



ISSN 0971-7463
POSTAL LICENSE DL (N)/114/2021-2023
U(DN) 154/2021-2022

Entrepreneur India



R.N.I. NO. 61509/95

AN ISO 9001-2015 CERTIFIED COMPANY

www.entrepreneurindia.co

₹ 20/-

An Industrial Monthly Journal on

INDUSTRIAL DEVELOPMENT, TECHNOLOGIES & PROJECT OPPORTUNITIES

Vol. 28

No. 05

May 2022

16 Pages

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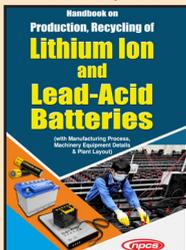
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About Us

NPCS is a well-known technical consultancy that focuses on Project Reports Compilation, and we have been following a tight system and procedure to assure only top quality in accordance with our clients' expectations in this rapidly increasing and changing market. We've created the list of the top projects to start your own business startups.

Handbook on Production, Recycling of Lithium Ion and Lead-Acid Batteries (with Manufacturing Process, Machinery Equipment Details & Plant Layout)

₹2995/- \$250-



India is one of the world's largest battery manufacturers. Furthermore, there is an increase in global demand for batteries, and Indian battery producers are preparing to satisfy this need. The Indian battery sector has grown by 25% year over year and is expected to increase even more in the future. Batteries, such as Sealed Maintenance Free (SMF), lead-acid, or lithium-ion batteries, now power virtually everything else on the world.

The global battery market was worth USD 108.4 billion and is predicted to increase at a CAGR of 14.1%. The increasing demand from the automotive application is responsible for the market's rise. Rechargeable batteries are utilised in non-rechargeable batteries and electric vehicles in the automobile industry. The rising global popularity of consumer electronics is expected to increase the use of lithium-ion batteries as a product category. Portable electronics, such as LCD displays, smartphones, tablets, and

wearable devices like fitness bands, are in high demand, increasing market growth. Because of technical developments in terms of increased efficiency, cost-effectiveness, and product innovation, the market is predicted to rise significantly. Battery demand is likely to be driven by strict emission requirements imposed by government agencies in industrialized countries such as the United States and the United Kingdom, as well as an increasing focus on fuel efficiency.

The demand for lithium-ion batteries is predicted to increase by more than 500 percent in the future. Many predictions suggest that demand will outpace supply, virtually assuring a price increase. All of the businesses in this field have unique opportunities to invest in the future of energy storage and transportation.

The global lithium-ion battery market size was valued at USD 53.6 billion and is expected to grow at a compound annual growth rate (CAGR) of 19.0%. The market's expansion can be ascribed to the rising demand for lithium-ion batteries in electric vehicles (EVs) and grid storage, since they provide high-energy density and lightweight solutions. The market size is expected to grow due to an increase in the registration of electric vehicles.

The global lead-acid battery industry is growing significantly

across the globe and it is likely to register a CAGR of 5.2% during the forecast period. Growing SLI applications in the automobile sector, increase in renewable energy output, and rising demand for energy storage devices are some of the causes driving up demand for lead-acid batteries. As the telecom industry expands in nations like the United States, Brazil, India, and the United Kingdom, there is a growing demand for UPS systems as a backup power source, resulting in a higher usage of lead-acid batteries as a cost-effective energy source.

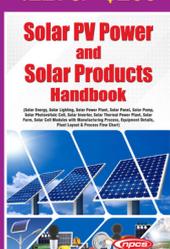
The book covers a wide range of topics connected to Batteries, as well as their manufacturing processes. It also includes contact information for machinery suppliers, as well as images of equipments.

A complete guide on Production, Recycling of Lithium Ion and Lead-Acid Batteries manufacture and entrepreneurship. This book serves as a one-stop shop for everything you need to know about the Battery manufacturing industry, which is ripe with opportunity for manufacturers, merchants, and entrepreneurs. This is the only book that covers Production, Recycling of Lithium Ion and Lead-Acid Batteries in depth. From concept through equipment procurement, it is a veritable feast of how-to information.

Solar PV Power and Solar Products Handbook

(Solar Energy, Solar Lighting, Solar Power Plant, Solar Panel, Solar Pump, Solar Photovoltaic Cell, Solar Inverter, Solar Thermal Power Plant, Solar Farm, Solar Cell Modules with Manufacturing Process, Equipment Details, Plant Layout & Process Flow Chart)

₹2275/- \$200-



Solar energy is expanding worldwide and becoming an increasingly important part of the energy mix in many countries. Solar energy is used all over the world, but in terms of total installed solar capacity, India, China, Japan, and the United States are now top of the world. Solar panels can create power almost anywhere on the planet. However, some regions receive more sunshine than others and hence have a greater solar energy potential. It is based on insolation, which is a measurement of how much solar radiation reaches a specific area on the earth's surface.

Solar energy can be captured in a variety of ways. Photovoltaic solar panels are the most frequent method. Photovoltaic (PV) devices use semiconductors to generate power directly from sunlight. Photons impact and ionize semiconductor material on the solar panel as the silicon photovoltaic solar cell absorbs solar energy, causing electrons

to break free of their atomic bonds. A flow of electrical current is created when electrons are compelled to move in one direction. Only a portion of the light spectrum is absorbed, while the rest is reflected, too faint (infrared), or generates heat rather than electricity (ultraviolet). Concentrated solar power is the second type of solar energy technology (CSP). Solar thermal energy is used in CSP facilities to create steam, which is subsequently turned into electricity via a turbine.

The global solar energy installed capacity is estimated to reach 1,645 gigawatts (GW), registering a CAGR is 13.78%. The growth of the solar energy market is driven by an increase in environmental pollution and the provision of government incentives & tax rebates to install solar panels. In addition, a decrease in water footprint associated with solar energy systems has fueled their demand in power generation sectors. The demand for solar cells has gained major traction owing to a surge in rooftop installations, followed by an increase in applications in the architectural sector. Furthermore, the demand for parabolic troughs and solar power towers in electricity generation is expected to boost the demand for concentrated solar power systems.

Only the two commonly recognized kinds of technology for

converting solar energy into electricity — photovoltaics (PV) and concentrated solar power (CSP, also known as solar thermal) — are considered in their current and possible future forms in The Future of Solar Energy.

Expanding the solar sector considerably from its current small size may result in developments that no one can predict right now. Solar deployment in the future will be highly influenced by uncertain future market conditions and public policies, including but not limited to measures aimed at mitigating global climate change.

The book covers a wide range of topics connected to Solar, as well as their manufacturing processes. It also includes contact information for machinery suppliers, as well as images of equipment.

A complete guide on Solar PV Power and Solar Products manufacture and entrepreneurship. This book serves as a one-stop-shop for everything you need to know about the Solar, which is ripe with opportunities for manufacturers, merchants, and entrepreneurs. This is the only book that covers Solar PV Power and Solar Products in depth. From concept through equipment procurement, it is a veritable feast of how-to information.

Setup Wheat Processing Unit

(Wheat Starch, Vital Wheat Gluten, Modified Starches, Fibres & Proteins)

A wheat processing unit is a piece of machinery that is used to turn wheat into starchy foods like white flour, pasta, and pastries. Vital wheat gluten, which has a high protein content and is utilised in many gluten-free goods, can also be made from processed wheat. Additional qualities, such as a thicker texture or a richer colour, can be added to processed wheat and utilised in ice cream and cake mixes.

Advantages of Setting up Wheat Processing Unit:

In addition to storing raw grains, wheat processing machines

are utilised for a variety of food manufacturing processes. Steel, aluminium, and plastic are some of the materials that can be used to make these wheat processing units. They are used to keep dry fruits and other consumables free of moisture in addition to storing grains. Additionally, these wheat processing technologies assist in the separation of damaged grains from excellent grains, eliminating waste from low-quality grains or crops. They also help to keep insects away from stored goods, which could cause damage otherwise. Apart from these benefits,

PROJECT COST ESTIMATE

CAPACITY:	
<i>Wheat A-Starch</i>	: 138 MT/Day
<i>Wheat B-Starch</i>	: 24 MT/Day
<i>Vital Wheat Gluten</i>	: 33 MT/Day
<i>Modified Starches</i>	: 30 MT/Day
<i>Fibres</i>	: 56 MT/Day
<i>Proteins</i>	: 12 MT/Day
Plant & Machinery	: ₹ 72 Cr
Cost of Project	: ₹103 Cr
Rate of Return	: 26%
Break Even Point	: 44%

wheat processing equipment can be customised to match the needs and specifications of unique consumers.

The market is estimated to increase at a CAGR of 3.1 percent between 2022 and 2027 as a consequence of the aforementioned factors. A key driver of the global Wheat starch market is the rising demand for wheat starch as a stabilising and gelling agent in numerous end-use industries. Wheat starch is a thickening ingredient used in a wide variety of meals. Gelatinization and retrogradation thicken dishes using wheat starch.

