



**Pre-feasibility Study** 

# AIR CONDITIONER AND GENERATOR RENTAL SERVICE CENTER

January 2023

The figures and financial projections are approximate due to fluctuations in exchange rates, energy costs, and fuel prices etc. Users are advised to focus on understanding essential elements such as production processes and capacities, space, machinery, human resources, and raw material etc. requirements. Project investment, operating costs, andrevenues can change daily. For accurate financial calculations, utilize financial calculators on SMEDA's website and consult financial experts to stay current with market conditions.

Small and Medium Enterprises Development Authority Ministry of Industries and Production Government of Pakistan

# **Table of Contents**

1.	DISCLAIMER	5
2.	EXECUTIVE SUMMARY	6
3.	INTRODUCTION TO SMEDA	8
4.	PURPOSE OF THE DOCUMENT	8
5.	BRIEF DESCRIPTION OF PROJECT & SERVICES	9
5.1.	Process Flow	14
5.2.	Installed and Operational Capacities	14
6.	CRITICAL FACTORS	. 18
7.	GEOGRAPHICAL POTENTIAL FOR INVESTMENT	. 18
8.	POTENTIAL TARGET MARKETS	. 18
9.	PROJECT COST SUMMARY	. 19
9.1.	Project Economics	19
9.2.	Project Cost	19
9.	2.1 Land	20
9.	2.2 Building Renovation Cost	20
	2.3 Generators	
	2.4 Air Conditioners	
	2.6 Allied Equipment	
	2.7 Furniture & Fixtures	
	2.8 Office Vehicles	
	2.9 Office Equipment	
	2.10 IT Equipment	
	2.11 Pre-Operating Cost	
	Financial Feasibility Analysis	
9.4.		
9.5.		
9.6.		
9.7.		
9.8.		
9.9.	·	
	CONTACT DETAILS	
11.	USEFUL LINKS	
12.	ANNEXURES	. 36
12.1	. Income Statement	36

1



12.2.	Balance Sheet	.37
12.3.	Cash Flow Statement	.38
13. K	EY ASSUMPTIONS	39
13.1.	Operating Cost Assumptions	.39
13.2.	Revenue Assumptions	.39
13.3.	Financial Assumptions	.39
13.4.	Debt related Assumptions	.40
13.5.	Cash Flow Assumptions	.40



# **Table of Tables**

Table 1: Average Days Assumptions	16
Table 2: Air Conditioners Allotted per Cycle	16
Table 3: Generators Allotted per Cycle	16
Table 4: Number of Cycles for Air Conditioners	17
Table 5: Number of Cycles for Generators	
Table 6: Project Cost	19
Table 7: Breakup of Space Requirement	20
Table 8: Building Renovation Cost	
Table 9: Gate Cost	
Table 10: Boundary Wall	21
Table 11: Precast Shed Cost for Machine and Store Area (4,050 Sq. Feet)	
Table 12: Precast Pillar Cost for Machine and Store Area (4,050 Sq. Feet)	
Table 13: Generators	
Table 14: Air Conditioners	22
Table 15: Business Vehicles	23
Table 16: Allied Equipment	23
Table 17: Furniture and Fixtures	
Table 18: Office Vehicles	24
Table 19: Office Equipment	24
Table 20: IT Equipment	
Table 21: Pre-Operating Cost	
Table 22: Security against Building	
Table 23: Financial Feasibility Analysis	
Table 24: Financial Feasibility Debt Financing	26
Table 25: Breakeven Analysis	
Table 26: Charges per Day and per Rental Cycle - Generators	27
Table 27: Generators Allotted per Cycle	
Table 28: Number of Rental Cycles for Generators	28
Table 29: Revenue Generation - Generators	28
Table 30: Charges per Day and per Rental Cycle - Air Conditioners	29
Table 31: Air Conditioners Allotted per Rental Cycle	29
Table 32: Number of Rental Cycles for Air Conditioners	30
Table 33: Revenue Generation – Air Conditioners	31
Table 34: Variable Cost Estimate	32
Table 35: Fixed Cost Estimate	32
Table 36: Human Resource Requirement	33
Table 37: Suppliers of Machinery and Equipment	34
Table 38: Useful Links	
Table 39: Operating Cost Assumptions	
Table 40: Revenue Assumptions	
Table 41: Financial Assumptions	39
Table 42: Debt Related Assumptions	
Table 43: Cash Flow Assumptions	



# Table of Figures

Figure 1: Portable Industrial Air Conditioners 1	10
Figure 2: Portable Industrial Air Conditioners 2	
Figure 3: Commercial Generator	12
Figure 4: Electric Chain Pulley	
Figure 5: 4000 CC Truck	
Figure 6: Process Flow Diagram	14



#### 1. DISCLAIMER

This information memorandum is to introduce the subject matter and provide a general idea and information on the said matter. Although, the material included in this document is based on data / information gathered from various reliable sources; however, it is based upon certain assumptions, which may differ from case to case. The information has been provided on, as is where is basis without any warranties or assertions as to the correctness or soundness thereof. Although, due care and diligence has been taken to compile this document, the contained information may vary due to any change in any of the concerned factors, and the actual results may differ substantially from the presented information. SMEDA, its employees or agents do not assume any liability for any financial or other loss resulting from this memorandum in consequence of undertaking this activity. The contained information does not preclude any further professional advice to be obtained by the users. The prospective user of this memorandum is encouraged to carry out additional diligence and gather any information which is necessary for making an informed decision, including taking professional advice from a qualified consultant / technical expert before taking any decision to act upon the information.

For more information on services offered by SMEDA, please contact our website:

#### www.smeda.org.pk

#### **Document Control**

Document No.	276
Prepared by	SMEDA-Punjab (OS)
Revision Date	January 2023
For information	helpdesk.punjab@smeda.org.pk



#### 2. EXECUTIVE SUMMARY

Rental industry is very large, as it comprises of numerous niches, all joined together by one concept: customers pay to borrow equipment, then give it back, allowing the rental businesses to make attractive returns on their investments. Rental businesses offer renting out assets on a daily, weekly, monthly or even annual basis. Most common types of assets acquired on rental basis include vehicles, machinery and equipment, party/weddings/events accessories, cameras and lenses, generators, air conditioners, etc.

This study provides information on air conditioner and electric generator rental services business. Air conditioners are rented to provide cooling services at different types of events, in marquees, event halls, etc. They are also acquired on rent by the industries which require cooling facilities on a temporary basis, for experimental or short run processes. Electricity generators are commonly rented on temporary construction sites where permanent power is yet to be installed, or to meet short-term needs, such as for providing electricity at community events, broadcasts, theatrical productions, etc. Sometimes, there are planned power shutdowns for maintenance on permanent standby generators, or repair work has to be done to the existing electrical systems of a building. For all such occasions, electricity generators are acquired on rent so that the operations in the building are not affected and the daily activities get carried out normally. Air conditioner and generator rental services are beneficial to the consumers in saving their capital costs.

This "Pre-feasibility Document" provides details for setting up an Air Conditioner and Generator Rental Service Center. It may be established in larger cities such as Lahore, Karachi, Multan, Rawalpindi, Islamabad, Peshawar, Quetta, Faisalabad, Bahawalpur, Hyderabad, etc. It may also be established in smaller cities such as. Sahiwal, Sialkot, Mardan, Sukkur, Muzaffarabad, Gujrat, Okara, Gilgit, Gujranwala, Attock, etc.

