

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. 29

No. 3

March 2023

16 Pages

EDITOR: AJAY KUMAR GUPTA D.M.S, M.B.A. **Entrepreneurship Management** **ASSOCIATE EDITOR** P. K. TRIPATHI **UDANT GUPTA**

NIIR PROJECT CONSULTANCY SERVICES

AN ISO 9001:2015 CERTIFIED COMPANY **106** E, Kamla Nagar, Delhi-110 007 (India).

Tel.: 91-11- 23843955, 23845886, 23845654, Mob.: +91-9097075054, 8800733955, Fax: 91-11-23845886 E-mail: info@niir.org, npcs.india@gmail.com, Website: www.niir.org, www.entrepreneurindia.co

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 **Active Pharmaceutical Ingredients (API), Drugs & Pharmaceutical Products**

(Paracetamol, Aspirin, IV Fluids, Ointment, Metronidazole, Liquid Glucose, Surgical Cotton, Syrup, Tablet, Excipients, Pharmaceutical Salts with Manufacturing Process, Machinery Equipment Details and Factory Layout)

₹ 2.495/- US\$ 63-

n active pharmaceutical ingredient (API) is the active substance in a Apharmaceutical drug that produces its therapeutic effect. APIs can be synthetic chemicals or natural sources such as plant extracts. APIs are components of drugs, the majority of which are manufactured by pharmaceutical companies. Drugs, on the other hand, are dosage forms that contain an API and are distributed to patients for use. Pharmaceutical products are any compounds used in the medical industry to diagnose, treat, cure, or prevent diseases. These products are typically formulated as drugs, vaccines, biologics, and medical devices, which can either be prescribed by a doctor or bought over-the-counter (OTC). They come in various forms such as tablets, capsules, syrups, ointments, creams, solutions, suspensions, implants, patches, and powders. Pharmaceutical products are manufactured under strict guidelines and must adhere to various regulations such

manufactured under strict guidelines and must adhere to various regulations such as Good Manufacturing Practices (GMP).

The global market for Active Pharmaceutical Ingredients (API), Drugs & Pharmaceutical Products is expected to grow rapidly over the next few years. This growth will be driven by rising demand for improved healthcare services and an increasing number of new treatments. The market for active pharmaceutical ingredients is anticipated to rise at a CAGR of 5.90%. The development in the production of active pharmaceutical ingredients (APIs) as well as the increased incidence of chronic diseases including cancer and cardiovascular conditions are both responsible for the expansion. Government regulations that are supportive of API manufacturing, together with shifting geopolitical conditions, are accelerating market

The pharmaceutical products market has grown steadily in recent years, and is expected to continue to do so. This growth is driven by a number of factors, including increased demand for new drugs, changing disease patterns and aging populations in some countries, as well as the emergence of innovative drugs and technologies. The market is being shaped by the rise of emerging economies and their increasing healthcare needs. This has led to increased investment in drug research and development, as well as an increase in the number of multinational companies setting up operations in various countries.

Furthermore, generic drugs are becoming increasingly popular as a way of reducing healthcare costs. Generic drugs are copies of brand-name drugs, which are manufactured by generic drug companies. They offer an effective alternative to branded drugs and are often much cheaper. As a result, generic drugs are increasingly

being used in countries across the world, leading to an increase in the global pharmaceutical products market.

Overall, the global market for pharmaceutical products and drugs are set to continue to grow in the coming years. New products, innovative technologies and emerging markets will drive growth, and this will bring both

opportunities and challenges for the industry.

The books' main subjects include Active Pharmaceutical Ingredients (API), Drugs, Aspirin, Paracetamol, IV

Fluids, Ointment, Metronidazole, Liquid Glucose, Surgical Cotton, Syrup, Tablet, Excipients, Pharmaceutical

Salts with formulations, factory layout, and images of machinery with contact information for suppliers.

A thorough guide to manufacturing and business operations in the Active Pharmaceutical Ingredients (API),

Drugs & Pharmaceutical Products industry. The Active Pharmaceutical Ingredients (API),

Drugs & Pharmaceutical Products industry. The Active Pharmaceutical Ingredients (API),

Drugs & Pharmaceutical Products industry.

Products manufacturing industry is full with opportunity for producers, traders, and business owners, and this book is your one-stop resource for all the information you require. Thes only complete manual on the creation of commercial Active Pharmaceutical Ingredients (API), medications, and pharmaceutical products is this one. It offers a wealth of information on how to do things, from concept through equipment acquisition.

Handbook on

Printing Technology

(Offset, Flexo, Gravure, Screen, Digital, 3D Printing with Book Binding and CTP) (5th Edition)

Printing is a process for reproducing text and image, typically with ink on paper using a printing press. It is often carried out as a large-scale industrial process, and is an essential part of publishing and transaction printing. Modern technology is radically changing the way publications are printed, inventoried and distributed. Printing technology market is growing, due to technological proliferation along with increasing applications of commercial printing across end users.



across end users.

In India, the market for printing technology is at its nascent stage; however offers huge growth opportunities in the coming years.

The major factors boosting the growth of offset printing press market are the growth of packaging industry across the globe, increasing demand in graphic applications, the wide range of application in various industry, and industrialization. 3D printing market is estimated to garner \$8.6 billion in coming years. The global digital printing packaging market is expected to exceed more than US\$ 40.02 billion by 2026 at a CAGR of 13.9%. Computer-to-plate systems are increasingly being combined with all digital prepriess and printing processes prepress and printing process

prepress and printing processes.

This book is dedicated to the Printing Industry. In this book, the details of printing methods and applications are given. The book throws light on the materials required for the same and the various processes involved. This popular book has been organized to provide readers with a firmer grasp of how printing technologies are revolutionizing the industry.

The major content of the book are principles of contact (impression), principles of noncontact printing, coated grades and commercial printing, tests for gravure printing, tests for letterpress printing, tests for offset printing, screen printing, application of screen printing, offset lithography, planography, materials, tools and equipments, sheetfed offset machines, web offset machines, colour and its reproduction, quality control in printing, flexography, rotogravure, creative frees printer, shaftless spearheads expansion, digital printing, 3D printing and printing machinery, book binding, computer-to-plate (ctp) and photographs of machinery with suppliers contact computer-to-plate (ctp) and photographs of machinery with suppliers contact

A total guide to manufacturing and entrepreneurial success in one of today's most printing industry. This book is one-stop guide to one of the fastest growing sectors of the printing industry, where opportunities abound for manufacturers, retailers, and entrepreneurs. This is the only complete handbook on the commercial production of printing products. It serves up a east of how-to information, from concept to purchasing equipment.



A Business Plan for Sodium Chlorite (NaClO₂) Direct Electrolysis Process from Sodium Chloride to Sodium Chlorite

Sodium chlorite is a chemical compound with the formula NaClO₂. It is a white crystalline solid, odourless and non-flammable. It is used in water treatment, industrial processes, and food preservation. It is often used as a disinfectant due to its ability to kill a wide variety of microorganisms and eliminate odors. Sodium chlorite can be used to disinfect drinking water, swimming pools, and wastewater. It is also used in medical and dental settings to clean equipment and surfaces. Sodium chlorite is also used in bleaching and whitening applications.

What is Direct Electrolysis Process?

Sodium Chlorite Direct Electrolysis Process is a chemical process that produces Sodium Chlorite from Sodium Chloride by direct electrolysis. This method of electrolysis involves passing an electric current through an aqueous solution of sodium chloride, resulting in the formation of chlorine gas and sodium hydroxide, which can then be used to produce sodium chlorite. The process requires specialized equipment and involves carefully controlling the parameters of temperature, pressure, and current intensity. The Sodium Chlorite Direct Electrolysis Process is a highly efficient and costeffective method for producing sodium chlorite

PROJECT COST ESTIMATE

CAPACITY

Sodium Chlorite (NaClO₂) : 15 MT Per Day Plant & Machinery : ₹ 567 Lakhs Cost of Project : ₹ 1892 Lakhs Rate of Return : 26 % Break Even Point : 48 %

from sodium chloride. It is a safe and reliable method for producing sodium chlorite with minimal environmental impact.

Why Should Entrepreneurs Invest in This Business?

The Sodium Chlorite Direct Electrolysis Process is an innovative and efficient way to produce a valuable chemical. It offers entrepreneurs a unique business opportunity to capitalize on the growing demand for this product. The direct electrolysis process uses energy-efficient technologies that allow for faster and more cost-effective production of Sodium Chlorite than other methods. This makes it an attractive option for entrepreneurs who are looking to quickly increase their profits. This process requires relatively few resources and can be scaled up quickly, making it an ideal choice for

entrepreneurs who are just starting out or who are looking to expand their operations.

Forecast for the World Market

The global sodium chlorite market is forecasted to grow at a rate of 6.3% from USD 197.5 million in 2019 to USD 323.2 million in 2027. The sodium chlorite industry is witnessing rapid growth attributed to its increasing application as a disinfectant and bleaching agent in water treatment, paper, textile, and medical. Factors such as surging demand in water treatment plants, growing application in the medical sector, growing usage in the textile industry, and growing demand from the emerging economies drive the market demand.

Conclusion

Investing in the Sodium Chlorite Direct Electrolysis Process from Sodium Chloride to Sodium Chlorite can help entrepreneurs stay ahead of the competition by providing them with a reliable source of high-quality sodium chlorite. This in turn can help ensure that their products are up to the highest standards and remain competitive in the market. Overall, investing in the Sodium Chlorite Direct Electrolysis Process from Sodium Chloride to Sodium Chlorite is an excellent option for entrepreneurs looking to reduce costs and maximize profits.

A Business Plan for Highway Guard Crash Barrier with Metal Beam (Roll Forming) and Galvanizing Plant

Metal beam crash barriers, also known as guardrails, are an important safety feature on highways, bridges and roads. They are used to protect drivers and pedestrians from potentially hazardous driving conditions. Metal beam crash barriers are made of metal beams or posts connected together with wire rope, providing a physical barrier that can absorb the impact of a collision or prevent vehicles from running off the road. These metal beams are usually made of steel or aluminium, but they can also be constructed with other materials such as plastic or wood. The metal beams are typically placed in an alternating pattern, with gaps between them to allow air to pass through. This allows the barrier to flex and absorb the energy of the impact while still remaining in one piece. Metal beam crash barriers can also be designed with different features such as reflectors, cross-bracing and other modifications to enhance their effectiveness in certain situations.

The Process of Roll Forming

Roll forming is the process of bending metal into specific shapes and lengths in order to create

metal beam crash barriers, or any other types of barrier. The process is done using specialized equipment which includes two large rolls that are connected and rotate in opposite directions, with each roll containing a series of dies which are used to form the metal beams into the desired shape. The process starts by feeding a strip of metal into the equipment and it passes between the two rolls. As the strip passes through the rolls, the dies press against the metal strip, shaping it into a specific profile as required. This process is repeated until the desired length of the barrier is achieved.

Benefit of Starting This Business

The roll forming process allows the barriers to be created with more consistency and quality than traditional methods, which can help reduce the cost of production and increase profits.

Global Market Outlook

The global market outlook for roll forming metal beam highway crash barriers is very positive. As more countries invest in infrastructure development

PROJECT COST ESTIMATE

CAPACITY:

 Metal Beam Highway Crash Barrier
 : 167 MT Per Day

 MS Sheet Scrap
 : 33 MT Per Day

 Plant & Machinery
 : ₹ 701 Lakhs

 Cost of Project
 : ₹ 2608 Lakhs

 Rate of Return
 : 30 %

 Break Even Point
 : 45 %

projects and the demand for safe, reliable and costeffective solutions continues to grow, the use of roll formed metal beam highway crash barriers is likely to become increasingly widespread in both developed and emerging markets.

Conclusion

Starting a roll forming metal beam highway crash barrier business can be a profitable venture for any entrepreneur. With an increasing demand for these types of barriers, this market is expected to grow over the coming years.

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

NIIR PROJECT CONSULTANCY SERVICES
AN ISO 9001:2015 CERTIFIED COMPANY

106 E, Kamla Nagar, Delhi–110 007 (India). Tel.: 91-11- 23843955, 23845886, 23845654 Mob.: +91-9097075054, 8800733955 Fax: 91-11-23845886



Setup Plant of Ceramic Wall and Floor Tiles

Ceramic wall and floor tiles are a popular choice for a wide variety of applications, from residential to commercial. These tiles are made by firing clay or other ceramic materials at high temperatures, resulting in a hard, durable tile that is resistant to staining, water damage, and general wear-and-tear.

Benefit of Starting Ceramic Wall and Floor Tiles Business?

The popularity of ceramic wall and floor tiles has been steadily increasing in recent years due to its many advantages. Ceramic tile is a durable, affordable, and attractive material that can be used to add value to your home. Starting a business in ceramic wall and floor tiles is a great investment, as it requires minimal initial investment and can provide a steady stream of income.