Business Plan for Setting up Automated Vehicle Scrapping and Recycling Unit

The deconstruction of automobiles for spare parts is known as vehicle recycling. Vehicles have value as a source of replacement components as they reach the end of their useful lives, which has given rise to the car dismantling industry. Commercial outlets in the business are often referred to as "wrecking yards," "auto dismantling yards," "vehicle replacement parts providers," and, more recently, "auto or vehicle recycling." Vehicle recycling has been a part of the process for a long time, but manufacturers have been more active in recent years. Before transferring a discarded car to a steel mill, a crusher is typically used to reduce its size.

In India, what is the scope of vehicle recycling?

India, being the world's third-largest steel producer, offers enormous potential for vehicle recycling. Because it is mostly unorganised, auto recycling in India can provide a variety of benefits to the country, ranging from a boost to the automotive sector to fuel savings and job

creation. The recycling business is placing a significant wager on the government's efforts. It is expected to produce business of USD 2.9 billion (roughly INR 190 billion) at first, based on 25% (7 million vehicles) of all automobiles that might be thrown. In the future years, these figures

PROJECT COST ESTIMATE

CAPACITY:	
<i>Spare Parts</i>	: 188 Units Per Day
<i>Waste Oil</i>	: 225 Units Per Day
<i>Waste Tyre</i>	: 1,125 Units Per Day
<i>Engines</i>	: 25 Units Per Day
<i>Steel Scrap</i>	: 30,000 Units Per Day
<i>Rubber Scrap</i>	: 100 Units Per Day
<i>Alloy Wheel</i>	: 125 Units Per Day
<i>Battery</i>	: 750 Units Per Day
Plant & Machinery	: ₹ 3 Cr
Cost of Project	: ₹ 25 Cr
Rate of Return	: 30%
Break Even Point	: 40%

are likely to rise.

Market Predictions:

In 2020, the worldwide car recycling market is expected to be worth \$20.6 billion. Between 2021 and 2026, the market is estimated to increase at a CAGR of 5.1 percent.

Lead Production

(Litharge, Refined Lead, Red Lead & Grey Lead)

Lead is a relatively soft metal with bluish-white lustre but on exposure to air, it becomes covered by a dull, gray layer of basic carbonate that adheres closely and protects it from further oxidation or corrosion. It is an important component of batteries, and about 75% of the world's lead production is consumed by the battery industry. Lead is also commonly used in glass and enamel.

India Lead Acid Battery Market is projected to grow at a CAGR of over 9% during 2018-24. India lead acid battery market is projected to reach \$ 7.6 billion by 2023. Anticipated growth in the market can be attributed to booming demand for automobiles, in addition to increasing

PROJECT COST ESTIMATE

CAPACITY:	
<i>Litharge</i>	: 960 MT/Annum
<i>Refined Lead</i>	: 1800 MT/Annum
<i>Red Lead</i>	: 440 MT/Annum
<i>Grey Lead</i>	: 525 MT/Annum
Plant & Machinery	: ₹ 82 Lakhs
Cost of Project	: ₹ 361 Lakhs
Rate of Return	: 31%
Break Even Point	: 54%

focus of the government towards boosting the penetration of electric vehicles in the country. Entrepreneurs who invest in this project will be successful.

E-Waste & Lithium Battery Recycling Plant

Electronic Waste – or e-waste – is the term used to describe old, end-of-life electronic appliances such as computers, laptops, TVs, DVD players, mobile phones, mp3 players etc. Technically, electronic "waste" is the component which is dumped or disposed or discarded rather than recycled, including residue from reuse and recycling operations.

Recycling of used lithium batteries has primarily focused on extracting active metal cobalt (Co) and lithium (Li).

According to E-Waste Market in India 2015-2019 research, the need to prevent biological hazards is one of the major trends upcoming in this market. Indians become richer and spend more on electronic items and

appliances, computer equipment accounts for almost 70% of e-waste material, followed by telecommunication equipment (12%), electrical equipment (8%) and medical equipment (7%). Other equipment, including household account for the remaining 4%. As a whole any entrepreneur can venture in this project without risk and earn profit.

PROJECT COST ESTIMATE

CAPACITY	
E-Waste & Lithium Battery Recycling Plant	: 20 MT/Day
Plant & Machinery	: ₹ 225 Lakhs
Cost of Project	: ₹ 540 Lakhs
Rate of Return	: 26%
Break Even Point	: 59%

3 -Chloropivaloyl Chloride Manufacturing Business Plan

The hazardous yellow or orange liquid 3-chloropivaloyl chloride has a horrible odour. In addition to being utilised as an intermediate in chemical synthesis, it has been used in research applications for DNA modification. When inhaled or absorbed through the skin, 3-chloropivaloyl chloride is flammable, moisture and oxygen sensitive, and dangerous. 3-Chloropivaloyl chloride is used as an intermediate in the organic synthesis of medicines and agrochemicals. Antibiotic properties can be found in the chemical. It can be used to make furfural, picolinic acid, methanol chlorohydroxide, alpha

PROJECT COST ESTIMATE	
CAPACITY	
3-Chloropivaloyl Chloride	: 4 MT Per Day
Hydrochloric Acid (30%) -by product	: 3 MT Per Day
Plant & Machinery	: ₹ 252 Lakhs
Cost of Project	: ₹ 686 Lakhs
Rate of Return	: 27%
Break Even Point	: 62%

acetylsalicylic acid (aspirin), 3-chloro acetic acid, and paratoluenesulfonic acid. It's also a precursor to pesticides such as aldrin, dieldrin, endosulfan, and lindane. It's also utilised in the manufacture of perfumes like rose oxide and civetone. It is also utilised in the production of pesticides such as fenitrothion.

India's demand for acid chlorides is predicted to grow at a CAGR of more than 8% between 2020 and 2024. The Indian market is expected to grow substantially throughout the forecast period due to rapidly increasing population and urbanisation.

Start

Lovastatin Production business (from Dextrose, Peptone Powder, Sugar & Soybean)

Lovastatin is a medicine that helps to prevent strokes and heart attacks by lowering harmful cholesterol and lipids. Lovastatin is a statin medicine that reduces the risk of heart attack and stroke by lowering bad cholesterol and fats like LDL and triglycerides while retaining good cholesterol in the blood.

Lovastatin is a methoxylated carbocyclic framework fatty acid ester of mevastatin. It's an anticholesteremic medication found in fungus species including *Aspergillus terreus* and *Pleurotus ostreatus* (oyster mushroom).

PROJECT COST ESTIMATE

Capacity	: 240 MT Per Annum
Plant & Machinery	: ₹ 12 Cr
Cost of Project	: ₹ 27 Cr
Rate of Return	: 27%
Break Even Point	: 43%

Due to rising demand for statin drugs, the worldwide Cholesterol Lowering Medications Market is estimated to rise during the forecast period. Based on medicine class, the cholesterol-lowering pharmaceuticals sector is classified into statins and combinations, as well as others. Because of its improved effectiveness and lower costs, this pharmaceutical class is likely to dominate during the projection period.

A major portion of the market is expected to come from the Asia Pacific region. This is due to a growth in healthcare knowledge, research, and government activities in the healthcare industry, all of which are contributing to the creation of jobs in the region.

How to Setup Plastic Waste Recycling Plant

A Plastic Waste Recycling Plant (sometimes called a Plastic Recovery Facility) is an industrial facility that recycles and reuses plastic waste. Some companies are even capable of recycling some types of plastic into new resin pellets. If you're looking to start a business, there's never been a better time to get involved in plastic recycling in some way. More details on how to do so can be found further down.

Benefits of Recycling Plastics

Plastic recycling has a number of benefits, including energy savings and lower greenhouse gas emissions. It also contributes to the conservation of nonrenewable resources such as oil and gas. Furthermore, whether through legal or informal economic activity, recycling provides a source of income for millions of people and families in disadvantaged countries.

Despite the fact that plastics consumption is fast increasing in developing nations, particularly due to increased demand for plastics from Asia, developing country plastic consumption per capita is significantly lower than in developed countries. Recycling, on the other hand, has a far greater use in developing countries for a variety of reasons:

Despite increased global competition brought on by lower customs rates, India's sector has risen at a rate of over 11% per year, compared to global growth of 3 to 4%. Growth has slowed to a more secular pattern in recent years. Between 2002 and 2007, output increased at a 5.5 percent annual rate, whereas consumption increased at a 5.6 percent annual rate. In 2007-08, the industry saw a slight decrease in output.

PROJECT COST ESTIMATE

CAPACITY:	
Recycled PP Granules	: 1,250 Kgs Per Day
Recycled LDPE Granules	: 1,250 Kgs Per Day
Recycled HDPE Granules	: 1,250 Kgs Per Day
Recycled Derlin Granules	: 1,250 Kgs Per Day
Plant & Machinery	: ₹ 132 Lakhs
Cost of Project	: ₹ 401 Lakhs
Rate of Return	: 28%
Break Even Point	: 60%

Start

Quartz Slabs Manufacturing Business

Because quartz is one of the most abundant and hardest minerals on the planet, it's "hardly" surprising that manufacturers recognised its great potential as a surface material more than 50 years ago. Since then, quartz countertops have grown in popularity as homeowners have discovered what the early quartz pioneers already knew: when the natural mineral quartz is improved via man's ingenuity, quartz worktops can compete with other natural stone counters in every way.