The proposed business has 8 industrial air conditioners (3 air conditioners of 50 HP (10 Ton), 2 air conditioners of 80 HP (16 Ton), 2 air conditioners of 100 HP (20 Ton) and 1 air conditioner of 150 HP (30 Ton) and 18 commercial generators (6 generators of 50 KVA, 4 generators of 100 KVA, 4 generators of 150 KVA, 2 generators of 250 KVA and 2 generators of 500 KVA). These ACs and generators are rented out on daily, weekly or monthly basis to the customers.

The "Air Conditioner and Generator Rental Service Centre" will be set up in a rented building of 6,750 square feet. The project requires a total investment of PKR 86.24 million. This includes capital investment of PKR 81.53 million and working capital of PKR 4.71 million. This project is financed through 100% equity. The Net Present Value (NPV) of project is PKR 45.59 million with an Internal Rate of Return (IRR) of 36% and a Payback period of 3.68 years. Further, this project is expected to generate Gross Annual Revenues of PKR 48.48 million during 1st year, with Gross Profit (GP) ratio ranging from 70% to 74% and Net Profit (NP) ratio ranging from 16% to 51% during the projection period of ten years. The proposed project will achieve its estimated



breakeven point at capacity of 43% (339 rental cycles) with breakeven revenue of PKR 36.17 million.

The proposed project may also be established using leveraged financing. With 50% debt financing, at a cost of KIBOR+3%, the proposed production unit provides Net Present Value (NPV) of PKR 57.99 million, Internal Rate of Return (IRR) of 34% and Payback period of 3.90 years. Further, this project is expected to generate Net Profit (NP) ratio ranging from 15% to 50% during the projection period of ten years. The proposed project will achieve its estimated breakeven point at capacity of 44% (346 rental cycles) with breakeven revenues of PKR 36.17 million.

The proposed project will provide employment opportunities to 26 people. High return on investment and steady growth of business is expected with the entrepreneur having some prior experience similar businesses. The legal business status of this project is proposed as "Sole Proprietorship". Further, the proposed project may also be established as a "Partnership Concern".



#### 3. INTRODUCTION TO SMEDA

The Small and Medium Enterprises Development Authority (SMEDA) was established in October 1998 with an objective to provide fresh impetus to the economy through development of Small and Medium Enterprises (SMEs).

With a mission "to assist in employment generation and value addition to the national income, through development of the SME sector, by helping increase the number, scale and competitiveness of SMEs", SMEDA has carried out 'sectoral research' to identify policy, access to finance, business development services, strategic initiatives and institutional collaboration and networking initiatives. Preparation and dissemination of prefeasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the prefeasibility studies, a broad spectrum of business development services is also offered to the SMEs by SMEDA. These services include identification of experts and consultants and delivery of need-based capacity building programs of different types in addition to business guidance through help desk services.

National Business Development Program for SMEs (NBDP) is a project of SMEDA, funded through Public Sector Development Program of Government of Pakistan.

The NBDP envisages provision of handholding support / business development services to SMEs to promote business startup, improvement of efficiencies in existing SME value chains to make them globally competitive and provide conducive business environment through evidence-based policy-assistance to the Government of Pakistan. The Project is objectively designed to support SMEDA's capacity of providing an effective handholding to SMEs. The proposed program is aimed at facilitating around 314,000 SME beneficiaries over a period of five years.

#### 4. PURPOSE OF THE DOCUMENT

The objective of the pre-feasibility study is primarily to facilitate potential entrepreneurs in project identification for investment. The project pre-feasibility may form the basis of an important investment decision and in order to serve this objective, the document/study covers various aspects of project concept development, start-up, and production, marketing, finance and business management.

The purpose of this document is to provide information to the potential investors about "Air Conditioner and Generator Rental Service Centre". The document provides a general understanding of the business to facilitate potential investors in crucial and effective investment decisions.

The need to come up with pre-feasibility reports for undocumented or minimally documented sectors attains greater imminence as the research that precedes such reports reveal certain thumb rules; best practices developed by existing enterprises by



trial and error, and certain industrial norms that become a guiding source regarding various aspects of business setup and its successful management.

Apart from carefully studying the whole document one must consider critical aspects provided later on, which form the basis of any investment decision.

#### 5. BRIEF DESCRIPTION OF PROJECT & SERVICES

A rental business owns an asset or inventory and rents it out to customers on mutually agreed charges and other terms and conditions, on a daily, weekly, monthly or even annual basis. There are many high cost assets which the people/business do not need on a continuous basis and rather need those only from time to time. It does not make economic sense to spend money to acquire such assets on a permanent basis. This creates the market for offering such assets on rental basis. Different types of rental businesses, currently operational in the local market, include vehicles rental, machinery and equipment rental, party rental, wedding / event rentals, cameras and lenses rental, generators and air conditioners rental, etc.

Air conditioners and generators constitute an essential part of the modern-day life. These are expensive items which are not easily affordable by majority and thus people prefer to get these items on rental basis, as and when required by them. In addition to saving the high investment cost, the other benefit is the flexibility to choose air conditioners and generators as per the specific requirements of different events (which may be different for different events). In this way, the person/business getting the rental services does not have to compromise on the service quality by being forced to stick to any one particular type of air conditioner/generator which has been bought by him/her, or going for the option of buying multiple air conditioners/generators to fit to specific needs of different situations. In addition to this benefit, renting option also saves for the customers, the installation and maintenance costs of machinery and equipment which they have to spend if they buy those.

In the proposed project, air conditioners and generators of different specifications are available on rental basis on daily, weekly or monthly basis according to the customer's requirements.

#### **Air Conditioners**

Air conditioner is a device that helps to achieve the desired temperature in an enclosed space. The primary purpose of air conditioning is to create comfortable room temperature for the people. The proposed business uses portable industrial air conditioners which work on the same principle as other air conditioning systems, by drawing warm air into the unit before passing it over an evaporator to cool it. This cooled air is then blown back into the room and the warm air is expelled via a duct or heat exchange unit.



One of the main benefits of portable air conditioners that differentiates them from permanent cooling systems, is the mobility of these units. Regardless of the cooling requirement, a portable air conditioner offers a satisfactory solution, without necessitating the implementation of a costly permanent installation. Other benefits include:

- Higher affordability, when compared with that of installing a conventional air conditioning system
- Less installation time

Exhibitions and special events are often held in temporary structures such as marquees or multi-purpose buildings which rapidly gain and retain heat from visitors, equipment and the summer sunshine. This leads to causing high temperatures and an uncomfortable experience for the guests. Portable industrial air conditioners are used in such events for effective temperature control in such environments.

The portable air conditioners used in the proposed project are as follows:

- 50 HP (10 Ton) air conditioner
- 80 HP (16 Ton) air conditioner
- 100 HP (20 Ton) air conditioner
- 150 HP (30 Ton) air conditioner

Portable industrial air conditioners are shown in Figure 1 and Figure 2.



Figure 1: Portable Industrial Air Conditioners 1





Figure 2: Portable Industrial Air Conditioners 2

#### Generator

Generators generate electricity and are used to supply electrical power during a power outage to prevent discontinuity of daily activities or disruption of business operations. A generator is a device that converts mechanical energy obtained from a fuel into electrical energy as the output. Generators are available in different electrical and physical configurations for use in different applications. The portable nature of generators makes them a great temporary power source for domestic, industrial, and construction purposes. They provide a reliable source of backup power for residential, commercial and industrial applications. Generators are used for providing electricity supply to households, offices, commercial properties, industries, events, etc.

The proposed project recommends using commercial diesel generators. They are different from the residential generators as they are more robust, durable, can produce more power and are designed to operate for longer periods, when compared with the residential generators. In the proposed project, as per the practice in the local market, the diesel for generators will be provided by client as per their requirements.