Indian Market Outlook

The India ceramic tiles market size was valued at \$3,720.2 million in 2019, and is projected to reach \$7,144.7 million by 2027, growing at a CAGR of 8.6% from 2020 to 2027. Ceramic tiles are manufactured from clay for flooring choices. The ceramic tiles are made from raw materials such as kaolin, bentonite, sand, feldspar, and glass. They are most commonly used, owing to their features such as resistant to scratch, environment friendly, durable, and others. In addition, vitrified tiles are the type of ceramic tiles, which are used as alternative to granite and marble flooring. They are generally used for outdoor walls and flooring, owing to the properties such frost and water resistant. The growth in urbanization boost the demand for residential and commercial construction market in the country, which has fueled rapid growth for the India ceramic tiles market.

PROJECT COST ESTIMATE CAPACITY

Ceramic Wall & Floor Tiles : 6,000 Sq.MT. Per Day
Plant & Machinery : ₹ 2724 Lakhs
Cost of Project : ₹ 5543 Lakhs
Rate of Return : 29 %
Break Even Point : 47 %

Global Market Outlook

The global ceramic wall tiles market size was estimated at USD 68.6 billion in 2018 and is expected to grow at a compound annual growth rate (CAGR) of 6.1% from 2019 to 2025. The product demand is also expected to be benefited by growing renovation activities in commercial spaces including offices, hospitals, and shopping malls. The increasing number of hotels and restaurants in Southeast Asian countries is expected to propel the demand for ceramic wall tiles over the projected period. Also, the rising investment in the development and renovation of tourism infrastructure within Europe and the Americas is further expected to boost the product demand.

Outcome

The ceramic wall and floor tiles business has been booming in recent years. Ceramic wall and floor tiles are also very versatile, so they can be used in a variety of different applications, from bathrooms and kitchens to exterior walls and patios. As a result, ceramic tiles have become increasingly popular among homeowners who want to achieve an attractive, durable, and low-cost look for their homes.

A Business Plan for Transformer Oil

Transformer oil is a type of specialized oil that is used as an insulation and cooling medium in electrical transformers. It is a mineral-based oil, which may be composed of synthetic hydrocarbons, vegetable or animal oils, or silicone. It is mainly used in power and distribution transformers, in which it helps to cool down the coils, prevent breakdowns, and ensure proper insulation of the transformer. Transformer oil has excellent electrical insulating properties and does not react with the copper windings of the transformer. It has a very high flash point and low pour point, making it stable at high temperatures.

Application of Transformer oil

It is typically used to cool and insulate the components of these devices. It also provides protection against water and moisture, which can cause short-circuiting, sparking and arcing. Transformer oils are also used to clean and lubricate components. Transformer oil is used in a variety of industries including electricity generation, telecommunications, and industrial machinery. Transformer oil plays an important role in many industries and its use is becoming increasingly widespread. It offers many benefits, including improved efficiency, protection against fire and water damage, and protection against static electricity.

PROJECT COST ESTIMATE CAPACITY

Transformer Oil : 100 KLS Per Day Plant & Machinery : ₹ 19 Cr.

Cost of Project : ₹ 93 Cr.

Rate of Return : 27 %

Break Even Point : 41 %

Global Market Outlook

The global transformer oil market size was valued at USD 2.1 billion in 2022 and is expected to expand at a compound annual growth rate (CAGR) of 12.5% from 2023 to 2030. This is attributed to growth in the global power sector and advancement of electric grids in emerging countries. Transformer Oil is an excellent electrical insulator that remains stable at high temperatures. Although the majority of this transformer oil is derived from mineral oils, replacement compositions with superior physical and chemical qualities are becoming more and more popular.

Conclusion

With the continuing development of technology and the rise in demand for transformer oils, it is clear that the transformer oil business will continue to be a lucrative industry for many years to come.

Prestressed Concrete Sleepers

Concrete sleepers are one of the most important applications of a railway track system. The impact load characteristics and ultimate load carrying capacity of a prestressed sleeper, but the fatigue life of prestressed concrete sleepers is limited. The railway sleeper is a vital railway component that lies between the rail and the ballast. The important functions of sleepers include the following: uniform transfer and distribution of loads from the rail foot to ballast bed, provision of an anchorage for the fastening system, and the restraining of lateral, longitudinal, and vertical movement of the rails.

Prestressing is the process of applying a load to a structure deforming is it so that it will with stand a work load more effectively or so that it will deflect less. Prestressed concrete is that in which internal stresses are introduced to such a magnitude and distribution that the tensile stresses resulting from the service loads are encountered to a desired degree. The prestresses are commonly introduced by tensioning the tensions.

Indian railways is world's largest railway network. Railways in India consume at about

PROJECT COST ESTIMATE CAPACITY

Capacity : 500 Pcs. Per Day
Plant & Machinery : ₹ 1409 Lakhs
Cost of Project : ₹ 2691 Lakhs
Rate of Return : 29%
Break Even Point : 41%

350 Million concrete sleepers. The demand of such sleepers including Private players is expected to double to nearly 700 million sleepers in next 2 years. The Indian Railways is among the world's largest rail networks. The Indian Railways network is spread over 115,000 km, with 12,617 passenger trains and 7,421 freight trains each day from 7,172 stations plying 23 million travelers and 3 million tones (MT) of freight daily. The revenue generated by the Railways is expected to grow at 10 per cent in the fiscal year 2017-18. Foreign Direct Investment (FDI) inflows into Railways related components from April 2000 to March 2017 were US\$ 798.55 million. The market size is projected to grow from USD 104.03 Billion in 2017 to USD 138.96 Billion by 2022, at an estimated **CAGR of 5.96%**

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

NIIR PROJECT CONSULTANCY SERVICES

AN ISO 9001:2015 CERTIFIED COMPANY

106 E, Kamla Nagar, Delhi-110 007 (India). Tel. : 91-11- 23843955, 23845886, 23845654 Mob.: +91-9097075054, 8800733955 Fax : 91-11-23845886

 $Website: www.niir.org\ www.entrepreneurindia.co\ E-mail: info@niir.org\ ,\ npcs.india@gmail.com$

3 Visit us at : www.niir.org ● www.entrepreneurindia.co



Setup plant of Acetate Tow for Cigarette Filters

A cetate tow is a type of material used in the cigarette industry to make filters. It is made of cellulose acetate fibers which are very thin, strong and resilient. This type of material has been around for decades and is now widely used to manufacture cigarette filters. Acetate tow is produced through a process called extrusion, which consists of melting the cellulose acetate into liquid form and then spinning it into fine fibers that are then woven together. These fibers are then twisted into an even finer yarn, resulting in a durable and reliable material.

The Future of the Acetate Tow Industry

The demand for acetate tow is growing rapidly as cigarette manufacturers turn to this durable material to meet their ever-increasing production needs. The rise in the number of smokers, especially in emerging markets, is expected to drive growth in the acetate tow industry. The increasing demand for cigarette filters, coupled with the advancements in acetate tow production technologies, are expected to drive growth in the acetate tow industry over the next few years.

PROJECT COST ESTIMATE

CAPACITY

Acetate Tow : 8 MT Per Day
Plant & Machinery : ₹ 542 Lakhs
Cost of Project : ₹ 1426 Lakhs
Rate of Return : 29 %
Break Even Point : 50 %

Global Market Outlook

Acetate tow has become a popular choice for cigarette filters due to its safety, affordability, and versatility. With the evergrowing market for filter materials, acetate tow has become an essential component of the industry and is here to stay.

Conclusion

Acetate tow is relatively affordable and easy to work with. This makes it a great choice for companies looking to enter into the cigarette filter business. As more people become aware of the health benefits associated with acetate tow, we can expect the demand for this type of material to only increase.

Setup a Manufacturing Plant of Disposable Plate and Cups from Waste Rice Husk Powder

Disposable plate and cups has emerged as a better alternative to plastics across the globe and Indians have been early adopters of biodegradable products. All kinds of plant biomass material such as bagasse, rice husk, coconut coir etc. are being utilized for producing eco-friendly cuttery, tableware and packaging products that could see a surge in usage in the coming decade.

Rice husk plates is highly friendly, high performing, and cost-effective products manufacturing using top-quality materials and industry-leading technology. Great to hold and use and no unpleasant feeling of wooden single use tableware in your mouth. Ditch the single use plastic and bio plastic and reuse the natural sustainable alternative. Give a gift that has a positive effect, take to work, use at the deli takeout, switch from plastic at the refectory and avoid single use surcharges too.

Disposable plates and cups has gathered groundswell of interest among consumer worldwide due to compelling environmental

PROJECT COST ESTIMATE

CAPACITY:

Disposable Plates from : 10,000 Pcs per Day

Waste Rice Husk Powder

Disposable Cups from : 10,000 Pcs per Day

Waste Rice Husk Powder

Plant & Machinery : ₹ 38 Lakhs
Cost of Project : ₹ 166 Lakhs
Rate of Return : 28.44%
Break Even Point : 59.78%

reasons. To that end, augmenting the popularity of biodegradable utensils are their better sustainability than plastics and the salient environmental-friendliness of biodegradable materials. In particular, biodegradable tableware made of plant-based materials and biodegradable bio-plastics have attracted widespread attention world over. Most popularly, eco-friendly tableware are made using corn, areca leaves, and bagasse, and rice husk. Over the years, the remains of fast growing trees have been utilized. The demand for disposable plate and cup with bamboo in regions where they are abundantly available has gathered stream, such as in India.

Setup plant of Craft Beer

Craft beer is a term used to describe a beer that has been made in a traditional and independent fashion. It is usually made in smaller batches with high quality ingredients, and often has a distinctive flavor profile. Unlike many mass-produced beers, craft beer often uses a variety of malted grains, hops, and other ingredients such as spices and fruits, giving it a unique character and taste. Craft brewers also experiment with different styles, including lagers, stouts, porters, sours, IPAs, and many others.

Benefit of Craft Beer Industry

The craft beer industry is a booming business that offers a number of benefits for consumers, breweries, and the economy. Craft brewers are small, independent businesses that produce beers with high-quality ingredients and unique flavor profiles. The craft beer industry is also taking a leadership role in sustainability. Many breweries are using sustainable practices to reduce their carbon footprint. They are focusing on recycling, water conservation, and reducing energy usage. These efforts help create a greener future for everyone and are a great example of the positive effects of craft beer.

Indian Market Outlook

In recent years, craft beer has become increasingly popular among Indians. Many bars and restaurants across the country now offer craft beer on their menus, and there are numerous craft beer festivals taking place each year. In addition, craft beer clubs have sprung up in major cities, providing an opportunity for enthusiasts to sample new beers. The craft beer industry in India is still in its infancy and there is a lot of potential for growth. With the right strategies and investments, craft brewers can tap into this lucrative market and expand their reach to new customers.

Global Market Outlook

Craft Beer Market size was valued at USD 234.34 Billion in 2021 and is projected to reach USD 1132.91 Billion by 2030, growing at a CAGR of 19.13% from 2023 to 2030. Beer has always been the oldest and most widely consumed alcoholic beverage around the world and has several health benefits if consumed moderately; it contains iron, calcium, vitamin B, and fiber. Advancements in beer brewing technologies have resulted in the emergence of wide-ranging products in the market. The aforementioned product is one of the most consumed variants in the spectrum and has gained immense popularity in recent years. The market's overall growth has been tempered by changing consumer lifestyles and preferences. Furthermore, rapid urbanisation and an increasing population are expected to accelerate the market's overall growth.

Conclusion

The craft beer industry is a thriving industry that has brought countless benefits to consumers, breweries, and the local economy. By offering high-quality, unique products and focusing on sustainability, craft brewers have created a booming industry that will continue to grow for years to come.

PROJECT COST ESTIMATE

CAPACITY:

Craft Beer (Bottles 650 ml Size): 3,847 Bottles Per Day Craft Beer (Al. Cans 500 ml Size): 5,000 Bottles Per Day

Plant & Machinery : ₹ 780 Lakhs
Cost of Project : ₹ 2007 Lakhs
Rate of Return : 27 %
Break Even Point : 49 %

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

NIIR PROJECT CONSULTANCY SERVICES

106 E, Kamla Nagar, Delhi-110 007 (India). Tel. : 91-11- 23843955, 23845886, 23845654 Mob.: +91-9097075054, 8800733955 Fax : 91-11-23845886

AN ISO 9001:2015 CERTIFIED COMPANY



Start a Production of **Compressed Biogas**

ompressed bio gas (CBG) is a renewable energy source produced from organic material such as agricultural waste, municipal waste, and other organic sources. It is made through anaerobic digestion (AD), a process which breaks down organic material in the absence of oxygen to create biodas and other useful products. Biodas is made up mostly of methane and carbon dioxide, both of which can be used for energy production.

Uses and Applications

Compressed bio gas is a renewable energy source that has a wide range of uses and applications. It is a clean fuel that can be used to power vehicles, generate electricity, and provide heating and cooling. It can also be used in industrial processes, such as the production of fertilizer, plastics, and chemicals. As demand for renewable energy grows, compressed bio gas is likely to become an even more important part of the energy mix in the future.