India is on the verge of tremendous urbanisation in the coming decades. By 2050, India's urban population is expected to be approximately 81 crore, with over one crore people moving to cities. The socioeconomic diversity of India's population is reflected in the country's housing. Due to demographic changes, higher income, an increase in the share of nuclear families, and urbanisation, the housing sector in the country has grown rapidly in the last decade.

With a 4.9 percent annual growth rate from 2018 to 2025, the worldwide kitchen countertop quartz market is predicted to reach US\$ 135.47 billion by the end of 2025, up from US\$ 92.93 billion in 2017.

The residential sector is anticipated to be worth over US\$ 40,900 million in 2026. From 2017 to 2026, this amounts to a 4.6 percent compound annual growth rate (CAGR). The residential category is expected to lose market share by the end of 2026.

PROJECT COST ESTIMATE

Capacity	: 250 Nos. Per Day
Plant & Machinery	: ₹ 16 Cr
Cost of Project	: ₹ 32 Cr
Rate of Return	: 27%
Break Even Point	: 49%

How to Start Surgical Cotton Manufacturing Business

In certain circumstances, surgical cotton is referred to as "cotton wool" or "absorbent cotton." Cotton that has been cleansed, de-oiled, and bleached is packed in various sizes as surgical/absorbent cotton. Because surgical/absorbent cotton comes into close touch with the human body, it must be of the highest quality and adhere to all pharmaceutical laws.

Surgical cotton is widely used for medical purposes in hospitals, clinics, health centres, and pharmacies. It's also utilised in beauty salons, businesses, and homes for a multitude of functions. Cotton that is surgical or absorbent is used for sanitary purposes, surgical procedures, and everyday use. It is most commonly required by women during their monthly menstrual period. It's utilised for more than just dressing; it's also used to cushion clothing, comforters, and other objects.

A growth in the prevalence of chronic diseases, procedures, and therapies, as well as wound dressings and other wound care products. The global market for medial absorbent cotton is expected to expand in the future.

North America leads the global medical absorbent cotton market in terms of revenue, followed by Europe and Asia Pacific. The global medical absorbent cotton market is predicted to be driven by growth in the healthcare sector, which will be accompanied by an increase in the number of hospitals and clinics, as well as geographic expansion by companies in the pharmaceuticals, cosmetics, and sanitary goods industries.

PROJECT COST ESTIMATE

Capacity : 1000 Kgs. Per Day
Plant & Machinery : ₹ 358 Lakhs
Cost of Project : ₹ 568 Lakhs

Sodium Hypochlorite Manufacturing

Sodium hypochlorite is the active ingredient in chlorine bleach, a potent oxidant and bleaching agent (NaClO). Population growth is to blame for the majority of the increase in home bleach use. Water treatment is the most prevalent and fastest-growing application for bleach, owing to population development and accompanying increases in water consumption, as well as limited fresh water resources.

Because of its application in wastewater treatment, household

PROJECT COST ESTIMATE

Capacity : 4500 MT Per Annum
Plant & Machinery : ₹ 55 Lakhs
Cost of Project : ₹ 214 Lakhs
Rate of Return : 27%
Break Even Point : 60%

cleaning products, textiles, and the chemical sector, the market for sodium hypochlorite is estimated to reach USD 205 million in 2020, with a CAGR of roughly 5.5 percent between 2022 and 2027. The market is expected to grow

as sodium hypochlorite becomes more popular as a bleach and disinfectant in water treatment and household hygiene products.

Sodium hypochlorite has been commonly used in textile finishing for over two centuries. Preshrinking wool with sodium hypochlorite is currently a common practise in the textile industry. In former applications such as cotton whitening, stonewashing jeans, and coloured textile decolorization, other chemicals have mostly replaced sodium hypochlorite.

Ethyl Acetate Production Business

The molecule ethyl acetate (also known as EtOAc or EA) is a colourless organic ester with the formula C4H8O2 (usually written as EtOAc or EA). It is frequently used as a cleaning, paint removal, and coatings solvent since it is significantly miscible with all common organic solvents (alcohols, ketones, glycols, esters). Alcoholic beverages, cereal crops, radishes, fruit juices, beer, wine, and spirits all contain ethyl acetate.

The chemical industry, for example, uses ethyl acetate and other solvents in a variety of industrial operations. Solvent demand is always on the rise due to its vast range of applications. The importance of so-called "green chemistry" (non-toxic chemicals for the environment and living beings) is becoming more apparent as rules on dangerous pollutant emissions from manufacturing processes become more stringent.

PROJECT COST ESTIMATE

Capacity : 7200 MT Per Annum
Plant & Machinery : ₹ 11 Cr
Cost of Project : ₹ 17 Cr
Rate of Return : 25%
Break Even Point : 49%

As a result, common solvents must have a lower impact on human health and the environment. Ethyl acetate has a low toxicity level and is also biodegradable. The market demand for this "green chemistry" product has soared as a result of these benefits. Sustainable development and solid engineering practise are driven by decreased energy and utility consumption, as well as lower waste output and a closed-cycle economy.

Badminton Rackets Manufacturing Business

Badminton rackets manufacturing is a company that helps people learn to play badminton and provides them with the essential equipment. However, because beginning a Badminton Rackets manufacturing business from the ground up can be difficult, learning how to start your own Badminton Rackets manufacturing business may make sense if you are interested in this field. We'll go over some of the options for getting started.

A racket, or racquet, is used to strike a shuttlecock in games such as squash, badminton, racquetball,

badminton, and padel. A racket is a handled frame with an open hoop across which a network of strings is stretched firmly in its most basic form.

Badminton is a popular sport in other parts of Europe and the United States, but its financial potential is limited due to its small population base.

The market will not grow much in a short period of time, despite the good development trend. The global badminton racket market was valued

\$580 million in 2018 and is predicted to reach \$980 million by 2025, with a CAGR of 6.7 percent from 2019 to 2025.

PROJECT COST ESTIMATE

Capacity : 1000 Pcs Per Day
Plant & Machinery : ₹ 81 Lakhs
Cost of Project : ₹ 353 Lakhs
Rate of Return : 30%
Break Even Point : 64%

Setup Curcumin Extraction Unit

Turmeric is a golden spice derived from the rhizomes of Curcuma longa, a member of the ginger family (Zingiberaceae). It is widely utilised in India for a variety of purposes, including health, food preservation, and textile dyeing. Underground horizontal stems that develop roots and branches are known as rhizomes. Curcumin's market exceeded USD 70 million in 2020, with a CAGR of more than 11% expected between 2021 and 2027. Curcumin is a substance that is often used to treat cancer, Alzheimer's disease, and other serious illnesses. It's also used to treat cancer, arthritis, and viral infections, so the pharmaceutical sector will continue to want it. Curcumin's anti-inflammatory and antioxidant

properties, as well as its use in ayurvedic medical formulations, will increase demand for curcumin-based nutritional supplements. Curcumin's

PROJECT COST ESTIMATE

Capacity:
Curcumin Powder : 100 Kgs Per Day
Turmeric Oil : 48 Kgs Per Day
Deoiled Turmeric : 1,842 Kgs Per Day
Plant & Machinery : ₹ 215 Lakhs
Cost of Project : ₹ 493 Lakhs
Rate of Return : 27%
Break Even Point : 64%

benefits in decreasing depression, metabolic syndrome, and cholesterol management are expected to drive market growth throughout the forecast period.

Rice Husk based Biodegradable Cutlery Making Plant

Early adopters of biodegradable cutlery, which has emerged as a preferred alternative to plastics, can be found all over the world. Bagasse, rice husk, coconut coir, and other plant biomass resources are being used to make environmentally friendly cutlery, tableware, and packaging products that are expected to gain prominence in the future decade.

Rice husk is a surprise tough material that can resist a lot of abuse and lasts a long time. Rice husk cutlery is one of the most durable biodegradable silverware solutions, withstanding temperatures of above 100°C without harm. This reusable tableware's smooth, shiny surface is made completely of natural wax produced from rice husks.

PROJECT COST ESTIMATE

CAPACITY

Biodegradable Cutlery (Per Set 6 Pcs. Flatware)	: 1,852 Sets Per Day
Plant & Machinery	: ₹ 28 Lakhs
Cost of Project	: ₹ 222 Lakhs
Rate of Return	: 27%
Break Even Point	: 52%

The rise of the biodegradable cutlery industry has been aided by the increasing prevalence of e-commerce in various sectors of these emerging nations. In 2018, the global biodegradable cutlery market was valued USD 33.9 million, and it is expected to increase at a 5.9% CAGR from 2019 to 2025.

The increased public awareness of the negative effects of non-biodegradable rubbish is predicted to enhance market growth. The government has made non-biodegradable plastic illegal, with rigorous regulations in place. Government initiatives to support the industry, as well as increased public awareness of the dangers of non-biodegradables, are likely to fuel growth.

