



# Delhi Technological University

## Business Plan 2021

Prepared By

Ankit Kumar ( 2K18/CO/071 )  
Ankit Prasad ( 2K18/CO/073 )

email : [fuelsoltech@gmail.com](mailto:fuelsoltech@gmail.com)  
contact : 022-359-3153  
website : <https://www.fuelsoltech.com/>

---

# TABLE OF CONTENTS

1. Company Description
  - 1.1. Company name
  - 1.2. Location
  - 1.3. What problem(s) our business will solve
  - 1.4. Why this company
  
2. Industry Analysis
  - 2.1. SWOT Analysis
  - 2.2. PESTEL Analysis
  
3. 4Ps of Marketing
  - 3.1. Product- Why this product
  - 3.2. Price- At what price
  - 3.3. Place- In which market
  - 3.4. Promotion- How will we market our product
  
4. Finance
  - 4.1. Budget
  - 4.2. Funding

## Company Description

**Company Name:** *FuelSol Ltd. ~ a solution to rejuvenate your vehicle*

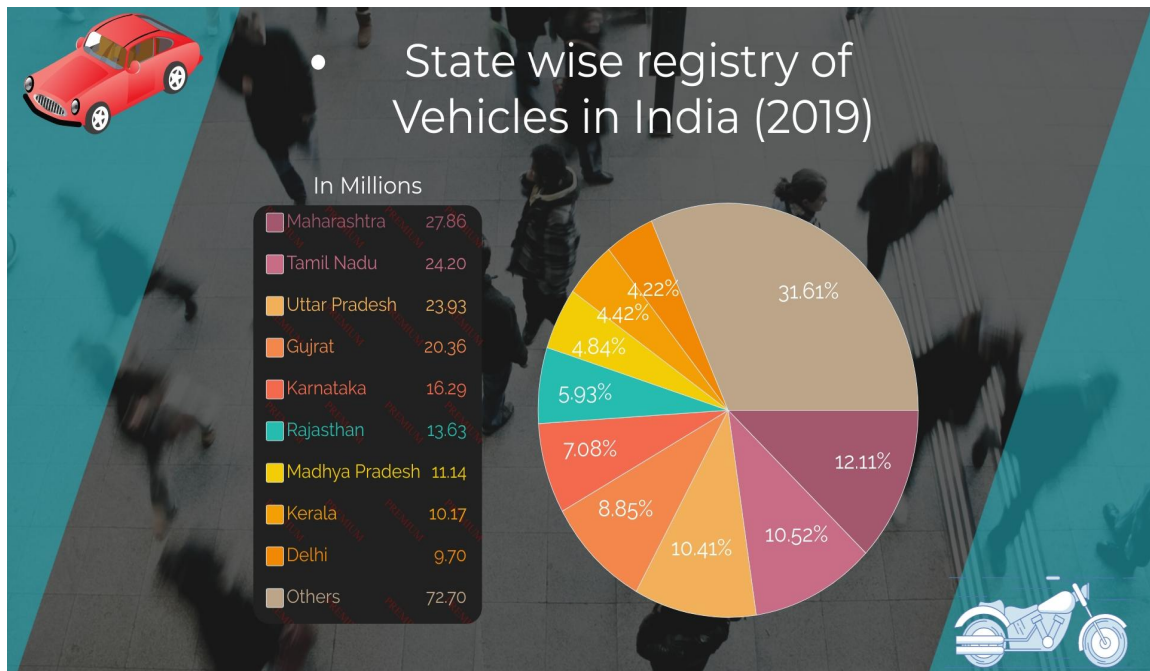


## Location

We have decided to set our company office in the region of Mumbai, Maharashtra because of the following beneficial reasons:



1. **Most number of registered vehicles in Maharashtra :** From the data provided by the Government of India, in the year 2019 , Maharashtra was the state with the most number of registered vehicles (including Government vehicles and public transport). Maharashtra had 2,78,69,866 vehicles registered in the year 2019. As our company targets motor vehicles, it would be beneficial for the company to set up it's main branch in Mumbai, and target the region with the most number of vehicles. The data provided by the Ministry of Statistics and Programme Implementation has been shown in the form of a pie chart below.