The most common type of commercial standby generator is a three-phase generator. Standby generators are paired with an ATS (Automatic Transfer Switch), which prompts the standby generator to kick in within seconds of power outage. Anything hooked up to the generator is then powered with little or no disruption. There is no manual need to start or power the generator and no risk of losing power. When power to the main grid is restored, the automatic transfer switch prompts the generator to shut down and reconnects the facility to the main power grid.

Generators can protect the business from unforeseen shortage of electricity due to bad weather, disturbance in power lines, load shedding and any other damages.



Generators are required for diverse applications, including medical complexes, construction sites, mining operations, manufacturing, and processing projects etc.

The commercial generators recommended in the proposed project are as follows:

- 50 KVA Diesel Generator (Hyundai)
- 100 KVA Diesel Generator (Perkins)
- 150 KVA Diesel Generator (Perkins)
- 250 KVA Diesel Generator (Perkins)
- 500 KVA Diesel Generator (Perkins)

A commercial generator is shown in Figure 3.



Figure 3: Commercial Generator

#### **Electric Chain Pulleys**

Electric Chain Pulleys will be used in the proposed project for loading and unloading of air conditioners and generators. These chain pulleys will have a lifting capacity of 40 tons. Figure 4 shows an electric chain pulley.





Figure 4: Electric Chain Pulley

#### **Business Vehicle**

Following business vehicles will be required for transportation of air conditioners and generators in the proposed project:

# 4000 cc Truck

4000 cc truck suggested in the proposed project, having manual transmission is shown in Figure 5.



Figure 5: 4000 CC Truck

#### 5.1. Process Flow

The process flow for an AC and Generator Rental Service Centre is shown in Figure 6.

Figure 6: Process Flow Diagram



A brief description of the process flow is provided below.

#### **Inquiry & Booking**

The clients call or visit the premises to communicate their requirements and inquire for details of bookings of AC and Generators. If those particular ACs or generators are available for those particular time slots, the client is informed about the availability, the rental charges and the transportation/delivery details. As per the market practice, the repair and maintenance services, and the associated charges during the entire renting-out period are borne by the customer and are usually included in the package price.

#### **Payment**

The client has to pay the complete amount as advance payment before the delivery.

#### **Delivery and installation on Client's Premises**

The AC or generators are then delivered to the client's premises on a truck. They are loaded on the truck with the help of electric chain pulley as it cannot be done with the help of manual labor due to their very heavy weights.

#### **Transport Back to Business Premises**

Upon completion of the booking period, the generators or the air conditioners at the respective client's premises are transported back to the business premises by truck.

#### 5.2. Installed and Operational Capacities

The proposed business will have 8 industrial air conditioners (3 ACs of 50 HP/10 Ton, 2 AC of 80 HP/16 Ton, 2 AC of 100 HP/20 Ton and 1 AC of 150 HP/30 Ton). The Air conditioner rental service will be provided for a period of 165 days during a year due to seasonal effect in three rental cycles (1-5 days cycle, 6-30 days cycles and more than 30 days cycle). For the purpose of calculations, average number of days i.e., 3 days for 1-5 days cycle, 18 days for 6-30 days cycle, 83 days for more than 30 days cycle, for the three rental cycle durations have been assumed.



The proposed business will also have 18 commercial generators (6 generators of 50 KVA, 4 generators of 100 KVA, 4 generators of 150 KVA, 2 generators of 250 KVA and 2 generators of 500 KVA). The Generator rental services will be provided for a period of 335 days during a year in three rental cycles (1-5 days cycle, 6-30 days cycles and more than 30 days cycle). For the purpose of calculations, average number of days i.e., 3 days for 1-5 days cycle, 18 days for 6-30 days cycle, 183 days for more than 30 days cycle, for the three rental cycle durations have been assumed.

Table 1 shows average days per rental cycle, Table 2 shows no. of air conditioners allotted per rental cycle.

Table 3 shows no. of generators allotted per rental cycle, Table 4 shows no of rental cycles of air conditioners and Table 5 shows no of rental cycles of generators.



**Table 1: Average Days Assumptions** 

Particulars	1-5 Days	6 -30 Days	More Than 30 Days
Averages for Air Conditioners	3	18	83
Averages for Generators	3	18	183

**Table 2: Air Conditioners Allotted per Cycle** 

Types of Air Conditioners	No.	Available days	3 Days	18 Days	83 Days
Air Conditioners					
Air Conditioner 50HP (10 Ton)	3		2	1	0
Air Conditioner 80HP (16 Ton)	2	165	0	1	1
Air Conditioner 100HP (20 Ton)	2		0	1	1
Air Conditioner 150HP (30 Ton)	1		0	0	1

**Table 3: Generators Allotted per Cycle** 

Types of Generators	No.	Available days	3 Days	18 Days	183 Days
Generators					
Diesel Generator 50KVA	6	335	4	2	0
Diesel Generator 100KVA	4		2	1	1
Diesel Generator 150KVA	4		1	2	1
Diesel Generator 250KVA	2		0	1	1



Diesel Generator 500KVA	2	0	0	2
Blood Contrator Court	_		U	_

**Table 4: Number of Cycles for Air Conditioners** 

	No.of Cycles @ 100% Capacity			No.of Cycles @ 50% Capacity		
Types of Air Conditioners	3 Days	18 Days	83 Days	3 Days	18 Days	83 Days
Air Conditioner 50HP (10 Ton)	110	9	0	55	5	0
Air Conditioner 80HP (16 Ton)	0	9	2	0	5	1
Air Conditioner 100HP (20 Ton)	0	9	2	0	5	1
Air Conditioner 150HP (30 Ton)	0	0	2	0	0	1

**Table 5: Number of Cycles for Generators** 

	No.of C	No.of Cycles @ 100% Capacity			No.of Cycles @ 50% Capacity		
Types of Generators	3 Days	18 Days	183 Days	3 Days	18 Days	183 Days	
Diesel Generator 50KVA	447	37	0	224	19	0	
Diesel Generator 100KVA	223	19	2	112	10	1	
Diesel Generator 150KVA	112	37	2	56	19	1	
Diesel Generator 250KVA	0	19	2	0	10	1	
Diesel Generator 500KVA	0	0	4	0	0	2	



#### 6. CRITICAL FACTORS

Following factors should be considered while making investment decision:

- Knowledge about the target audience
- Good technical knowledge of machinery and equipment
- Well maintained equipment
- Ability to build and maintain strong client relationships to promote client loyalty and customer satisfaction
- High quality of service
- Timely delivery to the clients
- Reputable and trusted suppliers of machinery and equipment
- Dealing with local market competition by providing quality services at reasonable rental charges

#### 7. GEOGRAPHICAL POTENTIAL FOR INVESTMENT

The proposed "Air Conditioner and Refrigerator Rental Service Centre" may be established in any of the major cities of Pakistan, which may include Karachi, Lahore, Islamabad, Peshawar, Multan, Rawalpindi, Hyderabad, Sialkot, Gilgit, Gujranwala, Gujrat, Muzaffarabad, Sheikhupura, Quetta, Mardan, Sukkur, Faisalabad, Bahawalpur, etc. Large number of offices, industries and event management companies exist in such cities, which is the most important factor for establishing and operating such business. In addition, the project may also be established in medium to small cities all over the country where air conditioners and generators rental services are in demand.