Start Production Business of Industrial Enzymes used in Textile, Poultry and Paper Pulp Industries

Enzymes are excellent catalysts because they are very selective and may be used in a number of situations. By combining the right enzymes with genetic engineering, enzyme companies have created proteins that can work in harsh process settings including those involving solvents, salts, and high temperatures. The global market for industrial enzymes is currently worth \$1.8 billion per year and growing at a rate of more than 20% per year.

Industrial enzymes are used in a variety of industries, such as pharmaceuticals, chemical manufacture, biofuels, food and beverage, and consumer goods. Thanks to recent advancements, biocatalysis employing isolated enzymes is currently considered more cost-effective than using complete cells.

The bio industrial industry in India, which is mostly made up of enzyme companies, contributes about 5% of the country's GDP and is valued at Rs. 3,950 million, with a 5.33 percent growth rate. Novozyme, India's market leader for industrial enzymes, is constructing a new R&D centre in Bengaluru. The United States, Canada, and China continue to supply India with 70% of its enzyme needs.

PROJECT COST ESTIMATE

Capacity	: 300 MT Per Annum
Plant & Machinery	: ₹ 633 Lakhs
Cost of Project	: ₹ 959 Lakhs

Growing enzyme use in existing application areas, enzyme use in new industrial processes, strict enforcement of environmental rules, and cost savings were all major drivers of this sector's rise in India.

Industrial enzymes had a market value of USD 4.61 billion in 2016, and it is predicted to grow at a CAGR of 5.8% from 2017 to 2022. Thanks to the country's booming food processing, tannery, and textile manufacturing industries, India's industrial enzymes market is predicted to approach US\$ 361 million by 2020.

Set up NPK Complex Organic Fertilizer Plant

Fertilizers are soil additions that help plants develop more quickly. Nitrogen, phosphorous, and potassium are the most common nutrients in fertilisers, with other elements being added in smaller amounts. In terms of weight, macronutrients such as nitrogen (N), phosphorus (P), and potassium (K) are the most significant nutrients for plants (i.e. NP-K).

India's principal agricultural products include pulses, wheat, rice, peanuts, potatoes, and onions. As a result of the country's ongoing population growth and rising need for food crops, the demand for fertilisers

PROJECT COST ESTIMATE

Capacity	: 12 MT Per Day
Plant & Machinery	: ₹ 114 Lakhs
Cost of Project	: ₹ 417 Lakhs
Rate of Return	: 25%
Break Even Point	: 53%

has increased. As a result of expanding urbanisation and diminishing arable land, Indian farmers are aggressively adopting fertilisers to enhance their production. Furthermore, the Indian government is pursuing measures and offering subsidies through KrishiVigyan Kendra (KVKs) to create high-quality seeds and cluster frontline

demonstrations, which is driving up demand for fertilisers. The National Food Security Mission (NFSM), for example, is boosting food productivity through a number of projects.

They also reduce the need for fertiliser imports, making it easier for India to create its own. Furthermore, governments are assisting farmers through a range of schemes and the introduction of new technology to manufacture better fertilisers at reduced prices, which is positively boosting market growth. During the following five years, the market is expected to grow at a CAGR of 4.8 percent (2022-2027).

Pre-Feasibility Report for Production Linear Alkyl Benzene Sulphonic Acid

Linear alkyl benzene sulphonic acid is the most extensively used synthetic surfactant due to its inexpensive cost, good performance, ability to be dried to a stable powder, and biodegradable environmental friendliness. An anionic surfactant, LAB Sulphonic Acid is extensively used in the manufacturing of household detergent powders, cake and dishwashing cleaners. Linear alkyl benzene sulfonic acids are complex mixtures of homologues of different alkyl chain lengths (C10 to C13 or C14) and phenyl positional isomers of 2 to 5-phenyl in proportions

PROJECT COST ESTIMATE

Capacity	: 60 MT Per Day
Plant & Machinery	: ₹ 550 Lakhs
Cost of Project	: ₹ 5190 Lakhs
Rate of Return	: 27%
Break Even Point	: 58%

dictated by the starting materials and reaction conditions, each containing an aromatic ring sulfonated at the para position and attached to a linear alkyl chain at any position except the terminal one (1-phenyl).

The global Linear Alkyl Benzene

Sulphonic Acid market was valued at USD 3606.9 million in 2020, and it is expected to grow at a CAGR of 3.5 percent from 2021 to 2027, reaching USD 4601.4 million by 2027.

There are two forms of LABSA: LABSA 96 percent and LABSA 90 percent. As a result of LABSA's washing function, downstream application industries will require more LABSA goods. As a result, LABSA has a large market potential in the future. Manufacturers are attempting to enhance technologies in order to create LABSA with high purity and performance.

Production of Stainless Steel Cold Rolled Coil using Stainless Steel Scrap

Cold rolling is a work hardening treatment for stainless steel that is widely used to alter the metal's structure. Cold rolled stainless steel is utilised as a raw material in a variety of medical, aerospace, and automotive applications. Continue reading to learn more about cold rolled steel, including what it is, how it is manufactured, and what applications it can serve.

Cold rolling steels' primary purpose is to reduce the thickness of hot rolled steel strips (usually 1.5 mm to 5 mm) to thinner thicknesses (normally 0.12 mm to 2.5 mm) that are impossible to achieve in a hot strip mill.

Cold rolling is used to improve

the surface polish of steels, improve thickness tolerances, provide a variety of 'tempers,' improve physical attributes, and prepare the strip for surface coating, among other things.

The worldwide steel strips market has been significantly fragmented as a result of the strong presence of multinational corporations around the world, as well as the existence of a large number of local and regional market competitors. Because of the increasing growth of end-user sectors in Asia Pacific, such as construction and consumer goods, the region is expected to consume a large amount of the stainless strips market.

PROJECT COST ESTIMATE

CAPACITY :

Stainless Steel 202 Series Strip Coil (0.02 mm to 3 mm) : 140.0 MT Per Day

Stainless Steel 304 Series Strip Coil (0.02 mm to 3 mm) : 100.0 MT Per Day

Stainless Steel 405 Series Strip Coil (0.02 mm to 3 mm) : 93 MT Per Day

Plant & Machinery : ₹ 24 Cr

Cost of Project : ₹ 83 Cr

Rate of Return : ₹ 28%

Break Even Point : ₹ 47%

Tennis Rackets Manufacturing Business

During a game of tennis, a tennis racquet is used to hit a ball. As sports become increasingly vital in controlling body metabolism and developing physical strength, tennis is projected to rise in popularity among health-conscious people.

and production have changed tremendously.

Between 2020 and 2030, the tennis racket market is estimated to reach a value of over US\$ 700 million, rising at a CAGR of 3.5 percent. The tennis racket market has had a historical CAGR of about 1% during the period (2015-2019), and is predicted to reach a valuation of US\$ 214 million by 2030, thanks to modest growth in mature nations such as North America and Europe.

The tennis equipment industry is being driven by the growing popularity of tennis around the world. Tennis has grown in popularity around the world as a result of an increase in tournaments and promotional initiatives.

PROJECT COST ESTIMATE

Capacity : 400 Pcs Per Day

Plant & Machinery : ₹ 81 Lakhs

Cost of Project : ₹ 345 Lakhs

Rate of Return : 30%

Break Even Point : 65%

A racket is a sport that consists of a handled frame and an open hoop across which a network of strings or catgut is stretched taut. In sports like tennis, it's used to hit a ball. Over the years, racket design

Start Production of Paracetamol (BP/IP/USP Grade)

India is the world's top supplier of generic pharmaceuticals. The Indian pharmaceutical industry supplies more than half of global demand for vaccines, 40% of generic demand in the United States, and 25% of all pharmaceuticals in the United Kingdom. Around 70% of India's need for bulk pharmaceuticals, drug intermediates, pharmaceutical formulations, chemicals, tablets, capsules, orals, and injectable is met by the pharmaceutical industry.

Paracetamol Powder's Applications: Fever, Discomfort relief, Osteoarthritis, Lower Back Pain, Headache, Swiss, Toothache, Menstrual Period Pain, Cold/Flu Pain

During the forecast period, India's paracetamol market is expected to rise at

a rapid pace. The extensive usage of paracetamol as a first-line treatment for pain and fever relief drives the paracetamol market in India. Additionally, the drug's broad use in COVID-19 patients to reduce various symptoms of cold, cough, and fever is predicted to drive market growth through FY2026. By 2025, the Indian pharmaceutical sector is estimated to be worth US\$ 100 billion, while the medical device market would be worth US\$ 25 billion. In FY20, India's pharmaceutical exports totaled US\$ 16.3 billion.

PROJECT COST ESTIMATE

CAPACITY:

Paracetamol Powder (IP/BP Grade) : 50 MT Per Day

Acetic Acid (31% Conc.) By Product : 72 MT Per Day

Plant & Machinery : ₹ 962 Lakhs

Cost of Project : ₹ 2887 Lakhs

Rate of Return : 32%

Break Even Point : 52%

Manufacturing Business of Steel Shipping Containers (Cargo Container)

The cargo container industry produces a lot of intermodal containers each and every year. They are used to transport goods all over the world. About 180 million container loads crisscross the oceans each year in about 5000 container ships. International shipping of containerized commodities is indispensable for global trading firms to thrive in the increasingly competitive economic environment. Containers are either made of steel (the most common for maritime containers) or aluminum (particularly for domestic) and their structure confers flexibility and hardness.

ment of Repetitive Jobs and Tasks: Containers are being deployed to support one or more similar processes, which often run in the background, such as ETL functions or batch jobs.

