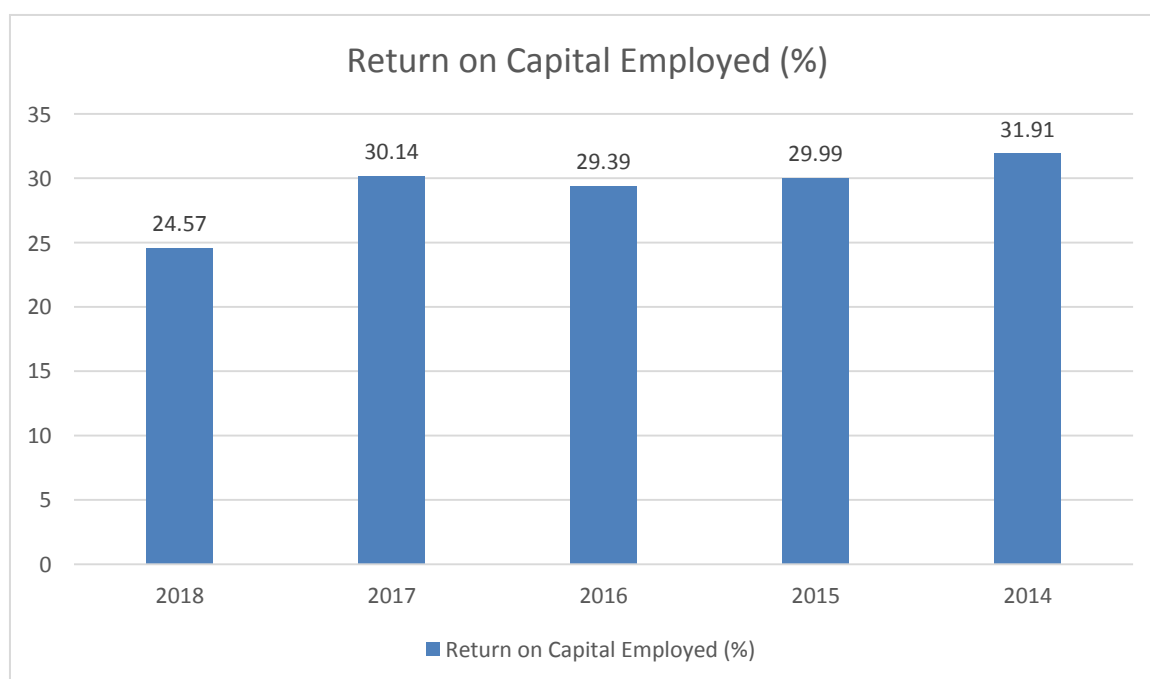
**Table 4.9 showing return on capital employed**

Particulars	2018	2017	2016	2015	2014
Return on Capital Employed (%)	24.57	30.14	29.39	29.99	31.91

**Analysis :**

From the above table we can see that the return on capital employed is 24.57 in 2018, it was 30.14 in 2017, it was 29.39 in 2016, it was 29.99 in 2015 and it was 31.91 in 2014

**Graph 4.9 showing return on capital employed**



**Interpretation :**

From the above graph we can see that the return on capital employed percentage of the company has decreased to 24.57 as compared to the previous years figure of 30.14 which stood highest in the year 2014.