#### 8. POTENTIAL TARGET MARKETS

The potential target market for this rental business will majorly be the industrial areas of Pakistan and the major cities such as Lahore, Karachi, Faisalabad, Multan, Sialkot, Gujranwala, Gujrat and Sheikhupura where large number of buildings, offices, event halls, farmhouses, conference and exhibition centers, etc. exist. These facilities mostly require backup generators on daily basis due to frequent load shedding and power outage problems in the country. Generators, being portable, can be carried to any place.

Furthermore, facilities like marquees, event halls, conference and exhibition centers and farmhouses which host different types of events such as, marriages, trade shows, sporting events or any type of large gatherings or meetings, require air conditioners to provide cool atmosphere for these events. Such facilities also need the generators to cope with the challenges of electricity load shedding and power outages.



Due to the ever-increasing inflation in Pakistan, businesses such as event management companies prefer to rent generators and air conditioners rather than purchasing to save high cost of owning these assets as well as high maintenance and repair cost of keeping them in good working condition.

#### 9. PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of an Air Conditioner and Generator Rental Service Centre. Various costs and revenue related assumptions along with results of the analysis are outlined in this section.

The projected Income Statement, Cost of Goods Sold, Cash Flow Statement and Balance Sheet are attached as Annexure.

#### 9.1. Project Economics

All the figures in this financial model have been calculated after carefully taking into account the relevant assumptions and target market.

#### 9.2. Project Cost

Total cost of the project has been calculated to be PKR 86.24 million. The project will be financed through 100% Equity. Table 6 provides the details of the costs calculated for the proposed production unit.

**Table 6: Project Cost** 

Description	Amount (PKR)	Reference
Land	-	9.2.1
Building / Infrastructure	2,519,723	9.2.2
Generators	47,200,000	9.2.3
Air Conditioners	17,900,000	9.2.4
Business Vehicles	8,000,000	0
Allied equipment	1,572,000	9.2.6
Furniture & fixtures	770,000	9.2.7
Office vehicles	504,000	9.2.8
Office equipment	809,800	9.2.9
IT Equipment	722,000	9.2.10
Pre-operating costs	726,327	9.2.11
Security Against Building	810,000	9.2.12
<b>Total Capital Cost</b>	81,533,850	



Working Capital		
Machinery spare parts inventory	807,967	
Upfront building rent	270,000	
Upfront insurance payment	1,627,500	
Cash	2,000,000	
<b>Total Working Capital</b>	4,705,467	
Total Project Cost (PKR)	86,239,316	

#### 9.2.1 Land

The proposed AC and Generator Rental Service Centre will be established on a rented land to avoid the high cost. Suitable locations for setting up a facility like this can be easily found on rent. Therefore, no land cost has been added to the project cost. Total space requirement for the proposed unit has been estimated as 6,750 sq. ft. The breakup of the space requirement is provided in Table 7.

**Table 7: Breakup of Space Requirement** 

Break-up of Land Area	Number	% Break-up	Area (Sq. Ft.)
Executive office	1	5%	338
Reception Area	1	4%	270
Admin and Accounts Department	1	8%	540
Marketing Department	1	4%	270
Area for A/c and Generators	1	60%	4,050
Workshop	1	6%	405
Storage for spares and tools	1	3%	203
Parking Area	1	8%	540
Washroom	3	2%	135
Total Area		100%	6,750

#### 9.2.2 Building Renovation Cost

There will be no construction cost of building since the unit will be started at a rented land. However, there will be a renovation cost; required to make the building usable for the business. The proposed project requires electricity load of 8 KW for which an electricity connection under the General Supply Tariff-Commercial three phase will be required. Building rent of PKR 270,000 per month has been included in the operating cost. Building renovation cost is shown in Table 8.



**Table 8: Building Renovation Cost** 

Cost Item	Unit of Measurement	Total Units	Cost per Unit	Total Cost (PKR)
Paint Cost	Litre	103	800	82,008
Labour Cost	Sq. Feet	10,25 1	15	153,765
Curtains	Number	2	6,000	12,000
Blinds	Number	2	7,000	14,000
Glass Partition and Doors	Sq. Feet	756	550	415,800
Carpet	Sq. Feet	878	60	52,650
Gate (Table 9)				105,000
Boundry Wall (Table 10)				316,500
Pre-Cast Shed & Pillars Cost (Table 11 & Table 12				1,368,000
Total (PKR)				2,519,723

**Table 9: Gate Cost** 

Length (ft)	Height (ft)	Area (sq ft)	Rate/Sq.feet (PKR)	Total Cost (PKR)
25	7	175	600	105,000

**Table 10: Boundary Wall** 

Description	Dimensions (ft)	Dimensions without Common Walls (R ft)	Rate per Sq.feet (PKR)	Total Cost (PKR)
Length	51	51	1,500	76,500
Width	80	160	1,500	240,000
Total (PKR)				316,500

Table 11: Precast Shed Cost for Machine and Store Area (4,050 Sq. Feet)

Cost Item	Unit of Measurement	Total Area (Sq. Ft.)	Cost/ Sq.feet (PKR)	Total Cost (PKR)
Precast Roof Cost	Sq.Feet	4,050	260	1,053,000



Table 12: Precast Pillar Cost for Machine and Store Area (4,050 Sq. Feet)

Cost Item	Number of Pillars	Cost/Unit/ Sq.feet(PKR)	Total Cost (PKR)
Precast Pillar Cost	15	21,000	315,000

#### 9.2.3 Generators

Table 13 provides details of generators required for the project.

**Table 13: Generators** 

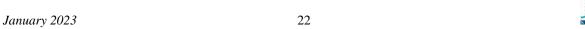
Cost Item	Number	Unit Cost (PKR)	Total Cost (PKR)
Diesel Generator 50KVA (Hyundai)	6	1,300,000	7,800,000
Diesel Generator 100KVA (Perkins)	4	2,100,000	8,400,000
Diesel Generator 150KVA (Perkins)	4	2,500,000	10,000,000
Diesel Generator 250KVA (Perkins)	2	3,500,000	7,000,000
Diesel Generator 500KVA (Perkins)	2	7,000,000	14,000,000
Total	18		47,200,000

#### 9.2.4 Air Conditioners

Table 14 provides details of air conditioners required for the project. These air conditioners are of Chinese origin from Shanghai Refrigeration Company.

**Table 14: Air Conditioners** 

Cost Item	Number	Unit Cost (PKR)	Total Cost (PKR)
Air Conditioner 50HP (10 Ton)	3	1,100,000	3,300,000
Air Conditioner 80HP (16 Ton)	2	2,000,000	4,000,000
Air Conditioner 100HP (20 Ton)	2	3,300,000	6,600,000
Air Conditioner 150HP (30 Ton)	1	4,000,000	4,000,000
Total	8		17,900,000





#### 9.2.5 Business Vehicles

Table 15 provides details of business vehicles required for the project.

**Table 15: Business Vehicles** 

Cost Item	Number	Unit Cost (PKR)	Total Cost (PKR)
Hyundai Shahzore (4000 cc)	1	8,000,000	8,000,000
Total Cost (PKR)			8,000,000

#### 9.2.6 Allied Equipment

Table 16 provides details of allied equipment required for the project.

**Table 16: Allied Equipment** 

Cost Item	Number	Unit Cost (PKR)	Total Cost (PKR)
Mechanical Tool Kit	4	10,000	40,000
Electrical Tool Kit	4	8,000	32,000
Electric Chain Pulley (40 Ton)	6	250,000	1,500,000
Total			1,572,000

#### 9.2.7 Furniture & Fixtures

Table 17 provides details of the furniture and fixture requirement of the project.