The global Shipping Containers Market was accounted for US\$ 10,350.1 Mn in terms of value and 306,324 Thousand Units in 2019 and is expected to grow at CAGR of 5.9% for the period 2020-2027. Increasing speed, reliability, and safety of containerization have compelled companies to opt for containers to ship their goods. Decreasing the cost of long-distance containerized transportation combined with globalization of trade further boosts containerization.

1. Refactor Existing Applications For Containers: Although refactoring is much more intensive than lift-and-shift migration, it enables the full benefits of a container environment.

2. Develop New Container-Native Applications: Much like refactoring, this approach unlocks the full benefits of containers.

3. Provide Better Support for Micro services Architectures: Distributed applications and micro services can be more easily isolated, deployed, and scaled using individual container building blocks.

4. Provide Easier Deploy-

PROJECT COST ESTIMATE

CAPACITY:

Cargo Containers (Size 20 Feet) : 4.0 Nos. Per Day

Cargo Containers (Size 40 Feet) : 4.0 Nos. Per Day

Cargo Containers (Size 40 Feet High Cube) : 2.0 Nos. Per Day

Plant & Machinery : ₹ 295 Lakhs

Cost of Project : ₹ 1364 Lakhs

Rate of Return : 26%

Break Even Point : 45%

Methyl isobutyl Ketone (MIBK) from Acetone

Methyl isobutyl ketone (MIBK) is a colorless liquid with an odor similar to mothballs. MIBK is also known as 4-methyl-2-pentanone, hexane and isopropylacetone. While it is usually in liquid form, MIBK can change into a gas. MIBK will dissolve in water, alcohols, benzenes and ethers.

Methyl isobutyl ketone (MIBK) [CAS registry number: 108-10-1] is an organic compound with the formula (CH₃)₂CHCH₂C(O)CH₃. This colorless liquid, a ketone, is widely used as a solvent. MIBK is a colorless liquid with a characteristic ketone odor. It is highly flammable and vapors may travel to the source of ignition and flashback. It is soluble in water and miscible with most organic solvents and evaporates in air. It irritates the skin, eyes and respiratory tract and in high concentrations leads to nausea, headaches, dizziness and unconsciousness. MIBK is a clear liquid with a sweet odor; the odor threshold is 1.64-mg/m³ (0.4 ppm). It is moderately soluble in water. MIBK can react violently with oxidizing and reducing agents. When heated, peroxides may form by auto-oxidation and may explode spontaneously.

PROJECT COST ESTIMATE CAPACITY

Methyl isobutyl Ketone (MIBK)	: 166 MT/ Day
Plant & Machinery	: ₹ 3216 Lakhs
Cost of Project	: ₹ 5881 Lakhs
Rate of Return	: 27%
Break Even Point	: 54%

Methyl isobutyl ketone is used in a number of industrial applications. The primary use of methyl isobutyl ketone, accounting for approximately 62 percent of all use, is as a solvent in protective coatings. It is also used as a solvent in specialty adhesives; in ink formulations; in dewaxing mineral oil; and in textile coatings and leather finishing. As a process solvent methyl isobutyl ketone is used in the separation and purification of certain metal ions, such as zirconium from hafnium; in the extraction and purification of antibiotics and other pharmaceuticals; and in the manufacture of insecticides and other pesticides. It is also used in purifying stearic acid; refining tall oil; and extracting rosin from softwood, especially pine.

Lucrative Business of Milk Powder (Baby Milk for 0 to 5 year, Milk Powder for Coffee and Tea)

Milk is a vital component of human nutrition. It's tasty, easy to digest, and nutrient-dense. Proteins, fat, sugar, minerals, and a variety of vitamins are all present in large amounts. India is only second to the United States of America and the Soviet Union in terms of milk production in the world. However, India's milk production is insufficient to meet the needs of its huge population, as daily average intake per person is less than half of the ideal requirement of roughly 310 grammes.

Fresh milk products, concentrates, and dried goods are all available as options for milk and milk products. Fresh milk and concentrates can be substituted with milk powders.

PROJECT COST ESTIMATE	
CAPACITY:	
Baby Milk Powder 400 gms Size Pack	: 62,500Nos. Per Day
Milk Powder for Tea & Coffee 200 gms Size Pack	: 25,000Nos. Per Day
Milk Powder for Tea & Coffee 500 gms Size Pack	: 10,000Nos. Per Day
Plant & Machinery	: ₹ 948 Lakhs
Cost of Project	: ₹ 2711 Lakhs
Rate of Return	: 29%
Break Even Point	: 50%

Converting liquid dairy streams to powder provides a handy and steady supply of milk solids.

From 2018 to 2025, the global milk powder market is expected to increase at a CAGR of 4.4 percent, from \$27,783.3 million in 2017 to \$38,086.1 million in 2025. Milk

powder is a dry dairy product made by evaporating milk to dehydrate it. Making milk powder has the goal of extending the shelf life of milk without the need of a refrigerator. Whole milk powder, skimmed milk powder, dairy whitener, and various varieties of milk powder are available.

Profitable Opportunities in Business of 7-Aminocephalosporanic Acid (7-ACA)

7-aminocephalosporanic acid is abbreviated as 7-ACA, white or almost white crystalline powder, 7-ACA is an important nucleus in synthesis of cephalosporin antibiotics, in the nucleus 7 and 3 chemical transformation can be used to prepare many cephalosporins: cefazolin sodium, cefotaxime sodium, ceftriaxone sodium, cefoperazone sodium, sodium ceftazidime, cefuroxime sodium.

7-Aminocephalosporanic Acid [chemically, 3-(Acetyloxy-methyl)-7-amino- 8-oxo-5-thia-1- azabicyclo (4.2.0) oct-2-ene-2-carboxylic acid] is the active nucleus for the synthesis of cephalosporins and intermediates. India has the world's third largest active pharmaceutical ingredients (API) for the industry valued at a little less than USD 2 bn. Top 5 API producers account for approximately 6.5%. The leading APIs are anti-infectives, gastrointestinal, cardiovascular and respiratory drugs.

PROJECT COST ESTIMATE CAPACITY	
7-Aminocephalosporanic Acid	: 0.5 MT Per Day
Plant & Machinery	: ₹ 593 Lakhs
Cost of Project	: ₹ 1937 Lakhs
Rate of Return	: 28.20%
Break Even Point	: 45.58%

The Chemical Pharmaceutical Generic Association (CPA) projects that India's share of the world API market will grow by 10.5% by 2010 as patented blockbuster drugs lose their patent protection. The CPA also expects that the domestic Indian market for APIs, both generic and branded, will rise from USD 755 mn in 2005 to USD 1.9 bn in 2010. The API market in India to grow at a CAGR of 10.76 percent.

Sugarcane Juice Preservation and Bottling Plant

Sugarcane juice is quite nutritious as it contains natural sugars, minerals like iron, magnesium, phosphorous, calcium and organic acids e.g. malic acid, succinic acid, acotinic acid etc. Preservation is done when Juice or food is kept for longer period without any deteriorated or spoils the juice by the direct contact with atmosphere. Sugarcane juice is excellent in treating urinary related diseases. It keeps the urine flow clear and aids the kidneys to perform better. Sugarcane juice relieves the

PROJECT COST ESTIMATE CAPACITY	
Capacity	: 48, 00,000 Ltrs. /Annun
Plant & Machinery	: ₹ 106 Lakhs
Cost of Project	: ₹ 467 Lakhs
Rate of Return	: 28%
Break Even Point	: 54%

burning sensation which arises due to infections of the urinary tract. The sugar cane juice provides the glucose, which is stored, as glycogen to be

'burned' by muscles when required. Sugar Industry contributes about 2500 crore rupees as tax to both central and state governments. The industry size in terms of capital is more than Rs. 40,000 crore. Almost 50 million people depend on sugar industry for their livelihood. We actively encourage a culture of innovation, which facilitates the development of new technologies and ensure a high quality product.