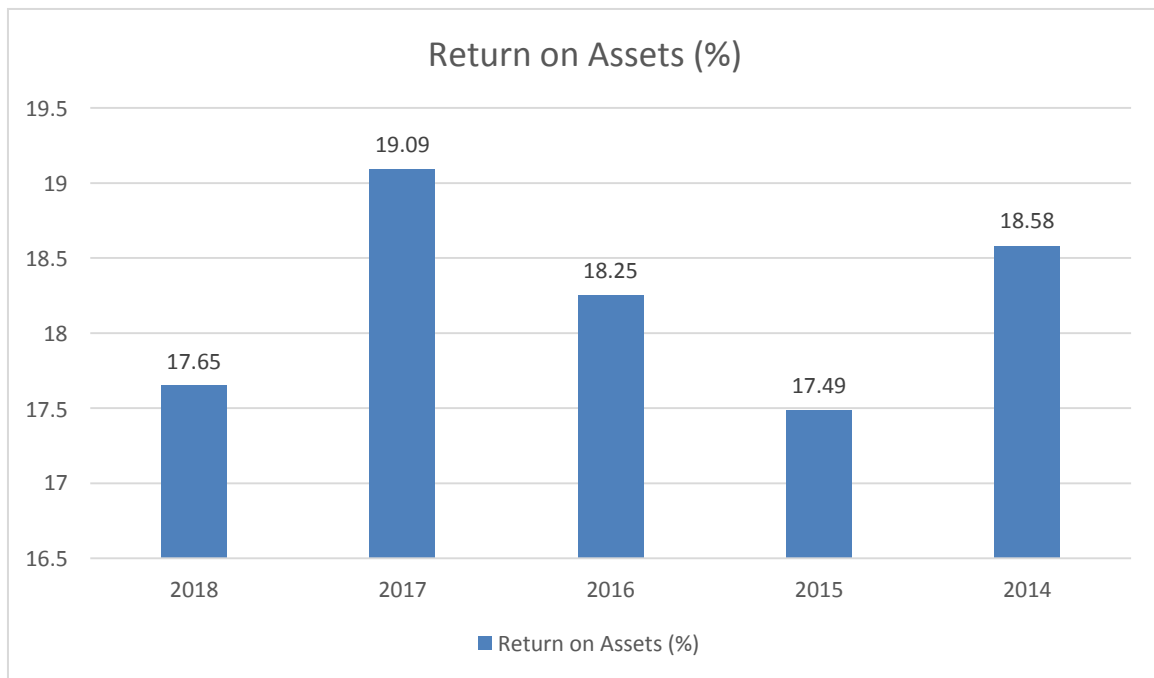
**Table 4.10 showing return on assets**

Particulars	2018	2017	2016	2015	2014
Return on Assets (%)	17.65	19.09	18.25	17.49	18.58

**Analysis :**

From the above table we can see that the return on assets is 17.65 in 2018, it was 19.09 in 2017, it was 18.25 in 2016, it was 17.49 in 2015 and it was 18.58 in 2014

**Graph 4.10 showing return on assets**



**Interpretation :**

From the above graph we can see that the return on assets for the Neutech Solar company has decreased drastically from the previous financial years which had started to increased from its predecessor years.

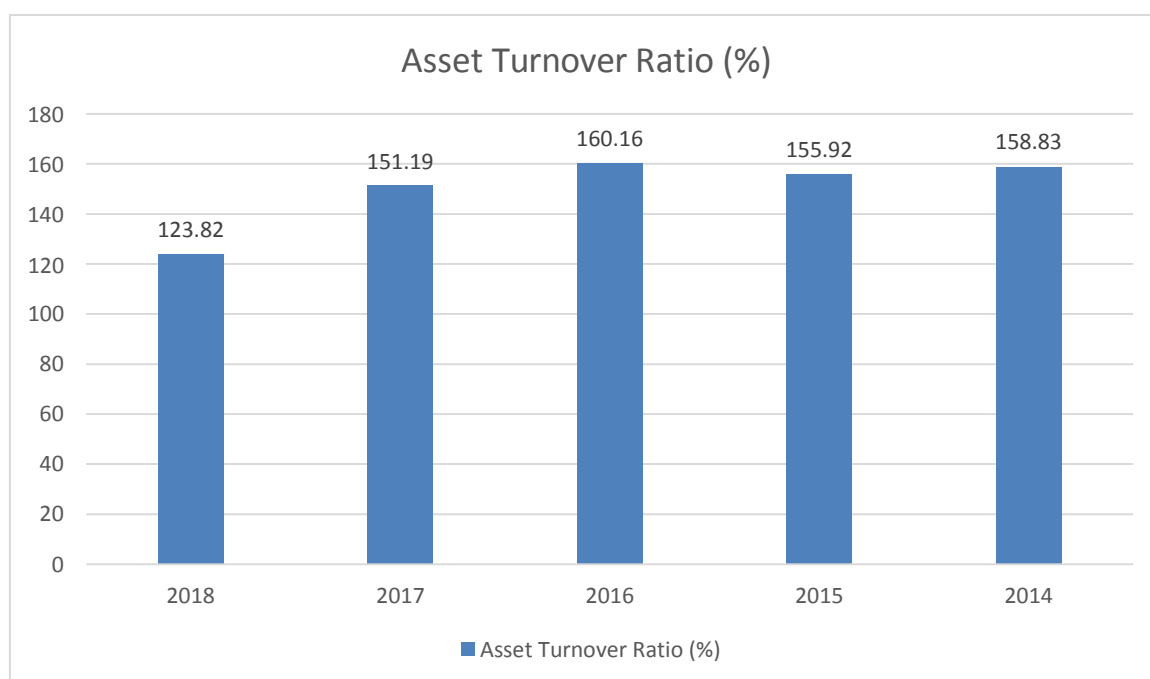
**Table 4.11 showing asset turn over ratio**