2. **Two sea ports in the city of Mumbai :** There are two sea ports namely Mumbai Port in South Mumbai and Jawaharlal Nehru Port. For manufacturing of our product, we might require to import some raw materials and other products from other countries, and through the help of these ports, those materials can be imported with ease. Furthermore, It will be feasible for the company to monitor and solve any issues that might arise in the future while importing the products.
3. **Setting up the factories :** Our products lie in the domain of the petrochemical category and are supposed to be used in motor vehicles, therefore setting up a factory is required. We will plant our factory in Malad, a region in West Mumbai for manufacturing our products after seeking permission from the state government. Since the sea port is also nearby, it will help in reducing the transportation cost of materials required for manufacturing. Furthermore the company can also keep a track on the activities which will be carried out in the factory.

## *What problems do we solve ?*

After a certain point of time, any person who owns a vehicle be it car, motorcycle, etc. has to deal with certain problems like :

1. **Reduced performance** : As the vehicle grows old, due to wear and tear effect on the automobile's engine, its performance decreases which leads to decrease in the mileage of the vehicle. As the mileage decreases, the vehicle has to use more litres of fuel in order to run the same amount of distance as it used to cover earlier with lesser amount. It has a significant impact on the owner's income.
2. **Regular maintenance / servicing of the vehicle** : As the engine becomes weak by time, regular maintenance of the vehicle and its engine are required which also becomes a load on the pocket of the owner.
3. **Increased Pollutants Emission** : As the efficiency of engine becomes weak, lesser amount of fuel will be utilised effectively, and greater amount of fuel are emitted as pollutants. The increased pollutant emission furthermore affects the environment.

Our company aims to build the product(s) which will help the people in dealing with these major problems which are associated with their vehicles.

## *Why this company ?*

Nowadays in almost every family, at least 1 vehicle is present and it's commonly observed that the mileage of the vehicles drastically decreases with time, which certainly draws the attention of people towards the surging price of fuels (petrol, diesel) but no one is aware about how to utilize the fuel in the most optimized way. As stats shows that only 30% of the entire fuel is used in the travelling purpose and the rest 70% is completely wasted in the form of unburnt fuel, and this is where our company comes to the rescue of this problem of the common man, So basically our company has two products viz, InGen Energizer and InGen Maxx. Our product works in this unique direction of utilizing the fuel up to 50% therefore less partial combustion fuel which indeed leads towards reducing the overall pollution caused due to vehicles combustion.

# INDUSTRY ANALYSIS

## SWOT ANALYSIS:



### STRENGTHS:

- ❖ **Breakthrough Technology** - Our main strength is the uniqueness of our technology and its effectiveness in increasing the efficiency of the vehicle.
- ❖ **Customer's Loyalty** - Our product packaging consists of the testimonials of our product from different branded automobile brands which will help us in achieving customer's loyalty because results speak for themselves.
- ❖ **Wide Range** - We cover a wide range of vehicles from 2-wheeler motorbike/scooties to 20 wheeler heavy weight trucks and also in terms of the kind of fuel it uses (ex. Petrol/Diesel/CNG) vehicles our product is applicable in all of the above.
- ❖ **Reasonable price** - We will sell our product in different price categories based upon the mileage/workload of the vehicle. So that our product is affordable by all the classes of the society.
- ❖ **Location ( Physical Asset )**
  - We have our head office located at Malad( West Coast of Maharashtra) and the raw material needed for manufacturing our product is imported so that highly reduces the **shipping cost**.
  - Malad being the one of the biggest metropolitan cities of India, ultimately provides us the **essential resources** (water/electricity/machinery) for manufacturing at a very low cost.
  - Being situated at Malad also reduces the **transportation cost** of supplying our product at different locations within India as well as from an exporting point of view.