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PLASTICS, SPECIALITY PLASTICS, FOAMS (URETHANE, FLEXIBLE, RIGID), PET & PREFORM, BIODEGRADABLE PLASTICS, POLYESTER FIBERS, MOULD DESIGNS, PLASTIC FILMS, HDPE AND THERMOSET PLASTICS, MEDICAL PLASTICS, INDUSTRIAL POLYMERS, ADDITIVES, COLOURANTS AND FILLERS, FIBRE GLASS, OPTICAL GLASS AND REINFORCED PLASTICS

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- Soaps, Detergents and Disinfectants Technology Handbook (Washing Soap, Laundry Soap, Handmade Soap, Detergent Soap, Liquid Soap, Hand Wash, Liquid Detergent, Detergent Powder, Bar, Phenyl, Floor Cleaner, Toilet Cleaner, Mosquito Coils, Naphthalene Balls, Air Freshener, Hand Sanitizer and Aerosols Insecticide) (3rd Revised Edition)..... 1595/- 150

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NIIR PROJECT CONSULTANCY SERVICES

AN ISO 9001:2015 CERTIFIED COMPANY

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E-mail : info@niir.org , npcs.india@gmail.com

SELECTED BUSINESS IDEAS FOR RIGHT INVESTMENT

EACH DETAILED PROJECT REPORT (BUSINESS PLAN) CONTAINS

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BEGINNING : Project Introduction, Brief History of the Product, Properties, BIS (Bureau of Indian Standard) Specifications & Requirements, Uses & Applications.

MARKET SURVEY : Present Market Position, Expected Future Demand, Statistics of Imports & Exports, Export Prospect, Names and Addresses of Existing Units (Present Manufactures).

PLANT & MACHINERY : List of Plant & Machineries, Miscellaneous Items and Accessories, Instruments, Laboratory Equipments and Accessories, Plant Location, Electrification, Electric Load and Water, Maintenance, Suppliers/Manufacturers of Plant and Machineries.

RAW MATERIAL : List of Raw Materials, Properties of Raw Materials, Availability of Raw Materials, Required Quality of Raw Materials, Cost/Rates of Raw Materials.

MANUFACTURING TECHNIQUES : Formulae Detailed Process of Manufacture, Flow Sheet Diagram.

PERSONNEL REQUIREMENTS : Requirement of Staff & Labour, Personnel Management, Skilled & Unskilled Labour.

LAND & BUILDING : Requirement of Land Area, Rates of the Land, Built up Area, Construction Schedule, Plant Layout.

FINANCIAL ASPECTS : Cost of Raw Materials, Cost of Land & Building, Cost of Plant & Machineries, Fixed Capital Investment, Working Capital, Project Cost, Capital Formation, Cost of Production, Profitability Analysis, Break Even Point, Cash Flow Statement for 5 to 10 Years, Depreciation Chart, Conclusion, Projected Balance Sheet, Land Man Ratio.

- Prepared by highly qualified and experienced consultants and Market Research and Analyst Supported by a panel of experts and computerised data bank.

- Data provided are reliable and upto date collected from suppliers/ manufacturers, plant already commissioned in India.

- NPCS Reports are very economical and immediatly available on demand where as commissioned Feasibility Studies are time consuming and costly.

FOR ASSESSING MARKET
POTENTIAL, INVESTMENT
DECISION MAKING
CORPORATE
DIVERSIFICATION
PLANNING ETC.

NPCS Engineers and Consultants have prepared Market Survey Cum Detailed Techno Economic Feasibility Report on the following products which are most viable and profitable.

Market Survey Cum Detailed Techno Economic Feasibility Report on all above Businesses are Available. Contact :

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SELECTED BUSINESS IDEAS FOR RIGHT INVESTMENT

Activated Carbon, Granular Activated Carbon (GAC), Activated Carbon, Activated Carbon Powder, Powdered Activated Carbon (PAC), Activated Charcoal, Activated Coal, Activated Fuller Earth, Pelleted Activated Carbon (EAC), Impregnated Carbon, Polymers Coated



- » Acid Washed Granulated Activated Carbon
- » Activated Carbon (By Steam Activation Process)
- » Activated Carbon from Bamboo
- » Activated Carbon from Coconut Shell
- » Activated Carbon from Coconut Shell in Continuous Rotary Kiln
- » Activated Carbon from Coconut Shell, Rice Husk & Saw Dust



- » Activated Carbon from Wood
- » Activated Carbon Powder from Jute Sticks
- » Carbon Composite Fiber
- » Charcoal from Coconut Shell
- » Fullers Earth
- » Furfural from Corncobs, Rice Husk & Sugarcane Bagasse



Adhesives and Sealants, Industrial Adhesives, Glues, Gums & Binders, Synthetic Resin, Resins (Guar Gum, Adhesive [Fevicol Type], Sodium Silicate Adhesive, Hot Melt Adhesives, Rubber Based Adhesive, Acrylic Adhesives, Guar Gum Powder, Gum Arabic)

- » ABS Resin
- » Acetates Production
- » Acrylic Adhesives
- » Acrylic Resin (Emulsion Type)
- » Adhesive (Fevicol Type)
- » Adhesive (Fevicol Type) Water Proofing Grade
- » Adhesive Based on Epoxy Resin (2 Pack)
- » Adhesive Based on Tapioca Starch in Powder Form (For Corrugated Board & Boxes)
- » Adhesive for Stickers
- » Adhesive from Maize Starch
- » Adhesives
- » Adhesives Based on Polyurethane
- » Adhesives Neoprene Based Rubber Adhesive for Footwear, Polyurethane based Adhesive for Footwear Epoxy Two Part (Resin & Hardener)
- » Alkyd Resin
- » Alkyl Resin from Cotton Seed Oil
- » Arabic Gum
- » BOPP Adhesive Tapes
- » Bopp Pressure Sensitive Adhesive Tape Boxes
- » CNSL Based Resin in Powder & Liquid Form
- » Cold Water Soluble Starch
- » Contact Adhesive
- » Corrugated Carton Boxes Gum Powder



- (Tamarind Kernel Powder Base)
- » Corrugation & Pasting Adhesive (Dry Powder/Liquid)
- » Corrugation Gum Powder (Adhesive- Dry Powder)
- » Elastic and Rigid Tape
- » Electrical Insulating Tape using BOPP Film
- » Epoxy Resin
- » Epoxy Resin Based Primer (Putty)
- » Extraction of Gelatin Glue from Leather Waste
- » Floral Foam
- » Floral Foam (Phenolic Foam) with Resin
- » Footwear Epoxy Two Part (Resin & Hardener)
- » Glue from Leather Waste
- » Glycol Modified Poly Ethylene Terephthalate (PETG) Resin
- » Guar Gum
- » Guar Gum Powder
- » Guar Gum Powder Using Splits
- » Gum Arabic (Spray Drying Process)
- » Gum Karaya
- » Hexamethoxymethyl Melamine (Hmmm)
- » Hot Melt Adhesives
- » Hot Melt Adhesives for Corrugation Board
- » Hot Melt Adhesives Production (for Book Binding, Packaging and Courier Bag)
- » Instrument Cable



- » Lamination cum Bottle Labeling Adhesives & Wood Adhesive Starch Based (Tapioca or Maize)
- » Latex Based Adhesive
- » Leather Binder (Resin Based)
- » Menthol Crystals-Bold (EOU)
- » PE Wax Emulsion
- » Pigment Binders for Textile Printing
- » Polymer Modified Cementitious Tile Adhesives
- » Pressure Sensitive Adhesive for Bopp Tapes (Acrylic Based)
- » PVA Adhesive (Fevicol Type)
- » PVC Compounds from PVC Resins
- » PVC Solvent Cement
- » Resin Epoxy Adhesive and Hardener
- » Resin for Nail Polish (Polycondensation Resin (Polyester, Alkyds), Epoxy Tosylamide Resin, Solvent Based Acrylic Resin)
- » Rubber Based Adhesive
- » Silicone Sealant
- » Sodium Silicate Adhesive
- » Unsaturated Polyester Resin
- » Urea Formaldehyde Resin (Powder)
- » Wall Paper Starch
- » Water Based Acrylic Adhesive for Bopp Self-Adhesive Tape
- » Xanthan Gum
- » Yellow Dextrin



Market Survey Cum Detailed Techno Economic Feasibility Report on all above Businesses are Available. Contact :

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Alcohol



- » Absolute Alcohol (Ethanol)
- » Absolute Alcohol from Molasses
- » Alcohol Based Fuel Gel
- » Alcohol from Grains
- » Alcohol from Potato
- » Alcohol from Tapioca Starch
- » Beer Industry
- » Beer Plant
- » Beer, Whisky & Rum
- » Beer, Wine & Whiskey (From Pineapple)
- » Benzyl Alcohol
- » Country Liquor from Molasses
- » Craft Beer (Microbrewery or Craft Brewery)
- » Denatured Ethanol
- » Ethanol (Ethyl Alcohol) from Broken Rice, Maize & Wheat
- » Ethanol from Broken Rice, Maize & Wheat
- » Ethanol from Molasses



- » Ethanol From Rice Straw and Rice Husk
- » Ethanol From Rice, Rice Straw, Rice Husk, Rice Bran
- » Ethanol
- » Fatty Alcohol
- » Fruit Wine (Alcoholic Beverage)
- » Furfural Alcohol from Furfural (Hydrogenation)
- » Geraniol Derivative and Alcohol Extract of a Pinene
- » Good Prospects for Grain Based Alcohol (Distillery)
- » Grain Alcohol Distillery
- » Grain and Molasses-Based Ethanol Distillery
- » Grape Wine
- » Herbal Wine
- » IMFL Bottling Plant
- » IMFL, Indian Made Foreign Liquor