Particulars	2018	2017	2016	2015	2014
Asset Turnover Ratio (%)	123.82	151.19	160.16	155.92	158.83

**Analysis :**

From the above table we can see that the asset turnover ratio is 123.82 in 2018, it was 151.19 in 2017, it was 160.16 in 2016, it was 155.92 in 2015 and it was 158.83 in 2014

**Graph 4.11 showing asset turn over ratio**



**Interpretation :**

From the above graph we can see that the asset turnover ratio for the company has seen a decreasing note and stood the lowest for the current financial year at 123.82 as compared to the past five financial year.

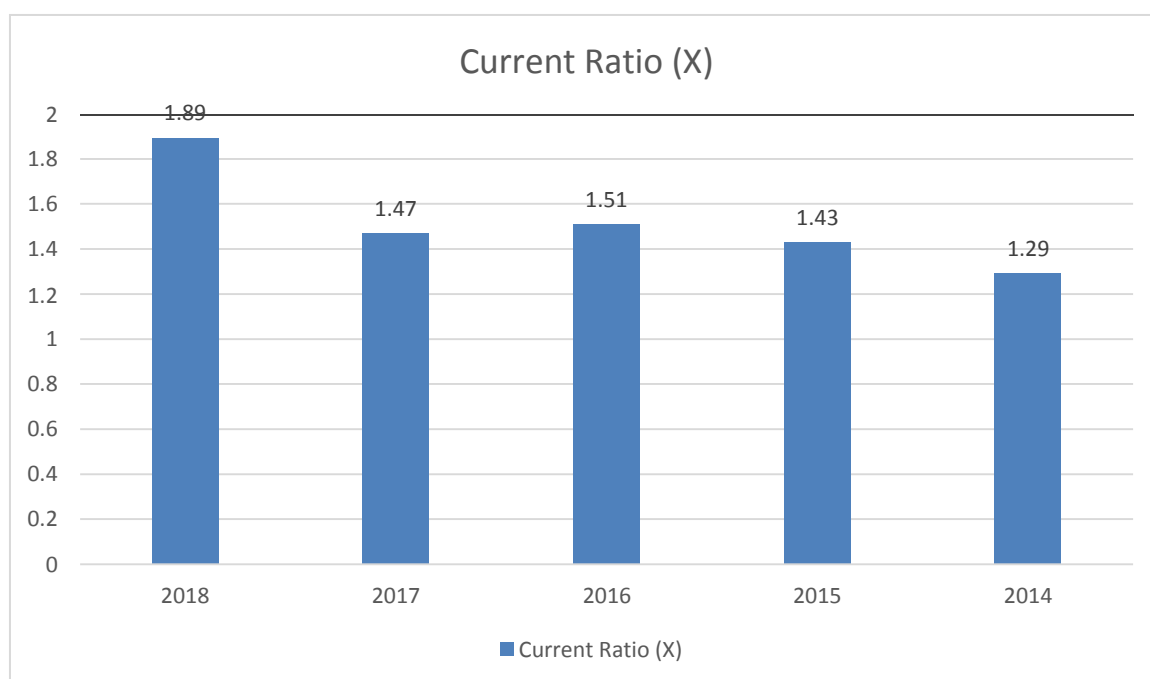
**Table 4.12 showing current ratio**

Particulars	2018	2017	2016	2015	2014
Current Ratio (X)	1.89	1.47	1.51	1.43	1.29

**Analysis :**

From the above table we can see that the current ratio is 1.89 in 2018, it was 1.47 in 2017, it was 1.51 in 2016, it was 1.43 in 2015 and it was 1.29 in 2014

**Graph 4.12 showing current ratio**



**Interpretation :**

From the above graph we can see that the current ratio for the Neutech Solar company has also increased in comparison with the past five financial years under study. It has a figure of 1.89 for the current year.