Future prospects for the compressed biogas sector

The future of the compressed bio gas industry is looking very promising. With the world's needs energy constantly creasing, newable energy

PROJECT COST ESTIMATE

CAPACITY:

Compressed Bio Gas : 6 MT Per Day Spent Slurry as Manure: 60 MT Per Day Plant & Machinery : ₹ 172 Lakhs **Cost of Project** : ₹ 522 Lakhs Rate of Return : 27 % : 46 % **Break Even Point**

compressed bio gas are becoming increasingly popular. With more businesses and governments recognizing the potential of this renewable energy source, the industry is likely to experience an even larger boom.

Indian Market Outlook

India is the world's second-largest biogas consumer in the world. According to the Oil and Natural Resources Minister, India will receive Rs 2 lakh in investment to develop 5000 biogas plants by 2023-24. The installation of renewable energy sources is expected to increase significantly over the next decade, resulting in India biogas market growth. Global Market Outlook

The global biogas market size was valued at USD 60.06 billion in 2021 and is expected to expand at a compound annual growth rate (CAGR) of 4.3% from 2022 to 2030. The growing interest in finding effective means to obtain bioproducts and biofuel from industrial food waste coupled with an increasing need for wastewater treatment in the industrial sector is expected to fuel the demand for biogas over the forecast period.

Conclusion

In conclusion, the compressed bio gas industry is booming and the future looks bright. With advancements in technology and more people and businesses recognizing the benefits of using this renewable energy source, this industry is set to become one of the biggest players in the energy sector. With its low emissions, economic efficiency, and environmental friendliness, it is clear why this fuel is becoming increasingly popular with businesses and governments around the world.

A Business Plan for Ferric Pyrophosphate (Food Grade/Pharma Gade)

erric pyrophosphate is a phosphate-iron anaemia, fatigue, and weakness due to iron compound that is used as a food additive, dietary supplement and in pharmaceuticals. It has a number of health benefits including reducing the risk of anaemia and maintaining blood sugar levels. It can also be found in breakfast cereals, energy drinks, and

some canned grade ferric pyrophosphate is used to add iron to food products an iron source for people who have difficulty obtaining from their diets. It is especially

beneficial to vegans and vegetarians who don't eat meat or animal products. Pharma grade ferric pyrophosphate is a more refined form of the compound used in drugs, supplements and other pharmaceutical products.

Benefit of Ferric pyrophosphate

Ferric pyrophosphate (FPP) is a mineral supplement used to improve iron levels in the body. It has been gaining popularity in recent years due to its numerous health benefits. FPP is an excellent source of iron, which is essential for maintaining healthy red blood cells and supporting a strong immune system. It helps to reduce symptoms of

deficiency. With its numerous health benefits, it is no wonder why the ferric pyrophosphate business is booming.

Global Ferric Pyrophosphate Market

Due to the COVID-19 pandemic, the global Ferric Pyrophosphate market size is estimated

PROJECT COST ESTIMATE

CAPACITY:

Ferric Pyrophosphate Anhydrous: 420 MT Per Annum (Food Grade)

Ferric Pyrophosphate Nonhydrate: 180 MT Per Annum (Pharma Grade)

Plant & Machinery : ₹ 8 Lakhs **Cost of Project** : ₹ 96 Lakhs **Rate of Return** : 28 % **Break Even Point** : 64 %

the economic change by this Yellow

to be worth USD

million in 2022

and is forecast to

a readjusted size

of USD million

by 2028 with a

CAGR during the

review period.

Fully considering

accounting for the Ferric Pyrophosphate global market in 2021, is projected to value USD million by 2028, growing at a revised CAGR in the post-COVID-19 period.

Conclusion

As more people become aware of the health benefits associated with ferric pyrophosphate, demand for this essential mineral is growing significantly. With increased demand comes increased prices, making ferric pyrophosphate an attractive business opportunity for those looking to capitalize on this booming industry.

Industrial Township

Industrial Township provides facilities like, parks, community halls, library, shopping centers, banks, post offices etc. In the Indian context, an "Industrial Park" means a project in which plots of developed space or built up space or a combination with common facilities and quality infrastructure facilities is developed and made available to the units for the purposes of industrial activities or commercial activities.

Industrial development is one of the important drivers of economic growth in India. India is targeting industrial growth rate of 12 to 14% in the medium run and contribution of industrial sector to national GDP by 25% creating 100 million additional jobs by 2022. Thus, due to demand it is best to invest in this project.

PROJECT COST ESTIMATE

CAPACITY:

Type 1 Industrial Plots Area 500 sq.mt. each Type 2 Industrial Plots Area 1000 sq.mt. each Type 3 Industrial Plots Area 2000 sq.mt. each Type 4 Industrial Plots Area 5000 sq.mt. each Residential Appartment 2 BHK 112.42 sq.mt. each : 120 Nos./Annum Residential Appartment 3 BHK 161.9 sq.mt. each : 96 Nos./Annum **Plant & Machinery Cost of Project**

: ₹ 69 Lakhs : ₹ 21024 Lakhs

: 80 Nos./Annum

: 40 Nos./Annum

: 20 Nos./Annum

: 8 Nos./Annum

Rate of Return : 30% **Break Even Point** : 14%

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

NIIR PROJECT CONSULTANCY SERVICES

AN ISO 9001:2015 CERTIFIED COMPANY

106 E, Kamla Nagar, Delhi–110 007 (India). Tel.: 91-11- 23843955, 23845886, 23845654 Mob.: +91-9097075054, 8800733955 Fax: 91-11-23845886

Website: www.niir.org www.entrepreneurindia.co E-mail: info@niir.org, npcs.india@gmail.com

Visit us at : www.niir.org • www.entrepreneurindia.co



Setup plant of Mica Powder from Mica Deposits

Mica powder is a fine, powdery mineral that is made from mica deposits. Mica is a type of natural rock that is composed of various minerals including silicon dioxide, magnesium, and aluminium. It has been used for centuries in various products due to its special qualities such as shine, light reflectivity, and colour range. Mica powder is created through a process called micronization where the mica is grinded into a fine

How is Mica Powder made from Mica Deposits?

Mica powder is made from mica deposits that are mined from the earth. The mica mineral is first extracted from the deposit and then further processed to extract the mica flakes, which are then ground into a fine powder. The mica powder is often used in cosmetics, paints, and other products due to its versatility and high-shine finish.

Benefits and Uses of Mica Powder

Mica powder is also used in cosmetics, jewellery, pottery, and more. The main benefit of mica powder is its versatility. It can be used as an ingredient in almost any kind of project. In cosmetics, mica powder can be used to add shimmer and depth to makeup. It can also be used to create lip gloss, eyeshadow, nail polish, and more. In pottery, mica powder is often used to add

colour and texture to clay.

Global Market Outlook

The global mica powder market is expected to grow from USD 1.02 Billion in 2017 to USD 1.48 Billion by 2030, at a CAGR of 4.5% from 2017 to 2030. The growth of the market can be attributed to the increasing demand for mica powder in various industries such as plastics and automotive industry.

PROJECT COST ESTIMATE CAPACITY

: 40 MT Per Day Mica Powder Plant & Machinery : ₹ 296 Lakhs Cost of Project : ₹ 2684 Lakhs Rate of Return : 24 % **Break Even Point** : 51 %

Conclusion

The mica powder business is booming right now, it is an incredibly versatile product that has many beneficial uses and is a cruelty-free, sustainable choice. It is becoming increasingly popular among cosmetic manufacturers and crafters alike. Whether you are looking to create makeup products or craft projects, mica powder can help you achieve beautiful results. With so many advantages and applications, it's no surprise that the mica powder business is booming right now.

A Complete Business Plan for **Lithium Ion Battery**

(Battery Assembly)

ithium 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

During the forecast period of 2018-2023, the India lithium-ion

PROJECT COST ESTIMATE CAPACITY

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

> 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

> 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.

Start Production of Tantalum Powder from Tantalite Ore

Tantalum is a rare transition metal that is mined from columbite-tantalite, which is an ore found in various parts of the world. The metal is particularly known for its high melting point and its resistance to corrosion, making it an ideal choice for many applications in a wide range of industries.

Uses and Application of Tantalum **Powder**

Tantalum powder is also used in the production of medical equipment, such as implants and prostheses. The unique properties of tantalum make it an ideal material for medical devices as it does not corrode and is biocompatible with the human body. In addition, tantalum powder is used in the production of jewellery and decorative items. The powder can

PROJECT COST ESTIMATE **CAPACITY**

Tantalum Powder : 4 MT Per Day Plant & Machinery : ₹ 235 Lakhs : ₹ 1935 Lakhs Cost of Project Rate of Return : 28 % Break Even Point : 51 %

be formed into intricate shapes and patterns, giving jewellery and other decorative items a unique and eyecatching look.

Scope in Tantalum Industry

With the increasing demand for tantalum in the electronics industry, there is a significant opportunity for startups to capitalize on the booming tantalum trade industry. Due to its relatively low cost and wide range of applications, tantalum has become an increasingly popular material for electronic products. Startups can explore the tantalum market to find new applications and uses for this material. There are currently a number of tantalum-based products, but there could be many more opportunities for new entrepreneurs. With some research and development, startups can come up with unique and innovative ways to use tantalum in different industries, such as automotive and aerospace.

Global Market Outlook

The Tantalum market size is estimated to reach a value of US\$451.6 million by the end of 2027 after growing at a CAGR of 4.5% during the forecast period 20222027. Asia-Pacific dominates the Tantalum market size, the increase in demand from end-user sectors, such as electronics, aerospace and medical equipment, is the main factor driving the region's growth.

Assessment

Tantalum powder is an important metal with many applications in a wide range of industries. It is an excellent choice for industries such as electronics, aerospace, and medical sectors. The process of extracting tantalum from tantalite ore can be complicated, but the resulting tantalum powder is worth the effort. As technology advances and the need for new materials increases, tantalum powder from tantalite ore will continue to be an important commodity in the global marketplace.

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

NIIR PROJECT CONSULTANCY SERVICES

106 E, Kamla Nagar, Delhi-110 007 (India). Tel.: 91-11-23843955, 23845886, 23845654 Mob.: +91-9097075054, 8800733955 Fax: 91-11-23845886

AN ISO 9001:2015 CERTIFIED COMPANY



Manufacturing Business of Silica Gel Crystal & Beads from Sodium Silicate and Sulphuric Acid

Silica Gel crystals & beads from sodium silicate and sulphuric acid are small porous granules made of silica. The process of manufacturing these granules starts with combining sodium silicate (Na2SiO3) and sulphuric acid (H2SO4) in a reactor, where the liquid reaction product is filtered and dried. The result is a fine powder which can be shaped into granules of different sizes. The crystals are highly absorptive and have an affinity for water and other volatile compounds, which makes them ideal for numerous industrial applications.

Uses and Application

Silica gel crystals and beads from sodium silicate and sulphuric acid have many uses. They can be used to protect items from corrosion, mildew and mold by eliminating moisture from the air. In addition to providing moisture control, silica gel crystals & beads are also used for various other purposes. They can be used as an abrasive to polish metals or remove paint and rust, as a fertilizer for plants, as an additive in cat litter, as an ingredient in soap and cosmetics, and for food preservation. The technology behind silica gel crystals and beads is also very useful for industrial applications. Silica gel has a high adsorption capacity which makes it an ideal material for chemical processing, such as oil and gas production, water treatment, and pharmaceutical manufacturing.

Indian Market Outlook

India is one of the world's largest consumers of silica gel and beads. It is used for various applications such as for moisture control, gas absorption, and chemical analysis. The Indian market for silica gel and beads is expected to grow at a CAGR of 5% from 2018 to 2025. It can be said that the Indian market for silica gel and beads holds a bright future ahead. With the increasing demand from various industries and the presence of major expected that the market Plant & Machinery will witness strong growth over the next few

Global Market Outlook

Silica Gel Market was valued at USD 946 million in 2020 and it is expected to reach USD 1261 million by the end of 2027, growing at a CAGR of 4.2% during 2021-2027. Increasing use of silica gel in the pharmaceutical industry for packaging to protect medicines from moist environment and thus getting decomposed or dissolved is expected to be a crucial success factor. Robust pharmaceutical manufacturing base in North America in light of supportive government regulations and expenditure on the healthcare

PROJECT COST ESTIMATE CAPACITY

global players, it can be Silica Gel Crystals & Beads: 1000 MT Per Annum

: ₹ 504 Lakhs **Cost of Project** : ₹ 912 Lakhs

industry will have a positive impact.

Conclusion

The business of producing silica gel crystals and beads from sodium silicate and sulphuric acid is booming. This is because of the many uses for these materials in a wide variety of industries. Not only are silica gel crystals and beads from sodium silicate and sulphuric acid used in the manufacture of everyday items such as cosmetics, pharmaceuticals and food items, but they are also used for industrial applications such as water purification, oil and gas drilling and for pollution control.