**Table 17: Furniture and Fixtures** 

Cost Item	No.	Unit Cost (PKR)	Total Cost (PKR)
Executive Tables	1	60,000	60,000
Executive Chairs	1	30,000	30,000
Office Table	7	20,000	140,000
Office/Visitors Chairs	21	15,000	315,000
Sofa Set	3	45,000	135,000
Racks	6	15,000	90,000
Total Cost (PKR)			770,000



#### 9.2.8 Office Vehicles

Details of office vehicle required for the project are provided in Table 18.

**Table 18: Office Vehicles** 

Cost Item	Number	Unit Cost (PKR)	Total Cost (PKR)
Motorcycle	4	120,000	480,000
Registration		6,000	24,000
Total Cost	4		504,000

# 9.2.9 Office Equipment

Details of office equipment required for the project are provided in Table 19.

**Table 19: Office Equipment** 

Cost Item	Units	Unit Cost(PKR)	Total Cost (PKR)
Air Conditioners-1.5 ton	3	105,000	315,000
Exhaust Fan	8	4,500	36,000
Bracket Fan	7	10,500	73,500
UPS 3 Kva	1	90,000	90,000
Batteries	6	25,000	150,000
Ceiling Fan	9	8,000	72,000
Water Dispenser	2	24,000	48,000
Wi-Fi / Internet Router	2	3,500	7,000
LED Bulbs	61	300	18,300
Total Cost (PKR)			809,800

# 9.2.10 IT Equipment

Details of IT equipment required for the project are provided in Table 19.

**Table 20: IT Equipment** 

Cost Item	Units	Unit Cost(PKR)	Total Cost (PKR)
Laptops	2	150,000	300,000
Desktop Computers	4	50,000	200,000
Office Printer	2	40,000	80,000
CCTV Cameras (2MP)	24	3,000	72,000
DVR	2	15,000	30,000



LED TV (32")	1	40,000	40,000
Total Cost (PKR)			722,000

#### 9.2.11 Pre-Operating Cost

Details of pre-operating cost for the project are provided in Table 21.

**Table 21: Pre-Operating Cost** 

Cost Item	Number of Months	Total Cost (PKR)
Administration expense	1	570,000
Utilities expense	1	56,327
Website Cost		100,000
Total		726,327

## 9.2.12 Security against Building

Details of pre-operating cost for the project are provided in Table 22.

**Table 22: Security against Building** 

Cost Item	Months	Unit Cost / Month (PKR)	Total Cost (PKR)	
Security against Building	3	270,000	810,000	

#### 9.3. Financial Feasibility Analysis

The financial feasibility analysis given in Table 23 provides the information regarding projected IRR, NPV and payback period of the study based on 100% equity.

**Table 23: Financial Feasibility Analysis** 

Description	Project
IRR	36%
NPV (PKR)	45,587,344
Payback Period (years)	3.68
Projection Years	10
Discount Rate used for NPV	25%



#### 9.4. Financial Feasibility Debt Financing

Table 24 provides the information regarding projected IRR, NPV and payback period of the study based on combination of equity (50%) and debt (50%) financing for the proposed project.

**Table 24: Financial Feasibility Debt Financing** 

Description	Project
IRR	34%
NPV (PKR)	57,986,928
Payback Period (years)	3.90
Projection Years	10
Discount Rate used for NPV	22%

# 9.5. Breakeven Analysis

Breakeven analysis is provided in Table 25.

**Table 25: Breakeven Analysis** 

Particulars	Amount First Year (PKR)	Ratio
Sales (PKR) – A	48,478,000	100%
Variable Cost (PKR) – B	15,305,632	32%
Contribution (PKR) (A-B) = C	33,172,368	68%
Fixed Cost (PKR) – D	24,747,548	51%
Break Even Revenue (PKR) (D/CM) =E		36,165,992
Breakeven No. of Rental Cycles		339
Breakeven Capacity		43%



#### 9.6. Revenue Generation

Based on the 50% capacity utilization of the unit, revenues from rental of generators and air conditioners during the first year of operations are estimated in Table 29 and Table 33 respectively.

Table 26: Charges per Day and per Rental Cycle - Generators

Type of Generators	Charges per Day			Charges per Rental Cycle		
	Average of 3 days	Average of 18 days	Average of 183 days	Average of 3 Days	Average of 18 Days	Average of 183 Days
Formulas	Α	В	С	D=A*3	E=B*18	F=C*183
Diesel Generator 50KVA	9,000	8,000	6,000	27,000	144,000	1,098,000
Diesel Generator 100KVA	12,000	10,000	8,000	36,000	180,000	1,464,000
Diesel Generator 150KVA	15,000	13,000	10,000	45,000	234,000	1,830,000
Diesel Generator 250KVA	18,000	16,000	13,000	54,000	288,000	2,379,000
Diesel Generator 500KVA	22,000	19,000	16,000	66,000	342,000	2,928,000

**Table 27: Generators Allotted per Cycle** 

Types of Generators	No.	Available days	3 Days	18 Days	183 Days
Generators					
Diesel Generator 50KVA	6		4	2	0
Diesel Generator 100KVA	4		2	1	1
Diesel Generator 150KVA	4	335	1	2	1
Diesel Generator 250KVA	2		0	1	1
Diesel Generator 500KVA	2		0	0	2



**Table 28: Number of Rental Cycles for Generators** 

	No. of Rental Cycles @ 100% Capacity			No. of Rental Cycles @ 50% Capacity		
Types of Generators	Average of 3 Days			Average of 3 Days	Average of 18 Days	Average of 183 Days
Formulas	A=(335*No. of Allotted Generators (	B=(335*No. of Allotted Generators (	C=(335*No. of Allotted Generators (	D=A*50%	E=B*50%	F=C*50%
	Table 27))/3	Table 27))/18	Table 27))/183			
Diesel Generator 50KVA	447	37	0	224	19	0
Diesel Generator 100KVA	223	19	2	112	10	1
Diesel Generator 150KVA	112	37	2	56	19	1
Diesel Generator 250KVA	0	19	2	0	10	1
Diesel Generator 500KVA	0	0	4	0	0	2

**Table 29: Revenue Generation - Generators** 

Type of Generators	Revenue @ 100% Capacity			Reve	nue @ 50% Cap	acity
	Average of 3 days	Average of 18 days	Average of 183 days	Average of 3 days	Average of 18 days	Average of 183 days
Formulas	Charges per Rental Cycle (Table 26) *No. of Rental Cycles @ 100% Capacity (Table 28)				ntal Cycle (Table 2 @ 50% Capacity (	
Diesel Generator 50 KVA	12,069,000	5,328,000	-	6,048,000	2,736,000	-
Diesel Generator 100 KVA	8,028,000	3,420,000	2,928,000	4,032,000	1,800,000	1,464,000





Diesel Generator 150 KVA	5,040,000	8,658,000	3,660,000	2,520,000	4,446,000	1,830,000
	. ,	, ,	, ,	2,020,000	, ,	
Diesel Generator 250 KVA	-	5,472,000	4,758,000	-	2,880,000	2,379,000
Diesel Generator 500 KVA	-	-	11,712,000	-	-	5,856,000
Sub-Total	25,137,000	22,878,000	23,058,000	12,600,000	11,862,000	11,529,000
Total Revenue (PKR)			71,073,000			35,991,000