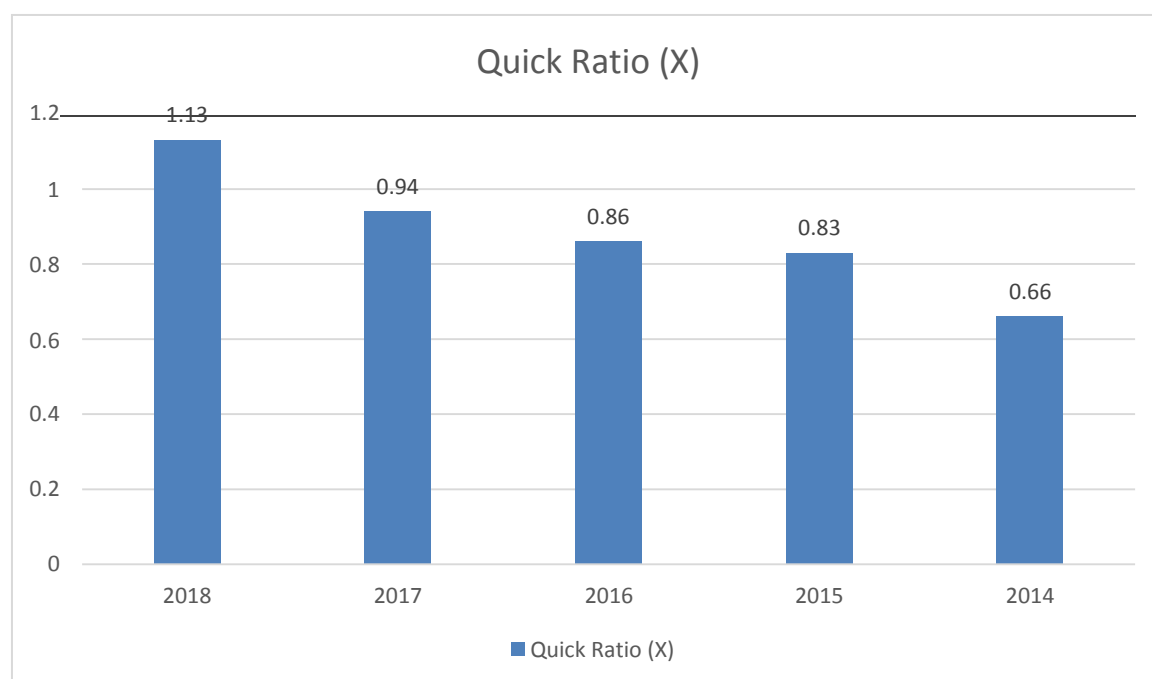
**Table 4.13 showing quick ratio**

Particulars	2018	2017	2016	2015	2014
Quick Ratio (X)	1.13	0.94	0.86	0.83	0.66

**Analysis :**

From the above table we can see that the quick ratio is 1.13 in 2018, it was 0.94 in 2017, it was 0.86 in 2016, it was 0.83 in 2015 and it was 0.66 in 2014

**Graph 4.13 showing quick ratio**



**Interpretation :**

From the above graph we can see that the quick ratio for the current financial year for the company has seen an increasing note and stood at 1.13 as compared to the previous financial years figure of 0.94.