Solar Panel (Including both type of the PV Cells: Polycrystalline and Monocrystalline

Asolar panel is made up of several solar modules that are wired together in series and parallel to give a certain voltage and current to charge a battery.

Photovoltaic panels make up the solar array of a photovoltaic system, which generates and distributes solar power in commercial and residential settings. The DC output power of each module is rated under conventional test conditions and typically ranges from 100 to 365 watts.

A single solar module can only provide a certain quantity of energy; therefore, most setups use numerous modules. A photovoltaic system consists of a panel or array of solar modules, a solar inverter, and, in certain cases, a battery and/or solar tracker, as well as interface cable.

A photovoltaic (PV) module is a pre-assembled, plug-and-play assembly of 6-10 solar cells. Solar photovoltaic panels make up the solar array of a photovoltaic system, which generates and distributes solar

PROJECT COST ESTIMATE

CAPACITY:

: 140 MW Solar Panel

Mono Crystalline Solar PV Module Capacity : 250 Watt 466.8 Nos. Per Day Mono Crystalline Solar PV Module Capacity : 320 Watt 364.6 Nos. Per Day Poly Crystalline Solar PV Module Capacity : 250 Watt 466.8 Nos. Per Day Poly Crystalline Solar PV Module Capacity : 320 Watt 364.6 Nos. Per Day

Plant & Machinery Cost of Project Rate of Return **Break Even Point**

power in commercial and residential settings. The DC output power of each module is rated under conventional test conditions and typically ranges from 100 to 365 watts.

A single solar cell will not be able to deliver the necessary usable output. To boost the output power of a PV system, a number of such PV Solar Cells must be connected. A solar module is typically made up of a sufficient number of solar cells that are connected in series to generate the requisite standard output voltage

and power.

: ₹ 36.35 Cr

: ₹ 63.46 Cr

: 30%

: 44%

Large-scale solar applications, such as commercial and residential systems, typically monocrystalline solar panels. They can also be used for smaller-scale applications, and the panel size is determined by the application.

The most widely utilised PV panels on the planet are polycrystalline solar panels. They come in a variety of power levels, ranging from 5 W to 250 W or more, and can be used in both home and commercial settings.

In the projected period 2021-2028, the global solar power market is estimated to increase at a CAGR of 6.9%, from \$184.03 billion in 2021 to \$293.18 billion in 2028.

With the unrelenting shift toward renewable energy, the worldwide solar panel industry is accelerating. China, the world's largest exporter of solar panels, will benefit from strong global demand, while domestic sales may decrease as tariff subsidies are reduced. Because solar cells are becoming more affordable and suburban building is becoming stronger, the United States is seeing a rise in solar power output.

Due to the rapid adoption of solar generation capacity, the EU, Asia-Pacific, Mexico, and Australia are also emerging as the most attractive markets. Distributed solar photovoltaic systems for residential, commercial, and industrial buildings appear to be a growing business segment around the world.

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

NIIR PROJECT CONSULTANCY SERVICES

AN ISO 9001:2015 CERTIFIED COMPANY

106 E, Kamla Nagar, Delhi-110 007 (India). Tel.: 91-11-23843955, 23845886, 23845654 Mob.: +91-9097075054, 8800733955 Fax: 91-11-23845886





NAME OF BOOKS

₹/US\$

CHEMICALS, FINE CHEMICALS, VITAMINS	,
AMINO ACIDS AND PROTEINS	

•	Handbook on Chemical Industries (Alcohol Based) 750 /- 100
•	Industrial Chemicals Technology Handbook 1100/- 125
•	The Complete Technology Book on Chemical Industries 975/- 100
•	Handbook on Manufacture of Acetophenone, Alcohols, Alletrhin,
	Anthracene, Barium Potassium Chromate Pigment, Calcium Cyanamide,
	Carboxymethylcellulose, Carotene, Chlorophyll, Chemicals from
	Acetaldehyde, Fats, Milk, Oranges, Wood, Manufacture of Dye Intermediates
	and Dyes, Fine Chemicals, Formaldehyde, Granulated Fertilizers, Granulated
	Triple Superphosphate and Hydroquinone1100/- 125
•	Handbook on Fine Chemicals, Vitamins, Amino Acids
	And Proteins 1450/- 150
•	Detailed Project Profiles on 9 Selected Chemical Industries
	(2nd Revised Edition) #
•	Detailed Project Profiles on Chemical Industries (Vol II)
	(2nd Revised Edition) #
•	The Complete Book on Non Ferrous and Precious Metals
	with Electroplating Chemicals
•	Modern Technology of Industrial Chemicals
	The Complete Technology Book on Fine Chemicals
•	The Complete Technology Book on Fine Chemicals 1100/- 123

PHARMACEUTICAL, DRUGS

•	Drugs & Pharmaceutical Technology Handbook	1075/	- 125
•	Investment Opportunity in Drugs & Pharmaceutical Projects (2nd Edn.) #	1895/	- 150

Handbook on Active Pharmaceutical Ingredients (API), Drugs & Pharmaceutical Products (Paracetamol, Aspirin, IV Fluids, Ointment, Metronidazole, Liquid Glucose, Surgical Cotton, Syrup, Tablet, Excipients, Pharmaceutical Salts with Manufacturing Process, Machinery Equipment Details and Factory Layout)......2495/- 225

PESTICIDES, INSECTICIDES

The Complete Technology Book on Pesticides, Insecticides, Fungicides and Herbicides (Agrochemicals) with Formulae, Manufacturing Process, Biopesticides Handbook 1575/- 150

STARCH & ITS DERIVATIVES

The Complete Technology Book on Starch & Its Derivatives .. 1100/- 125

WAX & POLISHES

 The Complete Technology Book on Wax and Polishes 1895/- 200 Wax Polishes Manufacturing Handbook with Process and Formulae (Automobile, Industrial, Leather, Furniture, Floor, Marine, Metal and Shoe Polish)...... 1675/- 150

JUTE & COIR PRODUCTS

•	The Complete Book on Jute & Coir Products
	(With Cultivation & Processing) 2nd Rev. Edn 1575/- 150
•	Handbook on 100% Export Oriented Jute & Jute Products
	(Eco Friendly Projects) # 695/- 100

BIO-TECHNOLOGY, NANOTECHNOLOGY, ENZYMES, FOOD BIO-TECHNOLOGY, VERMICULTURE, VERMICOMPOST, BIO-FERTILIZER, ORGANIC FARMING, BIOGAS, MUSHROOM

Bio -Technology Handbook 1100/- 125

•	Plant Biotechnology Handbook 1	100/- 125
•	 Hand Book on Projects in Export Thrust Area with Internation 	al
	Market Survey (Bio-Tech & Pharmaceutical Technology) # 1	095/- 100
•	Biotech & Pharmaceutical Handbook # 1	895/- 200
•	Enzymes Bio -Technology Handbook 1	100/- 125
•	The Complete Book on Biotechnology Based Bulk Drugs 1	050/- 125
•	Handbook on Food Bio-Technology (Extraction, Processing of	
	Fruits, Vegetables and Food Products) 2nd Revised Edition 1	495/- 150
•	Handbook on Plants and Cell Tissue Culture	275/- 125
•	The Complete Technology Book on Vermiculture and	
	Vermicompost (Earthworm) with Manufacturing Process,	
	Machinery Equipment Details & Plant Layout (2nd Edn.) 1	275/- 125
•	The Complete Technology Book on Biofertilizer and Organic Fa	arming
	(Potash, Greenhouse Farming, Hydroponic Farming, Pellet Fer	tilizer,

Machinery Equipment Details & Flant Layout (2nd Lun.) 1275/- 125
The Complete Technology Book on Biofertilizer and Organic Farming
(Potash, Greenhouse Farming, Hydroponic Farming, Pellet Fertilizer,
Seaweed Fertilizer, Biogas with Manufacturing Process, Machinery
Equipment Details)1895/- 150
 Handbook on Biogas and It's Applications
(from Waste & Renewable Resources with Engineering
& Design Concepts) 2nd Revised Edition1175/- 125
Handbook on Mushroom Cultivation and Processing
(With Dehydration, Preservation and Canning) 1275/- 125
The Complete Book on Organic Farming and Production
of Organic Compost (2nd. Rev. Edn.)1575/- 150

Nanotechnology Handbook......1675/- 150

Nanoscience and Nanotechnology Handbook...... 1675/- 150

Manufacture of Biofertilizer and Organic Farming...... 975/- 100

NAME OF BOOKS

Integrated Organic Farming Handbook 1275/- 125 Handbook on Organic Farming and Processing 1275/- 125

Handbook on Small & Medium Scale Industries (Biotechnology Products) .. 1695/- 150

Bioplastics & Biodegradable Products Manufacturing Handbook (Bioplastic Carry Bags, Bio-PET, Bioplastic Drinking Straws, Corn and Rice Starch-Based Bioplastics, Food Packaging Applications, Cassava Bags, Biodegradable Tableware, Biodegradable Plates, Biodegradable Toilet Paper, Starch Based Biodegradable Plastics, Polylactic Acid (PLA))......1575/- 150

Handbook on Biofuel, Ethanol and Bioenergy Based Products (Ethanol as Biofuel, Methane Gas, Biodiesel, Biogas, Biomass Gasification, Bio-Chemical, Renewable Energy, Clean-Energy, Activated Carbon, Agricultural Residues, Forestry Residues, Animal Waste, Wood Wastes, Industrial Wastes, Municipal Solid Wastes and Sewage with Machinery, Manufacturing

Process, Equipment Details and Plant Layout)......1875/- 150 Fertilizers Manufacturing Handbook (Ammonium Sulfate, Diammonium Phosphate (DAP), Urea - Ammonium Nitrate, Neem Coated Urea, N.P.K. Complex Fertilizers, Single Superphosphate (SSP), Triple Superphosphate, Zinc Sulfate Monohydrate, Magnesium Sulfate with Manufacturing Process, Machinery Equipment Details & Factory Layout) 2795/- 200

PRINTING, PACKAGING, PRINTING INK

Handbook on Modern Packaging Industries (2nd Rev. Edn.).. 1675/- 150 Modern Technology of Printing & Writing Inks (2nd Rev. Edn.) .. 1475/- 150 The Complete Technology Book on Printing Inks...... 1000/- 100 Handbook on Printing Technology (Offset, Flexo, Gravure, Screen, Digital, 3D Printing with Book Binding and CTP) (4th Revised Edition)..........1675/- 150 Screen Printing Technology Handbook...... 1000/- 100

Modern Printing Technology......250/- 50 The Complete Book on Printing Technology with Process Flow Diagrams, Plant Layouts and Machinery Details (Offset, Gravure, Flexographic, Security, Web Offset and

Pad Printing) 2nd Rev. Edn.....

PAPER, PULP & PAPER CONVERSION

Modern Technology of Pulp, Paper and Paper Conversion Industries 1000/- 100 The Complete Technology Book on Pulp & Paper Industries.. 1100/- 125 Handbook on Pulp and Paper Processing...... 1875/- 150

CONFECTIONERY, VEGETABLES, SPICES, AGRO BASED, CEREAL FOOD, MILK, COCOA, CHOCOLATE, ICE CREAM, PLANTATION,

FARMING, FOOD & BEVERAGES, FRUITS, DAIRY, OILS & FATS, BAKERY, SNACKS, FISHERIES, MEAT, COCONUTS, SUGARCANE, TEA CULTIVATION & PROCESSING

• Cultivation of Fruits, Vegetables and Floriculture...... 1100/- 125

with Project Profiles (3rd Rev. Edn)...... 1775/- 150 Modern Technology of Confectionery Industries with Formulae & Processes (2nd Rev.Ed.) 600/- 100 Modern Technology of Agro Processing & Agricultural Waste Products....975/- 100

Handbook on Agro Based Industries (2nd Rev. Edn.) # 1595/- 150 Handbook on Spices 975/- 100

Modern Technology of Oils, Fats & Its Derivatives (2nd Rev. Edn.) .. 1875/- 150 Manufacture of Food & Beverages (2nd Rev. Edn.) # 1895/- 150 Detailed Project Profiles on Dairy & Dairy Products (Dairy Industry,

Dairy Packaging, Dairy Farming & Dairy Products, Chocolate Confectionery Plant, Cheese Analogue, Milk Processing, Skimmed Milk Powder & UHT Milk Plant) 3rd Revised Edition #.......... 2595/- 225 **Profitable Agro Based Projects with Project Profiles**

(Cereal Food Technology) (2nd Revised Edition) # 1895/- 150 Modern Technology of Milk Processing & Dairy Products (4th Rev. Edn.)1475/- 150

The Complete Technology Book on Dairy & Poultry Industries with Farming & Processing (2nd Rev. Edn.)........... 1275/- 125