Table 30: Charges per Day and per Rental Cycle - Air Conditioners

Type of Air Conditioners	Charges per Day			Char	ges per Rental	Cycle
	Average of 3 days	Average of 18 days	Average of 83 days	Average of 3 Days	Average of 18 Days	Average of 883 Days
Formulas	Α	В	С	D=A*3	E=B*18	F=C*183
Air Conditioner 50HP (10 Ton)	16,000	13,000	10,000	48,000	234,000	830,000
Air Conditioner 80HP (16 Ton)	20,000	18,000	15,000	60,000	324,000	1,245,000
Air Conditioner 100HP (20 Ton)	26,000	24,000	19,000	78,000	432,000	1,577,000
Air Conditioner 150HP (30 Ton)	32,000	30,000	25,000	96,000	540,000	2,075,000

Table 31: Air Conditioners Allotted per Rental Cycle

Types of Air Conditioners	No.	Available days	3 Days	18 Days	83 Days
Generators					
Air Conditioner 50HP (10 Ton)	3	165	2	1	0



Air Conditioner 80HP (16 Ton)	2	0	1	1
Air Conditioner 100HP (20 Ton)	2	0	1	1
Air Conditioner 150HP (30 Ton)	1	0	0	1

**Table 32: Number of Rental Cycles for Air Conditioners** 

	No. of Ren	No. of Rental Cycles @ 100% Capacity			No. of Rental Cycles @ 50% Capacity		
Types of Air Conditioners	Average of 3 Days	Average of 18 Days	Average of 83 Days	Average of 3 Days	Average of 18 Days	Average of 83 Days	
Formulas	A=(165*No. of Allotted Air Conditioners ( Table 27))/3	B=(165*No. of Allotted Air Conditioners ( Table 27))/18	C=(165*No. of Allotted Air Conditioners ( Table 27))/83	D=A*50%	E=B*50%	F=C*50%	
Air Conditioner 50HP (10 Ton)	110	9	0	55	5	0	
Air Conditioner 80HP (16 Ton)	0	9	2	0	5	1	
Air Conditioner 100HP (20 Ton)	0	9	2	0	5	1	
Air Conditioner 150HP (30 Ton)	0	0	2	0	0	1	



Table 33: Revenue Generation - Air Conditioners

Type of Air Conditioners	Revenue @ 100% Capacity			Reve	nue @ 50% Cap	acity
	Average of 3 days	Average of 18 days	Average of 83 days	Average of 3 days	Average of 18 days	Average of 83 days
Formulas	Charges per Rental Cycle (Table 26) *No. of Rental Cycles @ 100% Capacity (Table 28)				Rental Cycle (Ta les @ 50% Capac	
Air Conditioner 50HP (10 Ton)	5,280,000	2,106,000	-	2,640,000	1,170,000	-
Air Conditioner 80HP (16 Ton)	-	2,916,000	2,490,000	-	1,620,000	1,245,000
Air Conditioner 100HP (20 Ton)	-	3,888,000	3,154,000	-	2,160,000	1,577,000
Air Conditioner 150HP (30 Ton)	-	-	4,150,000	-	-	2,075,000
Sub-Total	5,280,000	8,910,000	9,794,000	2,640,000	4,950,000	4,897,000
Total Revenue (PKR)			23,984,000			12,487,000



#### 9.7. Variable Cost Estimate

Variable costs of the project have been provided in detail in Table 34.

**Table 34: Variable Cost Estimate** 

Variable Cost	Cost (PKR)
Operational Cost-1 Fuel Cost/ Transportation Cost	1,454,340
Operational Cost-2 Machinery Mantainance Cost (Spare Parts, Oil change, filter, AC gas etc)	4,847,800
Operational Cost-3 Payrolls of Direct Staff	7,740,000
Operational Cost-4 Business Vehicle maintenance cost	484,780
Direct Electricity Expense	88,209
Indirect Electricity Expense	499,503
Office vehicle running and maintenance expense	191,000
Total Variable Cost (PKR)	15,305,632

#### 9.8. Fixed Cost Estimate

Table 35 provides details of fixed cost for the project.

**Table 35: Fixed Cost Estimate** 

Fixed Cost	Cost (PKR)
Administration expense	6,900,000
Administration benefits expense	1,464,000
Building Rental Expense	3,240,000
Office expenses (software, stationery, entertainment, janitorial services, etc.)	414,000
Promotional expense	1,454,340
Insurance expense	1,627,500
Depreciation expense	9,477,442
Website Maintenance Cost	25,000
Amortization of pre-operating costs	145,265
Total Cost (PKR)	24,747,547

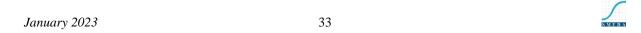


# 9.9. Human Resource Requirement

For the 1<sup>st</sup> year of operations, the complex shall require the workforce at a salary cost as projected in Table 36.

**Table 36: Human Resource Requirement** 

Designation	No of Persons	Average Monthly Salary (PKR)	Total Salary (PKR)
Owner/Manager	1	150,000	1,800,000
Supervisor	1	60,000	720,000
Mechanics/Care Takers	8	50,000	4,800,000
Truck Driver	1	35,000	420,000
Helpers	2	25,000	600,000
Electrical Technician	2	50,000	1,200,000
Marketing Officers	2	60,000	1,440,000
Accounts and Admin Officer	1	50,000	600,000
Accounts Assistant	2	45,000	1,080,000
Admin. Assistant	1	40,000	480,000
Security Guard	4	25,000	1,200,000
Office Boy	1	25,000	300,000
Total	26		14,640,000



# 10. CONTACT DETAILS

Details of suppliers of AC and Generators are provided in Table 37.

**Table 37: Suppliers of Machinery and Equipment** 

Name of Supplier	Equipment	Address	Contact
Shah Cooling Center	Air Conditioner	G8X8+W54, Temple Rd, Mozang Chungi, Lahore	0300 9413940
Sultan & sons	Air Conditioner	Mall road, LG2, 34-35 Shahrah-e-Quaid-e- Azam, Lahore	0321 4627452
Cool & Cool Electronics portable ac	Air Conditioner	Plot WS-12, industrial Area, Block 18 Gulberg Town, Karachi	0330 9879879
Habib company Quetta	Air Conditioner	52R7+G78, Quetta, Balochistan	0300 3933102
Green Appliances (Pvt.) Ltd.	Air Conditioner	386 Potohar Rd, I 9 Markaz I-9, Islamabad, Islamabad Capital	(051) 4859138
Perkins Generator Dealers	Generator	G 11/2 G-11, Islamabad Capital Territory	0300 6729903
RC Generator	Generator	Crest Towers DHA, D.H.A. Phase 7 Phase 2 Ext Defence Housing Authority, Karachi,	0332 1319962
Multiline Engineering Co	Generator	Multiline Engineering Co. opposite Toyota Airport Motors. Khuda Buksh Colony Lahore	(042) 111 966 966
A & J International	Generator	14-Zafar Ali Road, Gulberg-V, GT Rd, Mominpura Daroghawala, Lahore	0321 4124133



# 11. USEFUL LINKS

**Table 38: Useful Links** 

Name of Organization	Website
Small and Medium Enterprises Development Authority (SMEDA)	www.smeda.org.pk
National Business Development Program (NBDP)	www.nbdp.org.pk
Government of Pakistan	www.pakistan.gov.pk
Government of Punjab	www.punjab.gov.pk
Government of Sindh	sindh.gov.pk/
Government of Balochistan	balochistan.gov.pk/
Government of KPK	kp.gov.pk/
Government of Gilgit Baltistan	gilgitbaltistan.gov.pk/
Government of Azad Jammu & Kashmir	ajk.gov.pk/
Trade Development Authority of Pakistan	www.tdap.gov.pk
Securities and Exchange Commission of Pakistan	www.secp.gov.pk
State Bank of Pakistan	www.sbp.gov.pk
Federal Board of Revenue	www.fbr.gov.pk
Federation of Pakistan Chambers of Commerce and Industry (FPCCI)	www.fpcci.com.pk
Pakistan Stock Exchange (PSX)	www.psx.com.pk
National Electronic Power Regulatory Authority	https://nepra.gov.pk/
Water & Power Development Authority	http://www.wapda.gov.pk/
Lahore Electric Supply Company	https://www.lesco.gov.pk/
K-Electric	https://www.ke.com.pk/