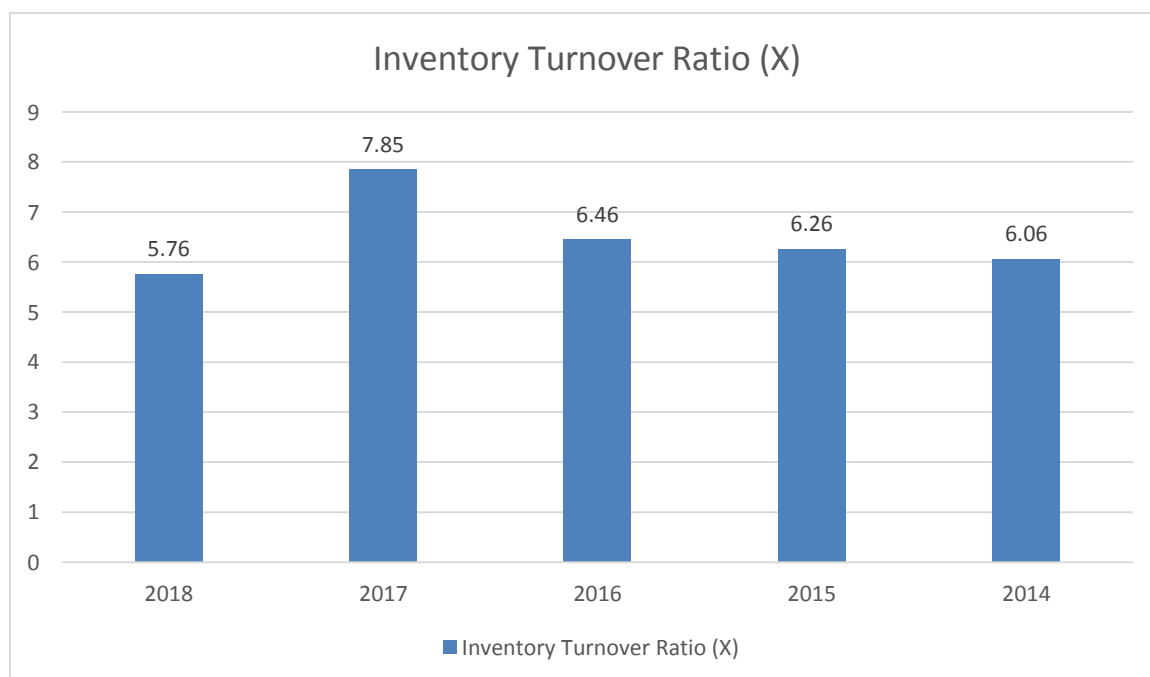
**Table 4.14 showing inventory turn over ratio**

Particulars	2018	2017	2016	2015	2014
Inventory Turnover Ratio (X)	5.76	7.85	6.46	6.26	6.06

**Analysis :**

From the above table we can see that the inventory turnover ratio is 5.76 in 2018, it was 7.85 in 2017, it was 6.46 in 2016, it was 6.26 in 2015 and it was 6.06 in 2014

**Graph 4.14 showing inventory turnover ratio**



**Interpretation :**

From the above graph we can see that the inventory turnover ratio percentage for the Neutech Solar company has decreased for the current financial year which stood highest in the previous financial year of 2017

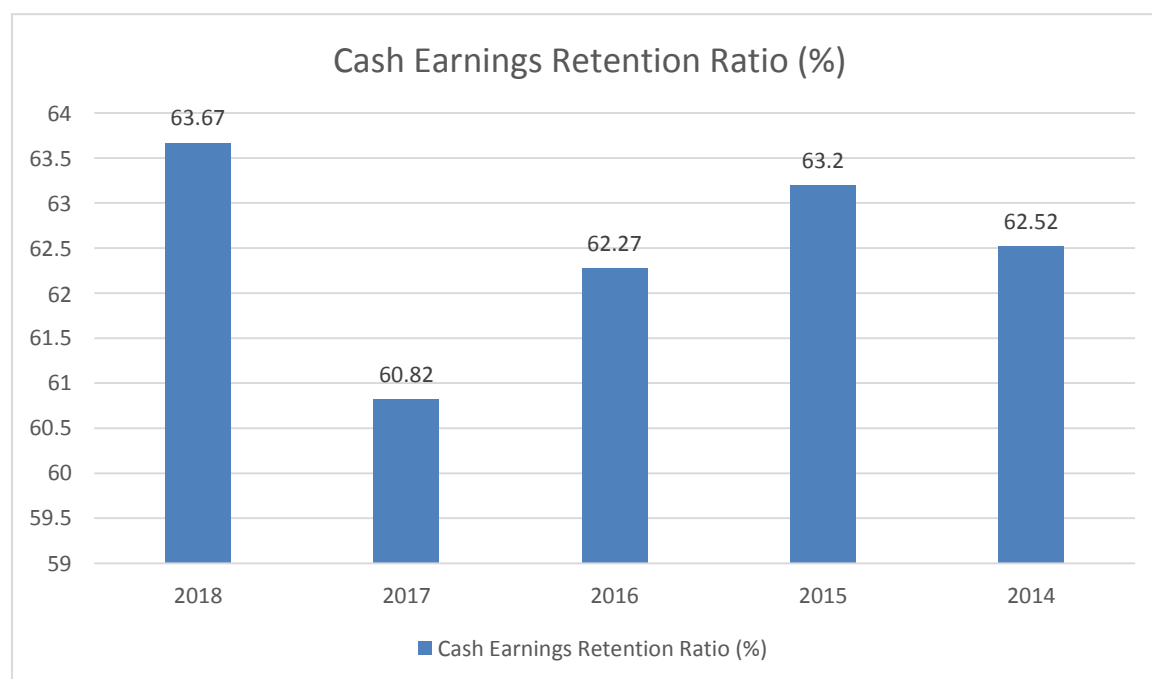
**Table 4.15 showing cash earning retention ratio**