The Complete Technology Book of Cocoa, Chocolate, Ice Cream and Other Milk Products 1275/- 125

The Complete Technology Book on Flavoured Ice Cream (Manufacturing Process, Flavours, Formulations with Machinery Details) 2nd Revised Edition...... 1475/- 150

Handbook on Drying, Milling and Production of Cereal Foods (Wheat, Rice, Corn, Oat, Barley and Sorghum





NAME OF BOOKS

₹/US\$

NAME OF BOOKS

₹/US\$

 The Complete Technology Book on Bakery Products (Baking Science with Formulation & Production (4th Rev. Edition) 1995/- 200
 The Complete Technology Book on Snack Foods (2nd Rev. Edn.) 1475/- 150

 The Complete Book on Sugarcane Processing and By-Products of Molasses (with Analysis of Sugar, Syrup and Molasses) 1675/- 150
 Confectionery Products Handbook (Chocolate, Toffees,

The Complete Book on Tomato & Tomato Products
 Manufacturing (Cultivation & Processing) 2nd. Rev. Edn. 1400/-150
 The Complete Book on Onion & Garlic Cultivation with
 Processing (Production of Onion Paste, Flakes, Powder &

 The Complete Book on Ginger Cultivation and Manufacture of Value Added Ginger Products (Ginger Storage, Ginger Oil, Ginger Powder, Ginger Paste, Ginger Beer, Instant Ginger Powder Drink and Dry Ginger from Green Ginger)1575/-150

 55 Most Profitable Micro, Small, Medium Scale Food Processing (Processed Food) Projects and Agriculture Based Business Ideas for Startup (2nd Revised Edition) 1495/-150

 Manufacture of Pan Masala, Tobacco and Tobacco Products (Tobacco Cultivation, Chewing Tobacco, Cigarettes, Bidi, Cigars, Khaini, Zarda, Gutka, Katha, Mouth Freshner, Pan Chatni, Kimam, Sweet Supari, Nicotine Sulphate, USP Nicotine, Nicotine Tartarate, Nicotine, Polacrilex Resin) 2nd Rev. Edn. 2225/-200

े फूड प्रोसेसिंग इंडस्ट्रीन (खाद्य प्रसंस्करण एवं कृषि आधारित उद्योग परियोजनाएं) 2nd Rev. Edn......1475/- 150 SMALL SCALE INDUSTRY (SSI), ENTREPRENEURSHIP, PROJECT IDENTIFICATION AND PROFILES, HI-TECH PROJECTS, EXPORT BUSINESS, GUIDELINES, SELF EMPLOYMENT, WOMEN ENTREPRENEURSHIP, SMALL, COTTAGE & HOME INDUSTRIES

• Stop Dreaming-Start Your New Business
What No One Ever Tells You About Starting Your Business-
Facilities and Procedures for Entrepreneurs400/- 50
Secrets for Making Big Profits from Your Business with
Export Guidelines 400/- 50
Opportunities for Women Entrepreneurship
(With Project Profiles) 2nd Edition575/- 50
• लघु व कुटीर उद्योग (स्माल स्केल इण्डस्ट्रीन्) (5th Revised Edition) 1150/- 125
Profitable Small, Cottage & Home Industries 800/- 100
• Select and Start Your Own Industry (4th Revised Edition) 475/- 50
• Just For Starters : How To Start Your Own Export Business ?
4th Revised Edition
Just For Starters : How To Become A Successful Businessman ?
3rd Revised Edition
Best Businesses You Can Start With Low Cost (2nd Rev. Edition) 750/-100
• 50 Projects To Start With 5,00,000
• Just For Starters: Selected Projects To Start With 30,00,000 475/- 50
• Just For Starters: Selected Projects To Start With 15,00,000 475/- 50
• Just For Starters: Selected Projects To Start With 35,00,000 475/- 50
Grow Rich By Starting Your Own Business325/- 50
• 50 Best Home Businesses To Start with Just 50,000425/-75
Profitable Cottage and Tiny Industries475/- 50
Detailed Project Profiles on Selected Hi-Tech Projects
(Project Reports) #795/- 100
Money Making Business IdeasYou Can Start from Home
with Low Costs (Profitable Part Time, Spare Time and Side
Businesses) 2nd Revised Edition 800/- 100
• स्मॉल स्केल इण्डस्ट्रीन् प्रोजेक्ट्स (लघु, कुटीर व घरेलू उद्योग
परियोजनाएं उद्यमिता मार्गदर्शिका) 2nd Rev. Edn950/- 100
Start-Up Projects for Entrepreneurs : 50 Highly Profitable
Small & Medium Industries–2nd Rev. Edn
Entrepreneurs Start-Up Handbook: Manufacturing of
Profitable Household (FMCG) Products with Process &
Formulations (2nd Rev. Edition)1675/- 150
Profitable Small Scale Industries Money making Business Ideas
for Startup (when you don't know what industry to start) 975/- 100
ioi Startup (when you don't know what industry to start) 975/- 100

FASHION TECHNOLOGY

• Fashion Technology Handbook325/- 50

CANDLE: MAKING & DESIGNS

The Complete Technology Book on Candle: Making & Designs 650/- 100

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

Modern Technology of Plastic Processing Industries (2nd Edn.) ... 975/- 100
 Detailed Project Profiles on Hi-Tech Plastic Products

Visit us at : www.niir.org • www.entrepreneurindia.co





NAME OF BOOKS	₹/US\$	NAME OF BOOKS	₹/US\$
The Complete Technology Book on Plastic Extrusion Moulding and Mould Designs The Complete Technology Book on Fibre Glass, Opti Glass and Reinforced Plastics	1000/- 100 cal 1275/- 125	Adhesives Formulary Handbook (Adher Paper, Film, Flocking, Foam, Water-Based, Hot Melt Adhesives, Pressure Sensitive Adl Compounds, Epoxy Adhesives, Caulking, Compounds, Compo	Oil-Based, Corrugation, Labelling, hesives, Hot Melt Coatings, Grouting ement, Concrete and Plaster Patching
The Complete Technology Book on Plastic Films, HD and Thermoset Plastics Modern Technology of Plastic and Polymer	1175/- 125	Compounds, Glazing Compounds, Joint Ce with Machinery Equipment Details & Facto Handbook on Speciality Gums, Adde Compounds of Compounds (Adde Compounds)	ory Layout)1895/- 150 esives, Oils, Rosin &
Processing Industries Profitable Plastic Industries The Complete Book on Water Soluble Polymers	250/- 50	Derivatives, Resins, Oleoresins, Kath Other Natural Products	
Speciality Plastics, Foams (Urethane, Flexible, Rigid Pet & Preform Processing Technology Handbook		(with Process & Formulations) 2nd R Phenolic Resins Technology Handboo The Complete Technology Book on II	ok (2nd Revised Edition) 1895/- 150
LEATHER PROCESSING & TANK		The Complete Book on Gums and Sta Food Industry	1275/- 125
Leather Processing & Tanning Technology Handboo		 The Complete Book on Water Solubl Handbook on Tall Oil Rosin Production 	
TEXTILE SPINNING, WEAVING, FINISHING AND PRIN WITH EFFLUENT TREATMENT, TEXTILE DYES & PIG DYES & PIGMENTS, NATURAL FIBERS, JUT	MENTS, NATURAL	and UtilizationSYNTHETIO	C RESINS
 The Complete Technology Book on Textile Spinning, Weaving, Finishing and Printing (3rd Rev.Edn.) 		Modern Technology of Synthetic Res (2nd Revised Edition)	1575/- 150
The Complete Technology Book on Textile Processing	g	 Synthetic Resins Technology Handbo The Complete Technology Book on S 	
with Effluent Treatment Modern Technology of Textile Dyes & Pigments (2nd R)	-	Formulae & Processes • Alkyd Resins Technology Handbook.	1150/- 125
The Complete Technology Book on Dyes and Dye Intermediates (2nd Rev. Edn.)	1995/- 200	Epoxy Resins Technology Handbook Adhesives, Epoxy Coatings) with Ma	(Synthesis, Epoxy Resin
The Complete Book on Natural Dyes & Pigments Handbook on Natural Dyes for Industrial Applications (Ex	1100/- 125	Machinery Equipment Details (3rd F	
Dyestuff from flowers, Leaves, Vegetables) 2nd Rev. Edn.	1575/- 150	PETROLEUM, GREASES, PETR	
 Natural Fibers Handbook with Cultivation & Uses Woollen Spinning, Weaving, Knitting, Dyeing, Bleac 	hing	 Modern Technology of Petroleum, Gre Petrochemicals (Lubricating Oils, Cutti 	
and Printing Technology Handbook Handbook on Textile Auxiliaries, Dyes and Dye	1100/- 125	 Bitumen, Waxes with Process and Form The Complete Book On Distillation A 	•
Intermediates Technology The Complete Book on Textile Processing and	1575/- 150	Products (Lubricants, Waxes And Per Lubricating Oils, Greases and Petrole	trochemicals) 975/- 100
Silk Reeling Technology • A Concise Guide on Textile Dyes, Pigments and Dye	1750/- 150	Manufacturing Handbook	1475/- 150
Intermediates with Textile Printing Technology	1675/- 150	 Manufacturing of Petroleum Produc Greases and Solid Lubricants, Solid F 	uels, Gaseous Fuels,
ELECTROPLATING, ANODIZING & META POWDER COATING AND METAL FI	NISHING	Gasoline, Diesel Fuel Oils, Automotive Fuels, Lubricating Oils and Lubricatire Petroleum & Petroleum Products Te	ng Greases) 1675/- 150 chnology Handbook
 Electroplating, Anodizing & Metal Treatment Handle The Complete Technology Book on Electroplating, P 		(Thermal Cracking of Pure Saturated Asphalts, Refinery Products, Blendin	ng and Compounding,
Powder Coating and Metal Finishing (2nd Rev. Edn.) Handbook on Electroplating with Manufacture of	1675/- 150	Oil Refining and Residual Fuel Oils) WASTE MANAGEMENT, PR	
Electrochemicals	1695/- 150	MEDICAL, MUNICIPAL WAS	STE, E-WASTE, BIOMASS,
RUBBER PROCESSING AND COMPO		MEDICAL & SURGICAL D • Products from Waste (Industrial & A	
 The Complete Book on Rubber Processing and Com Technology (with Machinery Details) (2nd Revised I 		Modern Technology of Waste Manag Recycling, Treatment & Utilization	gement: Pollution Control,
The Complete Book on Rubber Chemicals Handbook on Rubber and Allied Products (with Project Pro	-	Handbook on Recycling & Disposal of	of –Hospital Waste Municipal,
SURFACE COATING, PAINTS, VARNISHES		 Solid Waste, –Biomedical Waste, –F Water and Air Effluents Treatment H 	landbook 1275/- 125
The Complete Book on Resins (Alkyd, Amino, Pheno	olic,	 The Complete Guide on Industrial Po The Complete Book on Managing Food F 	-
Polyurethane Epoxy, Silicone, Acrylic) Paints, Varnis Pigments & Additives (Surface Coating Products wit	h	Handbook on Organic Waste for Biol Manure into a Solid, Tomato Waste	
Formulae) 3rd Rev. Edn Paints, Pigments, Varnishes and Enamels Technolog	y	from Jute Stick, Cotton Processing W Wastes. Bioconversion of Pretreated	laste, Fish Waste, Agro-Industrial
Handbook (With Process & Formulations) 2nd Rev. Modern Technology of Paints, Varnishes & Lacquers (2nd		Stalks to Ethanol, Agricultural Waste	Treatment, Waste of Dehydrated
Handbook on Paints and Enamels Surface Coating Technology Handbook	1275/- 125	Onion, Beef-Cattle Manure Slurry, M Wastes from Large Piggeries, Pig Wa	ste, Oxytetracycline, Methane
Spirit Varnishes Technology Handbook		from Cattle Waste Handbook on Medical and Surgical E	
(with Testing and Analysis) • The Testing Manual of Paints, Varnishes and Resins.	12/5/- 150	Plastic Gloves, I.V. Cannula, Infusion Cotton and Bandage, Surgical Wear,	
 Handbook on Paint Testing Methods Manufacture of Thinners & Solvents (Properties, Use 		 Disposable Products Manufacturing Cutlery, Paper Cups, Banana Leaf Pla 	
Formulation with Machinery Details) 2nd Edn. Rev. Manufacture of Paint Varnish & Allied Products (Inc.)	1875/- 150	Wipes, Toilet Paper Roll, Sanitary Na Thermocol Products, PET Bottles)	pkins, Baby Diapers,
Thinner, Paint Industry, Infrared Reflected (IR) Paint	, High Temperature	The Complete Book on Biomass Base	ed Products
Aluminium Based Paint, Paint Drier, Powder Coating for Roof) 3rd Edition #		(Biochemicals, Biofuels, Activated Ca The Complete Technology Book on E-V	Vaste Recycling (Printed
GUMS, ADHESIVES & SEALANTS, I		The Complete Book on Waste Treatn	
DERIVATIVES, RESINS AND OLEO Gums, Adhesives & Sealants Technology	MESINS	(Industrial, Biomedical, Water, Electi Household/ Kitchen, Farm Animal, D	Dairy, Poultry, Meat,
(with Formulae & their Applications) 2nd Rev. Edn.	1475/- 150	Fish & Sea Food Industry Waste)	1675/- 150