- (Whiskey, Rum, Gin, Vodka And Brandy)
- » Integrated Sugar Plant (Cultivation of Sugarcane, Co-Generation & Distillery)
- » Liquor from Mahua (Wine and Hard Liquor)
- » Mahua Alcoholic Beverage
- » Medical Alcohol from Date Juice Concentrate
- » Methylated Spirit from Sugarcane Molasses
- » Polyvinyl Alcohol
- » Rectified Spirit
- » Rectified Spirit & Extra Neutral Alcohol (ENA)
- » Single Super Phosphate
- » Sugar Mill, Distillery and Power Plant
- » Surgical Methylated Spirit (Denatured Alcohol Surgical Spirit)
- » Wine from Kinnow Fruits
- » Wine Industry



Alcoholic and Non-Alcoholic Beverages, Drinks, Hard and Soft Drinks, Fruit and Vegetable Juice, Agro food Sector, Distilled Beverage, Carbonated and Non-Carbonated Drinks, Beer and Breweries, Caffeinated Beverages, Energy Drinks Projects

- » Absolute Alcohol (Ethanol)
- » Alcohol from Grains
- » Alcohol from Tapioca Starch
- » Automatic Plant- Pulp Based Fruit Drink
- » Beer & Whisky
- » Beer & Wine
- » Beer Industry (Export Unit)
- » Beer Plant
- » Beer Production from Rice with Packaging in Can & Bottles
- » Beer, Whisky & Rum
- » Beer, Wine & Whiskey (From Pineapple)
- » Bottling of Country Liquor
- » Bottling of Country Liquor (Automatic Plant)
- » Canned Carrot Juice & Bottle Gourd Long Melon (Lauki Ka Juice) In Aseptic Packaging
- » Carbonated and Non-Carbonated Drinks (Non-Alcoholic)
- » Cashew Fruit Juice from Cashew Apple
- » Chocolate Drink (Liquid Form)
- » Coconut and Cashew Feni
- » Coconut Water
- » Country Liquor
- » Country Liquor from Molasses
- » Craft Beer
- » Craft Beer (Microbrewery or Craft Brewery)
- » Craft Brewery or Distillery
- » Denatured Ethanol
- » Dried Malted Beverage Food (Health Drink, Cocoa Beverages in Granules Form) Malted Health Drinks
- » Ethanol from Broken Rice, Maize & Wheat
- » Ethanol from Rice Straw and Rice Bran



- » Ethyl Alcohol from Molasses
- » Extra Neutral Alcohol (ENA)
- » Flavoured Drinking Water
- » Fruit Beverage
- » Fruit Juice (Mango, Orange & Litchi) & Sugarcane Juice in Aseptic Packaging & Pet Bottles
- » Fruit Juice Factory
- » Fruit Juice in Aseptic Packaging
- » Fruit Juices (Pineapple, Banana, Orange & Guava)
- » Fruit Wine (Alcoholic Beverage)
- » Glass Bottles for Beer
- » Grain & Potato Based Vodka Distillery
- » Grain And Molasses-Based Ethanol Distillery
- » Grain Based Alcohol Distillery
- » Grape Wine
- » Herbal Health Drink
- » Herbal Wine
- » IMFL Bottling Plant
- » IMFL, Indian Made Foreign Liquor (Whiskey, Rum, Gin, Vodka and Brandy)
- » Indian Made Foreign Liquor
- » Indian Made Foreign Liquor (Extra Neutral Alcohol)
- » Instant Ginger Powder Drink
- » Instant Tea
- » Lemon-Lime Flavoured Soft Drink (Nimbu Pani)
- » Liquor from Mahua (Wine and Hard Liquor)
- » Liquor from Mahua Flower
- » Litchi Beverage Production
- » Lychee Juice
- » Mahua Alcoholic Beverage
- » Mahua Oil & Country Liquor
- » Mango & Pomegranate Juice



- » Mango Juice
- » Mango Processing (Pulp & Juices)
- » Medical Alcohol from Date Juice Concentrate
- » Microbrewery or Brewpub
- » Nano Brewery
- » Orange Juice
- » Orange Juice Plant with Cold Storage Facility and Captive Power Plant
- » Packaged Drinking Water
- » Packaged Drinking Water with Pet Glasses (250 ML) (Automatic Plant)
- » Packaged Drinking Water, Soda Water and Pet Bottles
- » Profitable Grape Wine
- » Pulp Fruit Drinks
- » Rectified Spirit & Extra Neutral Alcohol (ENA)
- » Rice Beer
- » Soda Water in Plastic Pouches
- » Soft Drink (Aerated Water)
- » Soft Drinks (Cola, Orange, Lemon, Mango Pulp, Ginger, Clear Lemon 7up Type)
- » Soft Drinks in Poly Pouches
- » Sugar Mill, Distillery and Power Plant
- » Sugarcane Juice Extraction And Packaging in Aseptic Packaging
- » Sugarcane Juice in Aseptic Packaging
- » Sugarcane Juice Preservation
- » Sugarcane Juice Preservation and Bottling Plant
- » Vodka from Potato
- » Wine from Grapes
- » Wine from Kinnow Fruits
- » Wine Industry



Market Survey Cum Detailed Techno Economic Feasibility Report on all above Businesses are Available. Contact :

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Biodegradable Plastic Bags from Corn & Cassava Starch

Corn starch has 25% amylose and 75% amylopectin. The amylose molecules loose lose water increase biodegradation characteristic and amylopectin molecule is responsible for plasticizer properties. Their granule size ranges between 5 to 20 microns. I.e. good absorption capacity, rapid gel formation & good strength. Starch is used to produce such diverse products as food, paper, textiles, adhesives, beverages, confectionery, packaging, pharmaceuticals, and building materials. Cassava starch has many remarkable characteristics, including high paste viscosity, high paste clarity, and high freeze-thaw stability, which are advantageous to many industries.

Cassava starch could be used for making vari-

PROJECT COST ESTIMATE

CAPACITY:	
Biodegradable Plastic Bags from Corn Starch (Per Bag 25 gms Size)	: 6 MT / Day
Biodegradable Plastic Bags from Cassava Starch (Per Bag 25 gms Size)	: 6 MT / Day
Plant & Machinery	: ₹ 1053 Lakhs
Cost of Project	: ₹ 1768 Lakhs
Rate of Return	: 27%
Break Even Point	: 51%

ous types of packaging products. As a major source of starch in tropical and subtropical regions, cassava is a promising raw material for the development of biodegradable plastics in these areas.

The global biodegradable plastic packaging market was valued at USD 4.65 billion in 2019, and is expected to reach a market value of USD 12.06 billion by 2025, registering a CAGR of 17.04% during the forecast period of 2020-2025. Growing environmental concerns regarding plastic usage that consists of toxic pollutants which are harming plants, animals, and people are driving the use of biodegradable plastic. Stringent regulations by various government and federal agencies with an objective to reduce plastic waste and promote biodegradable plastics usage in packaging is boosting the demand of this market. As a whole any entrepreneur can venture in this project without risk and earn profit.

Production of White Fused Alumina

White fused alumina is an extremely pure type of aluminium oxide that may be utilised with both stainless steel and aluminium. The fusion of high purity calcined alumina in electric arc furnaces produces White Fused Alumina (WFA).

White Fused Aluminum Oxide is a fused aluminium oxide with a high purity. Its white hue comes from the fact that it has less impurities than brown or pink fused aluminium oxide. Brown fused aluminium oxide has a higher friability than white fused aluminium oxide.

It's best for refractory applications where purity, chemical stability, or great refractoriness are important factors.

- Polishing cloth and abrasive tape materials
- Precision grinding wheels (bearing steel, etc.) and high-classed polishing grinding wheels

- Various lapping materials for metal, glass, crystal, semiconductor crystal, and other materials
- Electrical insulation materials, high-grade refractory materials, and other items

The global White Fused Alumina market is predicted to increase at a CAGR of 2.2 percent between 2021

and 2026, from 447.8 million USD in 2020 to 522.4 million USD by the end of 2026.

The alumina market is divided into abrasives, ceramics, refractories, metallurgy, and other applications. The ceramics category is predicted to have the highest CAGR during the projection period. Alumina that has been calcined is utilised to make sophisticated ceramics.

PROJECT COST ESTIMATE

CAPACITY	
White Fused Alumina : 80 MT Per Day (Al ₂ O ₃ -99.73% and Na ₂ O -0.3%)	
Plant & Machinery	: ₹ 977 Lakhs
Cost of Project	: ₹ 2532 Lakhs
Rate of Return	: 27%
Break Even Point	: 52%

Steel Shots & Grits (Steel Abrasives) Manufacturing Business

Steel shots are spherical grains formed by atomizing (granulating) molten steel; these cast steel shots come in a variety of diameters and hardnesses. Steel scrap is used to make steel shots. Steel scrap is melted in a furnace and then water jet atomized into shot. Steel

shots produce the least amount of dust due to its gentle manufacturing technique. Heavy metal parts, such as engine turbine blades, crankshafts, and heavy-duty springs, are cleaned using steel shots. Steel shot and grit are primarily used in surface preparation to remove mill scale, dirt, and rust from metal surfaces, as well as to physically modify the metal

PROJECT COST ESTIMATE

CAPACITY	
Capacity	: 40 MT Per day
Plant & Machinery	: ₹ 722 Lakhs
Cost of Project	: ₹ 1884 Lakhs
Rate of Return	: 28%
Break Even Point	: 66%

surface, such as creating roughness for better paint and coating application, such as powder coating, enamelling, painting, metallization, rubber bonding, and so on.