Particulars	2018	2017	2016	2015	2014
Cash Earnings Retention Ratio (%)	63.67	60.82	62.27	63.20	62.52

**Analysis :**

From the above table we can see that the cash earnings retention is 63.67 in 2018, it was 60.82 in 2017, it was 62.27 in 2016, it was 63.20 in 2015 and it was 62.52 in 2014

**Graph 4.15 showing cash earnings retention ratio**



**Interpretation :**

From the above graph we can see that the cash earning retention ratio has increased for the current financial year of 2018 which stood lowest in the financial year of 2017.

## **CHAPTER 5**

### **FINDINGS CONCLUSION AND SUGGESTIONS**

## **FINDINGS OF THE STUDY**

- Raw material consumption is increasing. The increase in sugar cane consumption from the year 2016 to 2017 was 75.37% and that from the year 2017 to 2018 was 80.22%
- Over head of the firm was increasing from the year 2016 to 2017 was 57.47% and from the year 2017 to 2018 was 65.20%
- Prime cost of the firm was increasing from the year 2016 to 2017 was 74.92% and from the year 2017 to 2018 was 79.85%
- Work cost of the firm was increasing from the year 2016 to 2017 was 73.51% and from the year 2017 to 2018 was 78.69%
- Cost of production of the firm was increasing from the year 2016 to 2017 was 73.44% and from the year 2017 to 2018 was 78.47%
- Cost of goods sold of the firm was increasing from the year 2016 to 2017 was 73.95% and from the year 2017 to 2018 was 80.58%
- Cost of sales of the firm was increasing from the year 2016 to 2017 was 74.28% and from the year 2017 to 2018 was 78%

## **SUGGESTION**

- As prime cost, cost of production are increasing in the firm exercise cost reduction and cost control techniques like material control, labor control ,over head control, capital expenditure control.
- As the raw material cost is increasing the firm should using new techniques to reduce it.
- Like the firm allowed near to the sources of raw material.
- Reducing raw material usage in production down time.
- Company should concentrate on systematic inventory management
- Company should make the payment to the middle man at a proper time
- Company should practice new technology methods to save time, money and man power

## **CONCLUSION**

In this study is attempt to made analyze the cost analysis of the sample unit .Since the Neutech Solar company is facing heavy competition in an around area of the region, It is essential to focus on the aspect of cost, profitability etc

Cost accounting is a recent development. It is the branch of financial accounting. It maintains the records unit wise, process wise, job wise department wise, we can easily control in reduction of costs by preparation of the statement unit wise or job wise. I have learned a lot about the techniques to control the cost in various aspects in material management so that in order controls the cost of material for the financial growth of the company

## **BIBLIOGRAPHY**

- Anthony R. (2007), Management Control Systems, 12th Edition, Mc Graw Hill, New York
- Anthony, et al., (2005), “Management Control Systems”, Chicago, Irwin Publishers
- Atkinson A., Banker R., Kaplan R., Young M. (2001), Management Accounting, 3rd Edition, Prentice-Hall Inc., New Jersey.
- Bartholomew, D, 1984, The vendor-customer relationship today,” Production and Inventory Management25, 106-121
- Beamon, B. M. (1999). Measuring Supply Chain Performance. International Journal of Operations & Production Management, 19(3).
- Brosnan M., Messina J., Block E. (1999), Telecommunications Expense Management: How to Audit your bills, reduce your expenses and Negotiate Favorable rates, New York.
- Bulte J., Dijkma J., van der Wal R. (2002), Management Accounting, 2e druk, NoordhoffUitgevers B.V.
- Carroll, P, 1953, How to Control Production Costs, New York, McGraw-Hill
- Cashin, A. (1998), “Cost Accounting”, New York, McGraw-Hill Inc.
- *Chitkara, K, K., 2005. Construction Project Management: Planning, Scheduling, and Controlling. Tata McGraw Hill Publishing Company Ltd*