	NAME OF BOOKS ₹/US\$	NAME OF BOOKS	₹/us\$
•	Manufacture of Value Added Products from Rice Husk (Hull) and Rice Husk Ash (RHA) (Precipitated Silica, Activated Carbon, Cement, Electricity, Ethanol, Hardboard, Oxalic Acid, Paper,	SOAPS, DETERGEN [*] TOILETRIES & DI	
	Particle Board, Rice Husk Briquettes, Rice Husk Pellet, Silicon, Sodium Silicate Projects) 2nd Rev. Edition	Modern Technology of Soaps, Deterg (With Formulae & Project Profiles) (4)	ents & Toiletries
•	Medical, Municipal and Plastic Waste Management Handbook 1275/- 125	Herbal Soaps & Detergents Handboo	
	The Complete Book on Biological Waste Treatment	Handbook on Soaps, Detergents & Acid	
	and their Utilization1675/- 150	The Complete Technology Book on Det	
	INFRASTRUCTURE, HOSPITALITY, MEDICAL,	The Complete Technology Book on Soa	
E	NTERTAINMENT, WAREHOUSING, EDUCATION BUSINESS & REAL ESTATE PROJECTS	Surfactants, Disinfectants, Cleaners, To	iletries, Personal Care
		Products Manufacturing and Formulat	
	Investment Opportunities in Infrastructure Projects # 2500/- 225 Investment Opportunities In Hospitality, Medical, Entertainment,	Ball, Mosquito Coil, Floor Cleaner, Glas Utensil Cleaning Bar, Liquid Detergent,	
·	Ware Housing & Real Estate Projects (with 15 Project Profiles)# 4408/- 350	Detergent Soap, Liquid Soap, Handwas	
•	How to Start Profitable Education Business (12 Detailed Project Profiles)	Shampoo, Henna Based Hair Dye, Herk	
	(Engineering, Dental, ITI, Management, Marine Engineering, Medical,	Air Freshener, Shoe Polish, Tooth Paste) 3rd Revised Edition 1895/- 200
	Pharmacy, Polytechnic College and Schools) 2nd Revised Edition # 2295/- 200	Soaps, Detergents and Disinfectants Washing Soap, Laundry Soap, Hand	• • • • • • • • • • • • • • • • • • • •
	WOOD AND ITS DERIVATIVES	(Washing Soap, Laundry Soap, Handi Soap, Liquid Soap, Hand Wash, Liqui	
	The Complete Technology Book on Wood and Its Derivatives 1100/- 125	Powder, Bar, Phenyl, Floor Cleaner, T	
•	Bamboo Plantation and Utilization Handbook	Coils, Naphthalene Balls, Air Freshen	
	HERBAL PRODUCTS, AYURVEDIC, HERBAL & UNANI	Aerosols Insecticide) (3rd Revised Ed	
_	MEDICINES, DRUGS, NEEM, HERBS & MEDICINAL PLANTS	GLASS, CERAMICS, COAL	. LIGNIN & MINERALS
	CULTIVATION, COSMETICS, NATURAL PRODUCTS, JATROPHA	The Complete Book on Glass & Cerar	
•	Handbook on Unani Medicines with Formulae, Processes, Uses and Analysis (2nd Revised Edition)	(2nd Revised Edition)	
•	Handbook on Herbal Drugs And Its Plant Sources	The Complete Book on Glass Technol	
	Herbal Foods And Its Medicinal Values 1275/- 125	The Complete Technology Book on N	
	Herbal Cosmetics & Ayurvedic Medicines (Eou) (3rd Rev. Edn.) 1475/- 150	Mineral Processing	
•	Handbook on Ayurvedic Medicines with Formulae, rocesses & Their Uses (2nd Rev. Edn.)1475/- 150	 Handbook on Rare Earth Metals and (Properties, Extraction, Preparation a 	
•	Herbal Cosmetics Handbook (Formulae, Manufacturing	Hand book on Coal, Coke, Cotton, Lignin,	
	Processes with Machinery & Equipment Details (4th Rev. Edn.). 1775/- 150	Polymer Composites, Lignocellulosic-Plas	
•	The Complete Technology Book on Herbal Beauty Products	Materials, Wood Fiber, Rosin and Rosin D	
	with Formulations and Processes	ALUMINIUM, STEEL, FERROU	S, NON-FERROUS METALS
	Modern Technology of Cosmetics	WITH CASTING AND FOR	
	Toiletries, Perfumes) 2 Vols	AUTOMOBILE C	OMPONENTS
	Herbs Cultivation & Medicinal Uses975/- 100	The Complete Technology Book on H	
	Herbs Cultivation & Their Utilization	Steel Rolling Technology Handbook (•
	Compendium of Medicinal Plants875/- 100	 The Complete Book on Ferrous, Non- Casting and Forging Technology 	
•	Compendium of Herbal Plants975/- 100	The Complete Technology Book on A	
•	Cultivation And Processing of Selected Medicinal Plants 1175/- 125	Aluminium Products	1450/- 150
•	Aromatic Plants Cultivation, Processing and Uses	The Complete Technology Book on S	
•	Cultivation and Utilization of Aromatic Plants1100/- 125 The Complete Book on Jatropha (Bio-Diesel) with	(Fasteners, Seamless Tubes, Casting, & others)	Kolling of flat Products
	Ashwagandha, Stevia, Brahmi & Jatamansi Herbs	The Complete Book on Ferroalloys (F	erro Manganese, Ferro
	(Cultivation, Processing & Uses)	Molybdenum, Ferro Niobium, Ferro	Boron, Ferro Titanium,
	Handbook on Medicinal Herbs With Uses	Ferro Tungsten, Ferro Silicon, Ferro N	
·	Products, Formulations, Extraction & Processing	 Steel and Iron Handbook Handbook on Steel Bars, Wires, Tube 	
•	Handbook on Herbs Cultivation & Processing 875/- 100	Production with Ferrous Metal Casti	
	Handbook of Neem & Allied Products	The Complete Book on Production of	
	Handbook on Herbal Medicines750/- 100 Handbook on Cosmetics (Processes, Formulae	& Allied Products (Engine Parts, Pist	
·	with Testing Methods)1675/- 150	Control Cable, Engine Mounting, Aut Gear, Leaf Spring, Shock Absorber, Si	
•	Handbook on Drugs from Natural Sources 1175/- 125	Block, Chassis, Battery, Tyre & Flaps)	
	ESSENTIAL OILS, AROMATIC CHEMICALS, PERFUMES,	Handbook on Automobile & Allied Produ	
	FLAVOURS, FOOD COLOURS	FORMULARY (FORM	ULATION) BOOKS
•	The Complete Technology Book of Essential Oils	Selected Formulary Book on Cosmet	
	(Aromatic Chemicals (Reprint 2011)	Soaps and Detergents (2nd Revised E	
	Essential Oil Hand Book	Selected Formulary Book on Inks, Pa Varnishes and Enamels	
•	Cosmetics (2nd Rev Edn.)	Selected Formulary Handbook	
•	Modern Technology of Perfumes, Flavours and	Selected Formulary Book on Petrole	-
	Essential Oils 2nd Edn	Polishes, Glass, Ceramics, Nitrogenon Leather and Insecticides	
·	(2nd Revised Edition)1895/- 150	CONSTURCTION MATERIALS, (
	Food Flavours Technology Handbook	The Complete Book on Construction	
•	The Complete Technology Book on Flavours, Fragrances and Perfumes1675/- 150	The Complete Technology Book on Bricks	
•	Perfumes and Flavours Technology Handbook with	The Complete Technology Book on A	sbestos, Cement,
	Manufacturing Formulations, Process, Machinery	Ceramics and Limestone	
_	Equipment Details & Factory Layout	 Handbook on Gypsum and Gypsum by (Mining, Processing, Transportation, 	
•	Handbook on Perfume, Deodorant, Air Freshener, Body Spray, Fragrances, Flavours and Essential Oil Industry with Manufacturing Formulations, Process,	Gypsum Board, Plaster of Paris with	
			-





EMULSIFIERS AND OLEORESINS

- The Complete Book on Emulsifiers with Uses, Formulae and Processes. (2nd Rev. Edn.)1400/- 150
- Handbook on Oleoresin and Pine Chemicals (Rosin, Terpene, Derivaties, Tall Oil ,Resin & Dimer Acids...... 2200/- 200

COLD STORAGE, COLD CHAIN & WAREHOUSE

BATTERY ASSEMBLING AND RECYCLING

RENEWABLE ENERGY AND SOLAR PRODUCTS

 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 ELECTRIC VEHICLES MANUFACTURING, E- CAR, ELECTRIC BICYCLE, E- SCOOTER, E-MOTORCYCLE, ELECTRIC RICKSHAW, E- BUS, ELECTRIC TRUCK, E MOBILITY, EV INDUSTRY, AUTOMOBILE, LIGHT ELECTRIC VEHICLES, ELECTRIC VEHICLE INDUSTRY

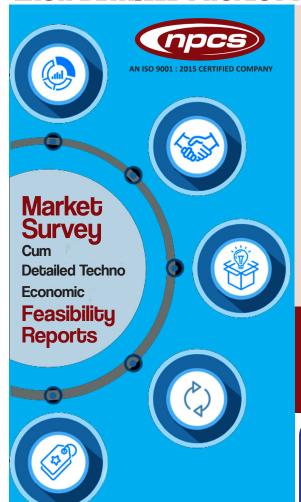
ELECTRICAL CABLE, WIRE AND WIRE PRODUCTS

NIIR PROJECT CONSULTANCY SERVICES

AN ISO 9001:2015 CERTIFIED COMPANY

106 E, Kamla Nagar, Delhi–110 007 (India).
Tel.: 91-11- 23843955, 23845886, 23845654
Mob.: + 91-9097075054, 8800733955, Fax: 91-11-23845886
Website: www.niir.org www.entrepreneurindia.co
E-mail: info@niir.org, npcs.india@gmail.com

SELECTED BUSINESS IDEAS FOR RIGHT INVESTMENT EACH DETAILED PROJECT REPORT (BUSINESS PLAN) CONTAINS



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 DetailedProcess 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 immediately 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:

NIIR PROJECT CONSULTANCY SERVICES

AN ISO 9001:2015 CERTIFIED COMPANY

106 €, Kamla Nagar, Delhi–110 007 (India). Tel. : 91-11- 23843955, 23845886, 23845654 Mob.: +91-9097075054, 8800733955 Fax : 91-11-23845886

SELECTED BUSINESS IDEAS FOR RIGHT INVEST

Essential Oils, Phytochemicals, Aromatic Chemicals, Aromatic Compounds, Spice Oils and **Oleoresins**



- » Agar Oil from Black Agarwood
- » Aromatic Perfumery Compound
- » Black Pepper Essential Oil
- » Black Pepper Oil
- » Chilli Oil
- » Chilli Oil from Red Chilli
- » Chilli Oleoresin
- » Citronella (Cymbopogon Nardus) Oil Extraction
- » Citronella Oil Extraction (Steam Distillation Process)
- » Cresols
- » Cultivation and Super Critical Oil Extraction (Chilli, Ginger and Large Cardamom)
- » Curcumin Extraction Unit
- » Curcumin from Turmeric
- » Dry Lemon Powder and Lemon Oil
- » Essential Oil
- » Essential Oil from Black Pepper
- » Essential Oil from Flowers and Leaves
- » Essential Oil from Lily, Mogra, Nishigandha
- » Essential Oil from Rose Flowers
- » Essential Oils Extraction (Lemongrass,

- » Extraction of Essential Oil and Packing of **Ground Spices**
- » Extraction of Oil from Artemisia Vulgaris
- » Extraction of Oil from Rajnigandha
- » Extraction of Spice Oleoresin (Chilly)
- » Fractional Distillation of Essential Oils and Medicinal Plant Extracts
- » Ginger (Dry, Powder, Flakes, Oil) & Garlio (Powder, Flakes, Oil) Processing Unit
- » Ginger Oil
- » Ginger Oil (Super Critical Co2 Process)
- » Herbal Natural Essential Oil (Super Critical Liquid Carbon Dioxide Process)
- Ionone from Lemongrass Oil
- » Lemongrass Oil
- » Manufacture of Celery Seed Oil
- » Menthol Crystal & Oil
- » Menthol Crystal and Mentha Oil
- » Menthol Oil, Clove Oil & Citronella Oil
- » Natural Colour and Oil (Turmeric Colour & Oil) » Natural Colours
- Citronella, Lavender, Rosemary and Peppermint) » Oleoresin of Spices