# 12. ANNEXURES

# 12.1. Income Statement

Calculations										SMEDA
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 1
Revenue-Generator Rental	35,991,000	41,504,787	48,747,089	61,066,741	70,966,671	91,593,287	105,549,076	120,585,746	144,862,724	159,783,58
Revenue-AC Rental	12,487,000	14,090,825	15,834,166	19,180,059	21,510,838	33,807,707	37,722,081	44,145,851	49,218,668	54,288,19
Total Revenue	48,478,000	55,595,612	64,581,256	80,246,800	92,477,508	125,400,995	143,271,156	164,731,597	194,081,392	214,071,77
Cost of sales										
Operational Cost-1 Fuel Cost/ Transportation Cost	1,454,340	1,814,641	2,293,430	3,100,528	3,887,523	5,735,440	7,129,407	8,918,677	11,432,371	13,719,57
Operational Cost-2 Machinery Mantainance Cost (Spare Parts, Oil change, Filt	4,847,800	5,559,561	6,458,126	8,024,680	9,247,751	12,540,099	14,327,116	16,473,160	19,408,139	21,407,17
Direct Electricity	88,209	104,695	123,236	144,052	167,389	193,514	222,721	255,336	291,714	314,75
Operational Cost-3 Payrolls of Direct Staff	7,740,000	8,490,780	9,314,386	10,217,881	11,209,016	12,296,290	13,489,030	14,797,466	16,232,820	17,807,40
Operational Cost-4 Business Vehicle maintenance cost	484,780	555,956	645,813	802,468	924,775	1,254,010	1,432,712	1,647,316	1,940,814	2,140,71
Total cost of sales	14,615,129	16,525,633	18,834,990	22,289,610	25,436,453	32,019,352	36,600,986	42,091,955	49,305,858	55,389,630
Gross Profit	33,862,871	39,069,979	45,746,265	57,957,190	67,041,055	93,381,643	106,670,171	122,639,642	144,775,534	158,682,140
General administration & selling expenses										
Administration expense	6,900,000	7,569,300	8,303,522	9,108,964	9,992,533	10,961,809	12,025,104	13,191,540	14,471,119	15,874,817
Administration benefits expense	1,464,000	1,606,008	1,761,791	1,932,684	2,120,155	2,325,810	2,551,413	2,798,901	3,070,394	3,368,222
Building Rental Expense	3,240,000	3,564,000	3,920,400	4,312,440	4,743,684	5,218,052	5,739,858	6,313,843	6,945,228	7,639,751
Indirect Electricity	499,503	538,963	581,541	627,483	677,054	730,542	788,254	850,526	917,718	990,218
Office vehicle running and maintenance cost	191,000	210,673	232,372	256,307	282,706	311,825	343,943	379,369	418,444	461,544
Office expenses (software, stationery, entertainment, janitorial services, etc.)	414,000	454,158	498,211	546,538	599,552	657,709	721,506	791,492	868,267	952,489
Promotional expense	1,454,340	1,667,868	1,937,438	2,407,404	2,774,325	3,762,030	4,298,135	4,941,948	5,822,442	6,422,153
Insurance expense	1,627,500	1,464,750	1,302,000	1,139,250	976,500	813,750	651,000	488,250	325,500	162,750
Professional fees (legal, audit, consultants, etc.)	-	-	_	-	_	-	_	_	-	-
Website Maintenance Cost	25,000	27,575	30,415	33,548	37,003	40,815	45,019	49,656	54,770	60,412
Depreciation expense	9,477,442	9,477,442	9,362,742	9,744,499	9,744,499	10,521,952	10,926,949	11,325,687	11,121,931	11,801,30
Amortization of pre-operating costs	145,265	145,265	145,265	145,265	145,265	-	-	-	-	-
Subtotal	25,438,050	26,726,003	28,075,698	30,254,382	32,093,278	35,344,293	38,091,182	41,131,212	44,015,813	47,733,66
Operating Income	8,424,821	12,343,976	17,670,567	27,702,808	34,947,777	58,037,349	68,578,989	81,508,430	100,759,721	110,948,47
Gain / (loss) on sale of office equipment							202,450			
Gain / (loss) on sale of office equipment	_	-	_	_	_	-	126,000	-	-	-
Earnings Before Interest & Taxes	8,424,821	12,343,976	17,670,567	27,702,808	34,947,777	58,037,349	68,907,439	81,508,430	100,759,721	110,948,47
Earnings Before Tax	8,424,821	12,343,976	17,670,567	27,702,808	34,947,777	58,037,349	68.907,439	81,508,430	100,759,721	110,948,47
rathings before 1ax	0,724,021	12,343,970	17,070,307	21,102,000	34,741,111	20,037,349	00,507,435	61,306,430	100,/39,/21	110,940,47
Tax	605,975	694,945	807,266	1,003,085	1,155,969	1,567,512	1,790,889	2,059,145	2,426,017	2,675,89
NET PROFIT/(LOSS) AFTER TAX	7,818,846	11,649,030	16,863,301	26,699,723	33,791,808	56,469,837	67,116,550	79,449,285	98,333,704	108,272,58