## ANNEXURE

### Balance Sheet Comparison of Neutech Solar

<b>PARTICULARS</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>EQUITIES AND LIABILITIES</b>					
<b>SHAREHOLDER'S FUNDS</b>					
Equity Share Capital	95.92	95.92	95.92	95.92	95.92
<b>Total Share Capital</b>	<b>95.92</b>	<b>95.92</b>	<b>95.92</b>	<b>95.92</b>	<b>95.92</b>
Reserves and Surplus	6,855.06	4,867.24	4,134.34	3,505.01	2,926.34
<b>Total Reserves and Surplus</b>	<b>6,855.06</b>	<b>4,867.24</b>	<b>4,134.34</b>	<b>3,505.01</b>	<b>2,926.34</b>
<b>Total Shareholders Funds</b>	<b>6,950.98</b>	<b>4,963.16</b>	<b>4,230.26</b>	<b>3,600.93</b>	<b>3,022.26</b>
<b>NON-CURRENT LIABILITIES</b>					
Long Term Borrowings	10.38	31.55	32.09	39.51	46.76
Deferred Tax Liabilities [Net]	261.17	207.69	167.78	177.07	143.33
Other Long Term Liabilities	5.96	1.68	0.00	0.12	0.50
Long Term Provisions	109.84	94.23	85.25	80.24	76.77



<b>Total Non-Current Liabilities</b>	<b>387.35</b>	<b>335.15</b>	<b>285.12</b>	<b>296.94</b>	<b>267.36</b>
<b>CURRENT LIABILITIES</b>					
Short Term Borrowings	26.83	0.00	0.00	0.00	0.00
Trade Payables	1,671.26	1,333.20	1,313.08	1,498.84	1,214.12
Other Current Liabilities	1,141.44	1,021.25	832.71	747.52	720.99
Short Term Provisions	36.20	711.39	612.03	537.48	423.55
<b>Total Current Liabilities</b>	<b>2,875.73</b>	<b>3,065.84</b>	<b>2,757.82</b>	<b>2,783.84</b>	<b>2,358.66</b>
<b>Total Capital And Liabilities</b>	<b>10,214.06</b>	<b>8,364.15</b>	<b>7,273.20</b>	<b>6,681.71</b>	<b>5,648.28</b>
<b>ASSETS</b>					
<b>NON-CURRENT ASSETS</b>					
Tangible Assets	2,512.01	2,532.97	1,886.42	1,973.21	2,074.91
Intangible Assets	92.67	92.17	79.07	38.99	26.98
Capital Work-In-Progress	219.76	92.79	139.54	37.95	52.55
<b>Fixed Assets</b>	<b>2,824.44</b>	<b>2,717.93</b>	<b>2,105.03</b>	<b>2,050.15</b>	<b>2,154.44</b>
Non-Current Investments	1,454.55	1,006.89	775.72	548.19	359.70

Long Term Loans And Advances	70.27	111.23	209.54	94.64	92.88
Other Non-Current Assets	434.92	30.54	13.64	6.32	0.00
<b>Total Non-Current Assets</b>	<b>4,784.18</b>	<b>3,866.59</b>	<b>3,103.93</b>	<b>2,699.30</b>	<b>2,607.02</b>
<b>CURRENT ASSETS</b>					
Current Investments	1,315.40	1,432.79	1,118.06	482.00	90.00
Inventories	2,194.09	1,610.12	1,802.18	1,665.05	1,480.79
Trade Receivables	994.63	759.06	728.87	712.36	633.88
Cash And Cash Equivalents	205.27	155.02	61.81	745.36	566.86
Short Term Loans And Advances	13.55	221.91	205.43	201.54	164.08
OtherCurrentAssets	706.94	318.66	252.92	176.10	105.65
<b>Total Current Assets</b>	<b>5,429.88</b>	<b>4,497.56</b>	<b>4,169.27</b>	<b>3,982.41</b>	<b>3,041.26</b>
<b>Total Assets</b>	<b>10,214.06</b>	<b>8,364.15</b>	<b>7,273.20</b>	<b>6,681.71</b>	<b>5,648.28</b>