- » Oleoresin of Spices (Black Pepper, Paprika and Cardamom)
- » Oleoresins of Spices by Steam Distillation Process
- Palmarosa Grass Oil
- » Patchouli Oil
- » Peppermint Oil
- » Perfumery Compounds (Fragrance Oil)
- » Rajnigandha & Rose Flower Plantation with Oil Extraction
- » Rajnigandha Oil Extraction Unit
- » Rose Plantation and Rose Oil Extraction
- » Spice (Chilli) Oleoresin
- » Spice Oil & Oleoresins of Spices (Ginger-Turmeric- Pepper & Red Chilies)
- » Spice Oil Extraction from Curry Leaves
- » Spice Oil or Oleoresins (Extraction of Essential Oil, Cardamom, Jeera, Ajwain, Ginger & Other Spices)
- » Spice Óleoresins
- » Tejpatta Oil (Bay Leaf Oil)
- » Turmeric and Ginger Oil





E-Waste Recycling (Electronic Waste, E-Waste, E-scrap, Waste Electrical and Electronic Equipment (Weee)) Disposal and Management

- » E-Waste Recycling Electronic Waste, E Waste, E Scrap, or Waste Electrical » E-Waste & Lithium Battery Recycling Plant and Electronic Equipment (WEEE)

 » E Waste Recycling Plant

- » E-Waste Recycling For Extraction of Precious Metals (Nickel, Tin & Zinc), Gold, Silver, Palladium, Plastic, Glass and Copper

Export Oriented Units, Projects (100% EOU)



- » Adhesive (Fevicol Type) Water Proofing Grade
- » Adhesive from Maize Starch
- » Adult Pull-up Diapers
- » Agar Agar (Bacteriological Grade)
- » Agarbatti (Incense Sticks)
- » Alcohol Based Fuel Gel
- » Aloe Vera Gel & Powder » Aluminium Cans for Brewery
- » Aluminium Foil
- » Aluminium Foil Rolling Mill with PP Caps
- » Aluminum Gravity Casting
- » Amla (Gooseberry) Powder
- » Apparel
- » Apple Chips

- » Ark of Ajwain, Pudina, Saunf & Gulab (Extracts of Carom Seeds, Mint, Fennel & Rose)
- Aromatic Herbal Shampoo **Aromatic Perfumery Compound**
- Atta Chakki
- » Automatic Modern Chilli Powder Plant
- » Automatic Packaged Drinking Water
- Automatic Papad Plant
- » Ayurvedic Pain Balm (Ointment)
- Ayurvedic Pharmacy
- Baby & Adult Diaper & Sanitary Pads
- Baby Cereal Food
- » Banana Plantation Banana Powder
- » Banana, Onion, Orange and Tomato Powder

- » Barley Malt
- » Beer Plant Beer, Wine & Whiskey (From Pineapple)
- Beetroot, Sapota, Dragon Fruit, Jamun and Green Peas)
- » Bicycle and Cycle Rickshaw
- » Bicycle Tyres & Tubes from Natural Rubber
- » Bio-Plastic Products (Glasses, Plates and Bags) Black Braided Silk Sutures (Non Absorbable
- Surgical Suture) Black Pepper Oil
- » Blood Bags
- » Button Mushroom Cultivation
- » Canvas Shoes



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

NIIR PROJECT CONSULTANCY SERVICES AN ISO 9001:2015 CERTIFIED COMPANY

106 E, Kamla Nagar, Delhi-110 007 (India). Tel.: 91-11-23843955, 23845886, 23845654 Mob.: +91-9097075054, 8800733955 Fax: 91-11-23845886

SELECTED BUSINESS IDEAS FOR RIGHT INVESTMENT

- » Carbonated and Non-Carbonated Drinks (Non-Alcoholic)
- Cardanol Production from Cashew Nut Shell Liquid (CNSL)
- **Cashew Cultivation**
- » Cashew Nut Processing Unit
- » Cashew Nut Processing with CNSL
- » Cashew Nut Shell Oil Production
- » Cement Water Proofing Compound
- » Cheese Analogues
- » Chilli Oil
- » Chilli Oil from Red Chilli
- » Chilli Oleoresin
- » Chocos (Ready-to-Eat Breakfast Cereal Food)
- » Citronella Oil Extraction (Steam Distillation Process)
- » Coconut Oil from Copra
- » Condoms
- » Condoms (Lubricated)
- » Cosmetics Manufacturing Unit Perfume Gel, Nail Polish Remover Liquid, Hair Gel, Face Wash Gel, Face Cream, Talcum Powder, After Shave Lotion Liquid, Shaving Cream Gel and Hand Wash Gel
- » Cotton Yarn from Waste Yarn
- » Cover All Boiler Suits
- » Craft Beer
- » Cultivation and Super Critical Oil Extraction (Chilli, Ginger and Large Cardamom)
- » Curcumin
- » Curcumin (Turmeric) The Indian solid gold
- » Curcumin Extraction Unit
- » Curcumin from Turmeric
- » Curry Leaves Essential Oil Extraction
- » Curry Powder
- » Dairy Farming with Breeding and Dairy Products
- » Dal Mill (Pulses)
- » Dehydrated Onion
- » Dehydrated Vegetables, Mushroom and Soup
- » Detergent Cake & Powder
- » Diabetic Food
- » Diaper (Baby and Adult) and Sanitary Napkins
- » Dish Wash (Liquid & Soap Bar) and Detergent (Liquid Soap Bar and Powder)
- » Disposable Baby Diaper
- » Disposable Plastic Syringes
- » Disposable Plastic Syringes with Needles
- » Disposable Surgical Masks » Dry Fruits Processing (Cashew, Almond, Walnut, Raisins and Figs)
- » Dry Fruits Processing (For Snack, Almond, Pistachio and Cashew Nut)
- » Drying of Tropical Fruits (EOU) (Pineapple, Mango, Banana, Papaya & Coconut)

 » Edible Oil Refinery from Crude Palm Oil
- » Egg Powder
- » Electronic Digital Weighing Machine
- » Electronic Toys
- » Essential Oil
- » Essential Oil Extraction (Jasmine and Tuberose)
- » Essential Oil from Flowers and Leaves
- » Exercise Note Books
- » Export House
- » Extraction of Essential oil and Packing of **Ground Spices**
- » Extraction of Essential Oil from Black Pepper
- » Extraction of Methi (Fenugreek) Seed
- » Extraction of Oil from Rajnigandha
- » Extraction of Spice Oleoresin (Chilly)
- » Fish Flavoured Chips
- » Flavoured Nuts
- » Flavoured Raisins
- » Floor Cleaners
- » Floral Foam
- » Floral Foam (Phenolic Foam) with Resin
- » Fractional Distillation of Essential Oils and **Medicinal Plant Extracts**
- » Freeze Dried Products- Fruits & Vegetables (Dry Banana, Mango, Custurd Apple, Freeze **Dried Vegetables**
- » Freeze Dried Vegetables
- » Fresh Dips
- » Frozen Foods, Fresh Produce, Purees & Sauces

- » Fruit Juice (Apple, Plum and Peach)
- » Fruit Juice (Mango, Oranges, Litchi) & Sugarcane Juice with Aseptic Packaging & Pet **Bottle Packaging**
- Fruit Juice Factory
- Fruit Juice in Aseptic Packaging
- Fruit Processing (Mango & Pomegranate Juice)
- Fruit Pulp. Mango Pulp, Guava Pulp, Pomegranate Pulp, Papaya Pulp
- » Fruits & Vegetables Powder (Tomato, Onion, Mango, Pomegranate and Papaya Powder)
- » Fully Automatic Match Box with Match Sticks (Wooden Match Sticks & Waxed Strips)
- » Gelatin Capsules Soft and Hard (Vegetable and Non-Veg Base)
- » Geraniol Derivative and Alcohol Extract of a Pinene
- » Ginger Oil
- » Ginger Paste in Pouch
- » Ginger Powder
- » Glass Reinforced Concrete
- » Gourmet Popcorns (Popped Corn, Popcorns or Pop-Corn)
- » Grain Based Alcohol Distillery
- » Granite Cutting and Polishing
- » Grapes Packhouse for Exports
- » Grapes Packing for Exports with 100 MT Cold Storage
- » Green Peas Processing and Preservation
- » Groundnut Oil
- » Growing Of Fruits and Manufacturing of Natural Juices
- » Hair Color Manufacturing with Formula
- » Hair Dye & Colourants
- Hard Stains Remover Liquid, Detergent
- Herbal Body Care Beauty Products (Herbal Body Wash, Shampoo, Hair Conditioners, Soaps, Lotions and Scrubs)
- » Herbal Cosmetics (Shampoo, Conditioner, Face Wash, Body Wash, Massage Oil, Hair Oil, Face Cream, Massage Cream, Lip Balm)
- » Herbal Health Drink
- » Honey Processing
- » Hosiery Industry (Ganji, Baniyan & Underwear)
- » Hosiery Manufacturing
- » Hosiery Products (Vest, Briefs, T-Shirts & Socks)
- » How to Start Personal Care Products
- » Hydroponic Green House Farming
- » Incense Sticks
- » Indian Kitchen Spices
- » Indigo Dyes» Instant Noodles» Instant Tea
- » Integrated Sericulture
- Integrated Sugar Plant (Cultivation Of Sugarcane, Co Generation & Distillery) **Iodised Salt**
- IV Fluid (Automatic Plant)
- » Jeans
- » Jeans & Jackets (Denim), Readymade Garments
- » Jeans Manufacturing Unit
- » Jute Garments
- » Jute Shopping Bags
- » Jute Yarn, Jute Sutli & Hessian Cloth
- Weaving Integrated Unit
- » Knitted Fabric
- » Ladies under Garments
- Latex Condom
- **Leather Garments** Leggings Manufacturing
- Liquid Glucose from Broken Rice
- Liquid Organic Fertiliser (Biofertiliser)
- » Liquid Washing Soap, Perfumed Bleach for the Wash of White Cloths, Toilet Tills
- » Liquor from Mahua (Wine and Hard Liquor)
- » Macaroni, Vermicelli, Noodles and Instant Noodles with Tastemaker
- » Maize Processing (Glucose, Sorbitol and Oil)
- » Maltodextrin
- » Mango Papad (Aam Papad)
- » Mango Pickles
- » Mango Pulp & Slices

- » Mango Pulp with Cold Storage
- » Manufacture of Celery Seed Oil
- » Manufacturing of Frozen Layer Paratha (Fried dough food-flatbread native to the Indian subcontinent)
- Manufacturing of Jeans, Trousers, T-Shirts and Kids Garments
- Masala Powder
- » Masala Powder and Chilli Powder
- » Medical Disposables: Disposable Syringes (Self Destructive) with Needles, Catheters and Mask
- » Menthol Crystals-Bold (EOU)
- » Metalised Colour PVC and Metalised Rainbow **PVC Sequence and Sparklers**
- Micronutrients Fertilizer
- » Mink Blankets
- Moringa Oleifera (Drumstick) Powder Mosquito Repellant Liquidator, Vaporiser (All Out type)
- Mosquito Repellent Candle
- Mosquito Repellent Coil
- » Mosquito Repellent Liquidator
- » Mouth Freshener (Sounf, Supari, Elaichi Flavoured & Coloured in Pouch)
- Multiblade Safety Razor
- » Mustard Oil Mill » Namkeen (Dalmoth, Bhujia, Chana Chur and
- Khatta Meetha) » Natural Food Colours
- » Oleoresins of Spices by Steam Distillation Process
- » Onion Powder
- » Packaging of Tomato Paste
- » Palmarosa Grass Oil » Paper Napkins, Toilet Paper Rolls
- & Facial Tissues » Paper Shopping Bags, Cups,
- Glass & Envelopes
- Pasta and Macaroni
- Peanut Butter Peanut Candy (Peanut Patti, Gajak)
- Peanut Oil
- Perfumery Compounds Manufacturing and
- Formulation Pesticides from Neem Seeds & Leaves
- **PET Preform**
- » Pharmaceutical Grade Sugar
- » Pharmaceutical Unit (Tablet and Capsules)
- » Phenolic Foam
- » Pickle Manufacturing » Pickles (Various Types)
- » Pickles, Murabbas, Sauces & Squashes
- » Plain Corn Flakes & Coated Choco Flakes » Plastic Cards for Telephone
- » Plastic Optical Lenses
- » Polymer Pencil
- » Pork Products
- » Potato Flakes and Pellets
- » Potato Powder (Automatic Plant)
- » Potato Powder, Flakes and Pellets » Potato Products (Potato Balls, Nuggets and
- French Fries) Powder Dehydrated Beetroot Powder, Dehydrated Carrot Powder
- Precipitated Silica from Rice Husk Ash Preservative Free Jam (Fruit Spreads) &
- Organic Jam Making **Printed Paper Shopping Bags** Production of (Mirchi Powder, Turmeric
- Powder, Sambhar Powder, Biryani Masala) **Profitable Dry Fruits Processing**
- » Protein » Puffed Rice (Muri)