The growing market for steel abrasives is estimated to increase at a CAGR of 6.2 percent over the forecast period (2019-2026). From 2017 to 2023, the global steel abrasives market is predicted to grow at a CAGR of 6.5 percent, from \$34,615 million in 2016 to \$53,634 million in 2023. Abrasives are used to give a superior polished surface finish during manufacture in the automotive, electronics, construction, and industrial industries.

Manufacturing Business of Glass Vials for Medicine (for Cosmetic & Other Injectable)

Glass vials are a typical packing choice for liquid medicines, elixirs, and other goods that need to be supplied in small quantities. Glass vial packaging is easier to use than plastic bottles or cardboard boxes, and it provides safety, portability, and other benefits.

Vials are small glass containers used to keep refrigerated medicine, but they can also be used to store chemicals and food. Liquids, dry powders, and lyophilized substances in vials must be reconstituted before administration to be effective. These vials are exposed to a wide range of temperatures throughout their lifespan since they are the most common type of packaging for injectable medicines and vaccines.

The Global Vials Market was valued at USD 3,200.2 million in 2021, and it is expected to increase at a CAGR of 6.8% over the next five years. Vials have been the standard packaging for drugs for many years and are expected to continue to be so in the future.

PROJECT COST ESTIMATE

CAPACITY	
Capacity	: 2,00,000 Pcs Per Day
Plant & Machinery	: ₹ 24 Cr
Cost of Project	: ₹ 34 Cr
Rate of Return	: ₹ 23%
Break Even Point	: ₹ 53%

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Detailed Project Report on Bromelain Enzyme from Pineapple Stems

Pineapple extract, commonly known as bromelain enzyme from pineapple stems, includes proteolytic enzymes obtained from the pineapple plant's flesh. These enzymes have been discovered to have anti-inflammatory qualities and to be beneficial to the digestive system, among other things, according to research. More research is needed, however, to confirm these findings and identify how bromelain can be utilised to cure illnesses or enhance overall health.

1. Bromelain softens dough by hydrolyzing gluten when added to it during baking. It also improves biscuit and bread quality and taste.

PROJECT COST ESTIMATE

Capacity	: 8 MT Per Day
Plant & Machinery	: ₹ 170 Lakhs
Cost of Project	: ₹ 656 Lakhs
Rate of Return	: 28%
Break Even Point	: 63%

2. In the dairy sector, bromelain is utilised to prevent casein condensation during the cheese-making process.

3. Bromelain is used to tenderise meat in the meat industry.

4. Bromelain is utilised in cosmetics because of its skin regeneration and lightening properties.

5. Bromelain is used in the pharmaceutical business as well.

This enzyme is utilised in a variety of industries, its economic importance is linked to pharmaceutical manufacture, digestive system effects, and the replacement of pepsin and trypsin in the treatment of pancreatic insufficiency.

The bromelain market is expected to reach a market size of \$1154.4 million by 2027, with a CAGR of 4.39 percent. Because of greater awareness of bromelain's benefits and its extensive use in the treatment of cardiovascular disorders, the bromelain market is predicted to grow.

A Complete Business Plan for Lithium Ion Battery (Battery Assembly)

Lithium ion batteries are the most widely used power source in portable electronics, such as cell phones, tablets, laptops, and even electric vehicles. They're used in these gadgets because they're light and have a high energy density, which means they pack a lot of power into a small package. However, the process of building lithium ion batteries involves many distinct phases, and it can be difficult to ensure that each component is fitted correctly so that the batteries work well when you use them later.

(1) Li-ion batteries are commonly found in cameras and calculators.

(2) They're in cardiac pacemakers and other implantable medical devices.

(3) Telecommunications equipment, instruments, portable radios and televisions, and pagers all use them.

(4) They're used in laptop computers, cell phones, and aerospace applications.

PROJECT COST ESTIMATE

Capacity	: 150 Nos. Per Day
Plant & Machinery	: ₹ 155 Lakhs
Cost of Project	: ₹ 708 Lakhs
Rate of Return	: 27%
Break Even Point	: 63%

During the forecast period of 2018-2023, the India lithium-ion battery market is expected to grow at a robust CAGR of 29.26%. The Indian automobile industry is one of the most important in the country, accounting for roughly 7% of the country's GDP. In April-March 2017, the industry produced 25.31 million vehicles, including commercial, passenger, two, and three-wheeled vehicles, and commercial quadricycles, compared to 24.01 million in April-March 2016.

The Indian automobile industry is one of the most important in the country, accounting for roughly 7% of the country's GDP. In April-March 2017, the industry produced 25.31 million vehicles, including commercial, passenger, two, and three-wheeled vehicles, and commercial quadricycles, compared to 24.01 million in April-March 2016.

Charcoal from Biomass

Biomass charcoal briquettes are a biofuel substitute. Briquettes are mostly used in the developing world where cooking fuels are not as easily available. Briquettes are used to heat industrial boilers in order to produce electricity from steam. Biomass charcoal briquettes are made from agriculture waste, wood chips, coconut shell waste saw dust, groundnut shell waste etc. are a replacement for fossil fuels such as oil or coal, and can be used to heat boiler in manufacturing plants. Biomass briquettes are a renewable source of energy and avoid adding fossil carbon to the atmosphere. Biomass charcoal briquettes are widely used for any type of Thermal application like steam generation in boilers, heating purpose, drying process & gasification plant to replace existing conventional fuel like coal, wood & costly liquid fuel like FO, Diesel, LDO, Kerosene etc.

On the basis of type, the charcoal market, biomass charcoal is estimated to contribute the largest share, of more than 67.0%, to the market in 2017. Biomass charcoal burns quickly and produces a high amount of heat on burning. Owing to these properties, the demand for biomass charcoal is growing for barbecue cooking purposes. The global charcoal market is projected to reach \$6,492.8 million by 2023.

The global biomass briquettes market is segmented into North America, Latin America, Western Europe, Eastern Europe, the Middle East and Africa, and Asia Pacific. Of these regions, Europe and North America are expected to be key regions for the growth of this market over the forecast tenure. The utilization of the biomass briquettes production technologies is high to convert their biomass into useful energy sources. Entrepreneurs who invest in this project will be successful.

PROJECT COST ESTIMATE

Capacity	: 4,500 MT Per Annum
Plant & Machinery	: ₹ 144 Lakhs
Cost of Project	: ₹ 271 Lakhs
Rate of Return	: 29%
Break Even Point	: 74%

Active Pharma Ingredients Metformin and Ciprofloxacin Manufacturing Business

Metformin (also known as Glucophage) is an oral diabetes drug that aids in the efficient utilisation of insulin and the reduction of blood sugar levels. Metformin is a diabetes drug that can be used alone or in conjunction with other diabetes medications. It does not cause hypoglycemia or weight gain, which are frequent adverse effects of other diabetes medications.

Ciprofloxacin is an antibiotic whose active ingredient is Ciprofloxacin. It works by preventing bacteria from replicating their DNA. Because of its broad spectrum of activity against Gram-positive and Gram-negative bacteria, as well as its ability to penetrate bacterial biofilms and stationary phase cells in both aerobic and anaerobic environments, it's primarily used to treat infections of the urinary tract, respiratory tract, prostate gland, skin and soft tissue infections, and anthrax.

During the projected period, the Indian ciprofloxacin market is expected to rise at a rapid pace. The rising frequency of renal problems and eye infections, among other things, is driving the ciprofloxacin market in India.

PROJECT COST ESTIMATE

Capacity:	
Metformin	: 2,000 Kgs. Per Day
Ciprofloxacin	: 1,000 Kgs. Per Day
Plant & Machinery	: ₹ 104 Lakhs
Cost of Project	: ₹ 584 Lakhs
Rate of Return	: 31%
Break Even Point	: 58%

SUBSCRIPTION RATE FOR INDIA—Single Copy ₹ 20/-, One Year ₹ 720/- (with Registered Post Charges)

OWNER, PUBLISHER, PRINTER & EDITOR : AJAY KUMAR GUPTA Printed at M/s. Balaji Offset Printers, 315/21, Daya Basti, Delhi 110 035
PUBLISHED AT : 106 E, Kamla Nagar, Delhi-110 007 (India).

R.N.I. NO. 61509/95 POSTAL NO. DL (N)/114/2021-2023

U.NO. U(DN) 154/2021-2022 LICENSED TO POST WITHOUT PREPAYMENT AT DELHI R.M.S.

DATE OF PUBLICATION : 19 EVERY MONTH—DATE OF POSTING : 21 OR 22 EVERY MONTH