### Profit and Loss Account comparison of Neutech Solar

<b>PARTICULARS</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>INCOME</b>					
<b>Revenue From Operations [Gross]</b>	<b>14,162.13</b>	<b>13,992.15</b>	<b>12,878.80</b>	<b>11,542.02</b>	<b>9,990.04</b>
Less: Excise/Sevice Tax/Other Levies	1,713.32	1,533.50	1,393.13	1,241.80	1,068.91
<b>Revenue From Operations [Net]</b>	<b>12,448.81</b>	<b>12,458.65</b>	<b>11,485.67</b>	<b>10,300.22</b>	<b>8,921.13</b>
Other Operating Revenues	198.30	187.23	163.16	118.56	50.57
<b>Total Operating Revenues</b>	<b>12,647.11</b>	<b>12,645.88</b>	<b>11,648.83</b>	<b>10,418.78</b>	<b>8,971.70</b>
Other Income	300.90	225.30	186.82	173.66	126.15
<b>Total Revenue</b>	<b>12,948.01</b>	<b>12,871.18</b>	<b>11,835.65</b>	<b>10,592.44</b>	<b>9,097.85</b>
<b>EXPENSES</b>					
Cost Of Materials Consumed	6,737.45	5,842.29	6,191.72	5,758.71	5,125.48
Purchase Of Stock-In Trade	646.53	524.42	380.56	256.58	199.56
Changes In Inventories Of	-515.58	162.86	-132.43	-75.34	-175.91

FG,WIP And Stock-In Trade					
Employee Benefit Expenses	742.83	664.20	606.94	482.43	404.59
Finance Costs	18.86	23.40	27.13	26.08	30.56
Depreciation And Amortisation Expenses	295.43	238.36	223.11	212.32	126.98
Other Expenses	2,364.44	2,972.55	2,591.52	2,219.13	1,870.71
<b>Total Expenses</b>	<b>10,289.96</b>	<b>10,428.08</b>	<b>9,888.55</b>	<b>8,879.91</b>	<b>7,581.97</b>

### Cash Flow comparison of Neutech Solar

<b>PARTICULARS</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>Net Profit/Loss Before Extraordinary Items And Tax</b>	<b>2,658.05</b>	<b>2,377.75</b>	<b>1,933.57</b>	<b>1,702.57</b>	<b>1,515.88</b>
Net CashFlow From Operating Activities	1,411.60	2,045.69	1,143.57	1,368.84	1,081.12
Net Cash Used In Investing Activities	-591.51	-862.78	-292.23	-615.38	-424.87
Net Cash Used From Financing Activities	-940.25	-771.06	-726.55	-559.67	-590.35
<b>Net Inc/Dec In Cash And Cash Equivalents</b>	<b>-120.16</b>	<b>411.85</b>	<b>124.79</b>	<b>193.79</b>	<b>65.90</b>
Cash And Cash Equivalents Begin of Year	1,276.49	862.69	745.08	551.57	500.97
Cash And Cash Equivalents End Of Year	1,156.33	1,274.54	869.87	745.36	566.87



**ACHARYA INSTITUTE OF TECHNOLOGY  
DEPARTMENT OF MBA**

**PROJECT (17MBAPR407) -WEEKLY REPORT**

**NAME OF THE STUDENT: POOJITH.K**

**INTERNAL GUIDE: PROF. SHASHI KUMAR**

**USN:11A17MBA44**

**COMPANY NAME: NUETECH SOLAR**

WEEK	WORK UNDERTAKEN	EXTERNAL GUIDE SIGNATURE	INTERNAL GUIDE SIGNATURE
3 <sup>rd</sup> Jan 2019 – 9 <sup>th</sup> Jan 2019	Industry Profile and Company Profile		
10 <sup>th</sup> Jan 2019 – 17 <sup>th</sup> Jan 2019	Preparation of Research instrument for data collection		
18 <sup>th</sup> Jan 2019 – 25 <sup>th</sup> Jan 2019	Data collection		
26 <sup>th</sup> Jan 2019 – 2 <sup>nd</sup> Feb 2019	Analysis and finalization of report		
3 <sup>rd</sup> Feb 2019 – 9 <sup>th</sup> Feb 2019	Findings and Suggestions		
10 <sup>th</sup> Feb 2019 – 16 <sup>th</sup> Feb 2019	Conclusion and Final Report		

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College Seal

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