» Razor Blade

- » Rajnigandha & Rose Flower Plantation with Oil Extraction
- Ready Made Garments Ready to Eat Food (Retort Packing)
- Readymade Garments
- Readymade Garments (Jean Trousers & Shirts)
- » Readymade Garments, Clothing » Rice Flakes (Thin Poha) and Puffed Rice (Murmura-)





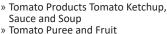
SELECTED BUSINESS IDEAS FOR RIGHT INVESTMENT

- » Rice Milling Unit
- » Roasted Salted Cashew Kernel from Cashew Nut
- from Cashew Nu » Roller Flour Mill
- » Rose Oil Extraction
- » Rose Plantation and Rose Oil Extraction
- » Sanitary Napkin & Baby Diapers
- » Sanitary Napkins
- » Sanitary Napkins (Low Cost Project)
- » Semi Processed Canned Vegetable
- » Shiitake Mushroom
- » Silicone Spray
- » Socks Manufacturing
- » Solar Panel
- » Spice Oil Extraction from Curry Leaves
- » Spice Powder (Turmeric, Chilli, Pepper, Coriander and Cumin Powder)
- » Spice Powder-Masala Powder (Cryogenic Grinding) Production of (Turmeric, Red Chilli, Coriander, Cumin, Cardamom, Cloves, Cassia, Shah Jeera, & Nutmeg Mace Powder)
- » Spices
- » Spices (Masala)
- » Spices (Turmeric Powder, Red Chilli Powder, Dhaniya Powder, Garam Masala, Sabji Masala, Popcorn Masala)
- » Spices (Turmeric, Red Chilli, Dhaniya and Jeera Powder)
 » Spices and Masala Grinding,
- Blending and Packing

 » Spices in Pouch Packing



- » Spices- Masala Powder Spices Powder, Blended Spices and Readymade Mixes
- » Spices Production Unit (Turmeric, Chilli & Masala Powder)
- » Spray Dried Fruit and Vegetables Juice Powder Vegetables and Fruit Juice Powder (Spray Dried Pineapple Juice Powder, Spray Dried Orange Juice Powder, Dehydrated Beetroot Powder, Dehydrated Carrot Powder)
- » SS Fasteners
- » Start a Namkeen Factory. Salted Packaged Food Industry
- » Sterile Water for Injection with BFS Technology
- » Stuff Toys
- » Sugarcane Juice Preservation and Bottling Plant
- » Surgical Hand Gloves
- » Surgical Hand Gloves and Mackintosh Sheets (Hospital Rubber Sheet)
- » Sweat Free and Antibacterial Socks
- » Sweet Supari
- » Synthetic Floats for Fishing Industry
- » Tamarind Based Products- Tartaric Acid, Food Colour, Crude Pectin, Tamarind Oil, Tamarind
- » Tea Blending and Packaging
- » Tea Packaging Unit (Blending and Packing)
- » Tejpatta Oil (Bay Leaf Oil)
- » Tissue Paper from Recycled Paper
- » Toffee (Confectionery Industry)
- » Tomato Paste (Tomato Concentrate)



- Someto Puree and Fruit Concentrate with Hot Break Process
- » Toothpaste
- » Trading Business (Export & Imports)
- » Trousers Fabrication Unit
- » Turmeric Powder, Coriander Powder and Chilli Powder Processing
- Turmeric, Dhania and Chilli Powder
- » Tyres (For Three Wheelers and Medium Size Four Wheelers)
- » uPVC Pipes
- » uPVC Profiles for Doors and Windows
- » Vacuum Fried Snacks Vacuum Fried Vegetable Chips (Sweet Potato, Beans and Beetroot)
- Vacuum Fried Vegetable Chips (Sweet Potato, Beans and Beetroot)
- » Vanilla Farming
- » Vegetables and Fruit Juice Powder Spray Dried Pineapple Juice Powder, Spray Dried Orange Juice
- » Virgin Coconut Oil
- » Viscose Filament Yarn
- » Vitamin 'C'
- » Women Lingerie-Ladies
- Undergarments (Bra & Panties)
 » Wood Plastic Composite (WPC)
- » Yarn, Fabric & Garments Production using
- Solar Charkha & Solar Looms
- » Zarda



Lucrative Business Ideas for Startup

Manufacturing Business of Soda Ash

By Solvay Process (without using limestone)

Soda ash, also known as sodium carbonate, is an essential chemical used in various industrial applications. It can be produced naturally or synthetically, and is commonly extracted from either the trona ore or limestone. However, what many people may not know is that there is another process that can be used to produce soda ash: the Solvay process without the use of limestone.

Scope in This Industry

The use of soda ash in various industries is continuously increasing, and this has created a great opportunity for entrepreneurs to consider launching a business in this field. The process of producing soda ash from solvay without the use of limestone is one that has grown in popularity over the years.

Indian Market Outlook

The Indian market for soda ash is growing rapidly, with the industry expected to expand by 10 % each year. India has already established itself as the third-largest producer of soda ash in the world. This is due in part to the country's vast supply of raw materials, such as limestone and salt, as well as the availability of relatively low-cost labour. Indian government policies have encouraged the development of large-scale soda ash producers, which in turn has resulted in lower prices for consumers. This, combined with rising demand from China, has contributed to the overall growth of the Indian soda ash industry.

Global Market Outlook

The global soda ash market size was valued at USD 11000.00 million in 2021 and is anticipated to

PROJECT COST ESTIMATE

CAPACITY:

Soda Ash (Na2CO3) : 200,000 MT Per Annum Ammonium Chloride (NH4Cl) : 200,000 MT Per Annum

Plant & Machinery : ₹ 1325 Cr.
Cost of Project : ₹ 1469 Cr.
Rate of Return : 13 %
Break Even Point : 36 %

witness a compound annual growth rate (CAGR) of 6.2% from 2022 to 2030. Soda ash is utilized as a raw material in many different industries, including agriculture, the production of paper and pulp, soap and detergent, and glass. Soda ash can also be used to soften water and clean the air. Soda ash is increasingly in demand as a purging agent for hydrochloric acid and sulphur dioxide recovered from stacked gasses as environmental concerns grow. Due to sodium carbonate's high solubility, it can be used in various chemical processes.

Conclusion

Soda ash from solvay process without limestone is an effective and efficient method for producing soda ash. It offers the advantage of having a high yield with low energy consumption and minimal environmental impact. Furthermore, the process does not require the use of limestone, making it both cost-efficient and beneficial to the environment. This method of soda ash production has the potential to be a reliable and sustainable source for production in the future.

Hybrid Electric Scooter Assembling

A plug-in hybrid electric vehicle (PHEV) is an HEV that can be plugged-in or recharged from wall electricity. PHEVs are distinguished by much larger battery packs when compared to other HEVs. The size of the battery defines the vehicle's All Electric Range (AER), which is generally in the range of 30 to 50 miles. PHEVs can be of any hybrid configuration. PHEVs start in 'all electric' mode, runs on electricity and when the batteries are low in charge.

India electric scooters and motorcycles market size valued at \$24.6 million in 2016, it is expected to grow at a CAGR of 45.4% during 2017- 2025. Some 4,50,000 electric two-wheelers were sold in India in the past eight years. The potential of electric vehicles in this segment is massive, say industry executives, given that more than 17 million two-wheelers are sold annually in the country. This facilitates the development of new technologies and ensures a high quality product.

PROJECT COST ESTIMATE CAPACITY

Hybrid Electric Scooter : 50 Nos./Day
Plant & Machinery : ₹ 95 Lakhs
Cost of Project : ₹ 279 Lakhs
Rate of Return : 34%
Break Even Point : 74%



Demanding Business of E-Rickshaw Assembling

Rickshaws are three wheel battery operated vehicles, which are considered as an upgrade to conventional rickshaws, and economically better than auto rickshaws and other fuel variants, these rickshaws, since are battery powered have zero emission, and is often argued to be much better than other rickshaws as they are considered almost pollution free. An E rickshaw is now fairly popular rickshaw drivers and has created new opportunities for people, as they require minimum investment to earn a living. They offer huge returns in less time, and are easy to operate and have low maintenance and running cost.

E rickshaws are now one of the preferred modes of transport in streets because of its low maintenance cost, low fuel cost, Eco-friendly, no noise pollution, easy to drive and last but not the least livelihood, e-rickshaw is a boon to the common man. Without putting in much physical efforts and without investing much amount of money, the earning is quite good for an e-rickshaw driver and hence it is an important means of livelihood for

many. These e-rickshaws consist of 3 smooth and comfortable ride. wheels with a differential mechanism at rear wheels. Basically these vehicles have a mild steel tubular chassis.

Advantages of E-Rickshaws

- Eco-Friendly E-Rickshaws can be the best alternative to petrol or diesel run vehicles as they are operated on battery. These rickshaws do not emit smoke and thus, will not contribute to the increasing air pollution. The batteries which will be used for the functioning of these rickshaws can be effectively recycled and thus, will solve the problem of battery disposal.
- Economical E-rickshaws are comparatively cheap and can be easily afforded by a common man. Passengers will have to pay a less transport charge. It is cost effective not only for the consumers but also for the owners. The batteries can be easily recharged from home or from any place that provides a proper voltage.
- Free from Noise Pollution -E-rickshaws are free from creating noise pollution as they do not emit any sound. Passengers can have a

- · Livelihood E-rickshaws provide a means of livelihood for the common as well as illiterate people. Without investing much of money, the e-rickshaw drivers can earn a good livelihood.
- Safety E-rickshaws involve less risk when compared to the other fuel operating vehicles. They can cause less accident as they are slower and lighter than an auto rickshaw. There is a chance of explosion in the case of fuel operating
- Easy Maintenance As they use electricity, they do not require fuel to operate the engines. E-rickshaws are free from an engine and a gear box and thus, the burden of maintenance is reduced. The motor which is used in these rickshaws is smaller and the battery is placed below it. Hence, maintaining them is quite easier.

The global e-Rickshaw market is projected to expand at around 9% CAGR during the upcoming period. The growth of the market is attributed to low cost of transportation and low power consumption. E-rickshaws are widely accepted as an alternative to

PROJECT COST ESTIMATE **CAPACITY**

E-Rickshaw : 200 Nos Per Day Plant & Machinery : ₹ 2.06 Cr. **Cost of Project** : ₹ 25.80 Cr. Rate of Return : 30% **Break Even Point** : 68%

> diesel, petrol, CNG auto rickshaws. Increasing awareness about the air pollution and other environmental issues which can be reduced by using the e-rickshaws. In the e-rickshaw the main electronic components that make the drive are controller, motor, batteries, harness and throttle. The mismatch between any of these components is nasty and may reduce performance. The global e-Rickshaw market is projected to expand at around 9% CAGR during the period. The growth of the market is attributed to low cost of transportation due better mileage and low power consumption. Increase in sales and production of electric vehicles as an alternative for fuel-based mobility, owing to several government initiatives and environmental regulations on the electric vehicle industry, is projected to drive the e-rickshaw market.

Radiator / Engine Coolant

The internal combustion engine is a heat engine, in which chemical energy of fuel is converted into heat energy by combustion and this heat energy is intern converted into mechanical energy. The coolant used in this cooling system must fulfill the requirement of the engine, which is basically the removal of one third of heat produced during combustion of fuel.

In addition automotive cooling systems, there are many where antifreezers are used. Stationary engines used in

PROJECT COST ESTIMATE CAPACITY

: 500 Ltrs / Day Capacity **Plant & Machinery** : ₹ 8 Lakhs Total Capital Investment: ₹ 56 Lakhs Rate of Return : 48% : 38% **Break Even Point**

pipeline service or other industrial applications need both freeze protection and corrosion prevention for the cooling system. This coolant is used mainly for cooling of engines. The different percentage, when added with water gives different maximum and minimum temperature limit.

There is a good scope for new entrants.

FORM IV (See Rule 8)

Statement about ownership and other particular about newspaper "ENTREPRENEUR INDIA" to be published in the first issue every year after the last day of February.

(1) Place of Publication : Delhi (2) Periodicity of its Publication : Monthly

(3) Printer's Name : Ajay Kumar Gupta **Nationality**

: 106-E, Kamla Nagar, Delhi - 110 007 Address

(4) Publisher's Name : Ajay Kumar Gupta Nationality : Indian

Address : 106-E, Kamla Nagar, Delhi – 110 007

(5) Editor's Name : Aiav Kumar Gupta Nationality : Indian

: 106-E, Kamla Nagar, Delhi - 110 007

I Ajay Kr. Gupta hereby declare that the particular given above are true to the best of my knowledge and belief.

Dated: 01.03.2023 Sd/-Place : Delhi Ajay Kumar Gupta Publisher/Printer/Editor

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 €, Kamla Nagar, Delhi–110 007 (India).