# 12.2. Balance Sheet

Calculations											SMED
Balance Sheet											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Yea
Assets	1 ear 0	1ear 1	1 ear 2	1ear 3	1ear 4	1 ear J	1ear o	lear/	1 ear o	1ear 9	16
Current assets											
Cash & Bank	2,000,000	15,460,301	28,808,475	39,463,722	56,206,361	59,627,205	80,269,115	98,964,779	121,436,844	141,542,718	205,782
Accounts receivable	2,000,000	15,400,501	20,000,473	39,403,722	30,200,301	39,027,203	60,209,113	30,304,773	121,430,644	141,342,710	200,70
Spare Parts Inventory	907.067	1,015,546	1,292,934	1,760,792	2,223,961	3,305,236		5,215,543	6,734,682	8,141,476	
•	807,967	297,000		359,370			4,138,766	526,154	578,769		
Pre-paid building rent	270,000		326,700	•	395,307	434,838	478,321		•	636,646	
Pre-paid insurance	1,627,500	1,464,750	1,302,000	1,139,250	976,500	813,750	651,000	488,250	325,500	162,750	205.70
Total Current Assets	4,705,467	18,237,597	31,730,109	42,723,135	59,802,128	64,181,029	85,537,202	105,194,726	129,075,794	150,483,590	205,78
ixed assets											
Land	-	-	-	-	-	-	-	-	-	-	
Building / Infrastructure- Renovation Cost	2,519,723	2,267,751	2,015,778	1,763,806	1,511,834	1,259,862	1,007,889	755,917	503,945	251,972	
Generators	47,200,000	42,480,000	37,760,000	33,040,000	28,320,000	23,600,000	18,880,000	14,160,000	9,440,000	4,720,000	
Air Conditioners	17,900,000	16,110,000	14,320,000	12,530,000	10,740,000	8,950,000	7,160,000	5,370,000	3,580,000	1,790,000	44,76
Business Vehicles	8,000,000	6,400,000	4,800,000	3,200,000	1,600,000	12,651,521	10,121,217	7,590,913	5,060,609	2,530,304	20,00
Allied Equipment	1,572,000	1,021,800	471,600	2,069,589	1,345,233	620,877	2,724,682	1,771,043	817,405	3,587,133	2,33
Furniture & fixtures	770,000	654,500	539,000	423,500	308,000	192,500	77,000	1,462,731	1,243,322	1,023,912	80
Office vehicles	504,000	428,400	352,800	277,200	201,600	126,000	50,400	1,046,385	889,427	732,469	57
IT Equipment	722,000	469,300	216,600	987,430	641,829	296,229	1,350,439	877,786	405,132	1,846,903	1,20
Office equipment	809,800	688,330	566,860	445,390	323,920	202,450	80,980	1,538,338	1,307,587	1,076,836	84
Security Against Building	810,000	810,000	810,000	810,000	810,000	810,000	810,000	810,000	810,000	810,000	81
Total Fixed Assets	80,807,523	71,330,081	61,852,638	55,546,915	45,802,416	48,709,439	42,262,608	35,383,113	24,057,425	18,369,530	71,34
Intangible assets											
Pre-operation costs	726,327	581,061	435,796	290,531	145,265	-	-	-	-	-	
Legal, licensing, & training costs	-	-	-	-	-	-	-	-	-	-	
Total Intangible Assets	726,327	581,061	435,796	290,531	145,265	-	-	-	-	-	
TOTAL ASSETS	86,239,316	90,148,739	94,018,543	98,560,580	105,749,810	112,890,467	127,799,810	140,577,838	153,133,220	168,853,120	277,125
Liabilities & Shareholders' Equity											
Current liabilities											
Total Current Liabilities											
Cotal Current Liabilities											
Other liabilities											
Total Long Term Liabilities	-	-	-	-	-	-	-	-	-	-	
Shareholders' equity											
Paid-up capital	86,239,316	86,239,316	86,239,316	86,239,316	86,239,316	86,239,316	86,239,316	86,239,316	86,239,316	86,239,316	86,23
Retained earnings	,,	3,909,423	7,779,227	12,321,264	19,510,494	26,651,151	41,560,494	54,338,522	66,893,903	82,613,804	190,88
Fotal Equity	86,239,316	90,148,739	94,018,543	98,560,580	105,749,810	112,890,467	127,799,810	140,577,838	153,133,220	168,853,120	277,12
TOTAL CAPITAL AND LIABILITIES	86,239,316	90,148,739	94,018,543	98,560,580	105,749,810	112,890,467	127,799,810	140,577,838	153,133,220	168,853,120	277,125



# 12.3. Cash Flow Statement

Calculations											SMEDA
Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year
Operating activities											
Net profit		7,818,846	11,649,030	16,863,301	26,699,723	33,791,808	56,469,837	67,116,550	79,449,285	98,333,704	108,272,58
Add: depreciation expense		9,477,442	9,477,442	9,362,742	9,744,499	9,744,499	10,521,952	10,926,949	11,325,687	11,121,931	11,801,30
amortization of pre-operating costs		145,265	145,265	145,265	145,265	145,265	-	-	· · · · ·	-	-
Spare Parts inventory	(807,967)	(207,580)	(277,388)	(467,858)	(463,168)	(1,081,275)	(833,530)	(1,076,777)	(1,519,139)	(1,406,794)	8,141,47
Pre-paid building rent	(270,000)	(27,000)	(29,700)	(32,670)	(35,937)	(39,531)	(43,484)	(47,832)	(52,615)	(57,877)	636,640
Advance insurance premium	(1,627,500)	162,750	162,750	162,750	162,750	162,750	162,750	162,750	162,750	162,750	162,750
Cash provided by operations	(2,705,467)	17,369,724	21,127,401	26,033,531	36,253,132	42,723,517	66,277,526	77,081,639	89,365,968	108,153,714	129,014,75
Financing activities											
Issuance of shares	86,239,316	_	_	_	_	_	_	_	_	_	_
Purchase of (treasury) shares											
Cash provided by / (used for) financing activities	86,239,316	-	-	-	-	-	-	-	-	-	
Investing activities											
Capital expenditure	(81,533,850)	_	_	(3,057,019)	_	(12,651,521)	(4,075,122)	(4,047,454)	_	(5,434,036)	(64,774,68
Acquisitions	( ,,)			(7.11,111)		( ,,)	( ,,)	(7,)		( ) = 1,1,	(-44
Cash (used for) / provided by investing activities	(81,533,850)	-	-	(3,057,019)	-	(12,651,521)	(4,075,122)	(4,047,454)	-	(5,434,036)	(64,774,684
NET CASH	2,000,000	17,369,724	21,127,401	22,976,512	36,253,132	30,071,995	62,202,404	73,034,186	89,365,968	102,719,677	64,240,07



# 13. KEY ASSUMPTIONS

## 13.1. Operating Cost Assumptions

**Table 39: Operating Cost Assumptions** 

Description	Details
Building rent growth rate	10%
Furniture and fixture depreciation	15%
Vehicle depreciation	15%
Office equipment depreciation	15%
Inflation rate	10.3%
Wage growth rate	9.7%
Electricity price growth rate	7.9%
Office equipment price growth rate	9.6%
Office vehicle price growth rate	11%

# 13.2. Revenue Assumptions

**Table 40: Revenue Assumptions** 

Description	Details
Sale price growth rate	10.3%
Initial capacity utilization	50%
Capacity growth rate	5%
Maximum capacity utilization	90%

# 13.3. Financial Assumptions

**Table 41: Financial Assumptions** 

Description	Details
Project life (Years)	10
Debt: Equity	0:100
Discount Rate used for NPV	25%



# 13.4. Debt related Assumptions

**Table 42: Debt Related Assumptions** 

Description	Details
Project life (Years)	10
Debt: Equity	0:100
Discount Rate used for NPV	22%
Debt Tenure	5 years
Grace Period	1 Year
Interest Rate (KIBOR+3%)	19%

# 13.5. Cash Flow Assumptions

**Table 43: Cash Flow Assumptions** 

Description	Details
Accounts Receivable Cycle (in days)	0
Accounts Payable Cycle (in days)	0



# Small and Medium Enterprises Development Authority HEAD OFFICE

4th Floor, Building No. 3, Aiwan-e-Iqbal Complex, Egerton Road, Lahore Tel: (92 42) 111 111 456, Fax: (92 42) 36304926-7

www.smeda.org.pk, helpdesk@smeda.org.pk

REGIONAL OFFICE	REGIONAL OFFICE	REGIONAL OFFICE	REGIONAL OFFICE
PUNJAB	SINDH	KPK	BALOCHISTAN
3 <sup>rd</sup> Floor, Building No. 3,	5 <sup>TH</sup> Floor, Bahria	Ground Floor State Life Building The Mall, Peshawar. Tel: (091) 9213046-47 Fax: (091) 286908 helpdesk-pew@smeda.org.pk	Bungalow No. 15-A
Aiwan-e-Iqbal Complex,	Complex II, M.T. Khan Road,		Chaman Housing Scheme
Egerton Road Lahore,	Karachi.		Airport Road, Quetta.
Tel: (042) 111-111-456	Tel: (021) 111-111-456		Tel: (081) 831623, 831702
Fax: (042) 36304926-7	Fax: (021) 5610572		Fax: (081) 831922
helpdesk.punjab@smeda.org.pk	helpdesk-khi@smeda.org.pk		helpdesk-qta@smeda.org.pk