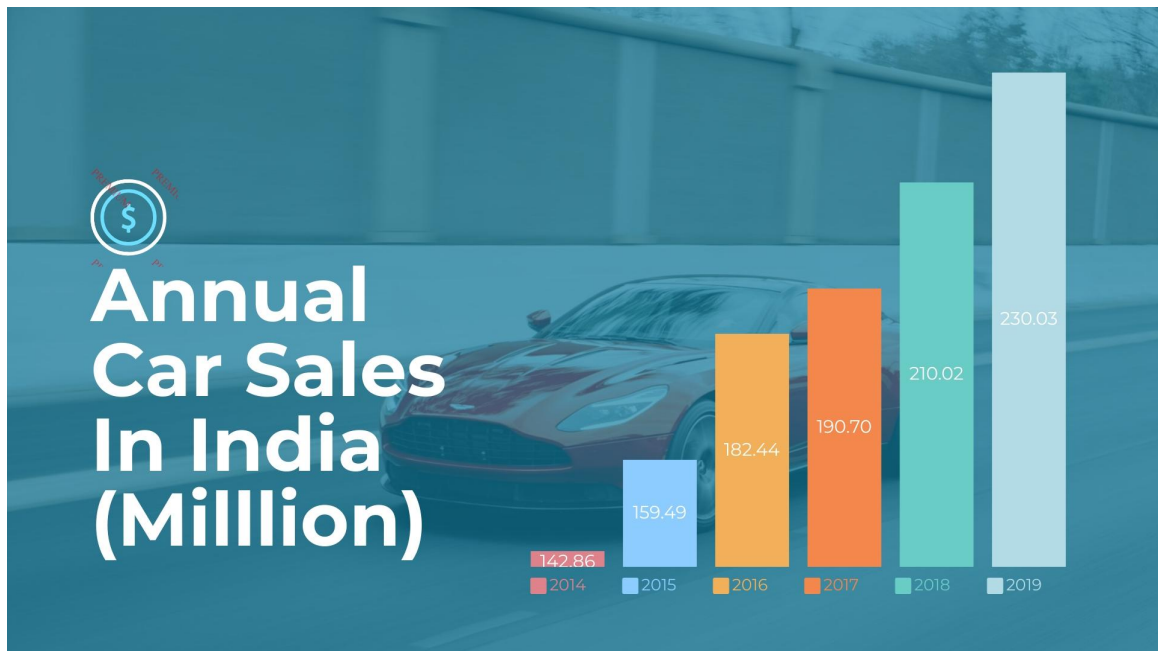
## **WEAKNESS**

- ❖ **StartUp** - Being a startup our company doesn't have a goodwill or brand value and since our company is in the embryonic phase of its development, some of our samples may not perform as expected.
- ❖ **Steady progress** - Our product takes time to be effective, and customers will only see its result after 3-4 weeks or after covering 1000km distance.
- ❖ **Lack of Awareness and Clarity** - People usually don't think on this side of rejuvenating their vehicle.
- ❖ **High Investment** - As we are going to deliver a breakthrough product, it will require huge investment for production as the raw materials are also imported from other nations and return on investment will also be low in the starting phase.
- ❖ **Cost of land** - As we are going to take land on rent for our startup in malad, and being a metropolitan area will bear us high rental values initially.



## **OPPORTUNITIES**

- ❖ As announced by our Union minister Nitin Gadkari vehicles can survive after 15 year of use if they pass the fitness test, this will encourage people to buy more of our product.
- ❖ According to the graph it is clearly visible that we are tapping in an evergoing Automobile Industry because vehicle production (running on petrol/diesel etc.) is exponentially increasing, both in and outside of India.



- ❖ In future, our R&D team will try to explore more areas where we can develop the technology for even Ships, Boats, Aviation engines, Gensets, etc.



### **THREATS:**

- ❖ **Electric Vehicles** - Emergence of the Electric vehicle in India by companies like Tesla can affect the sales of our products because we are not certain about it.
- ❖ **Duplicacy of product** - Being a startup our company has no brand value and duplicacy of product can be easily done.



# PESTEL ANALYSIS:



## POLITICAL:

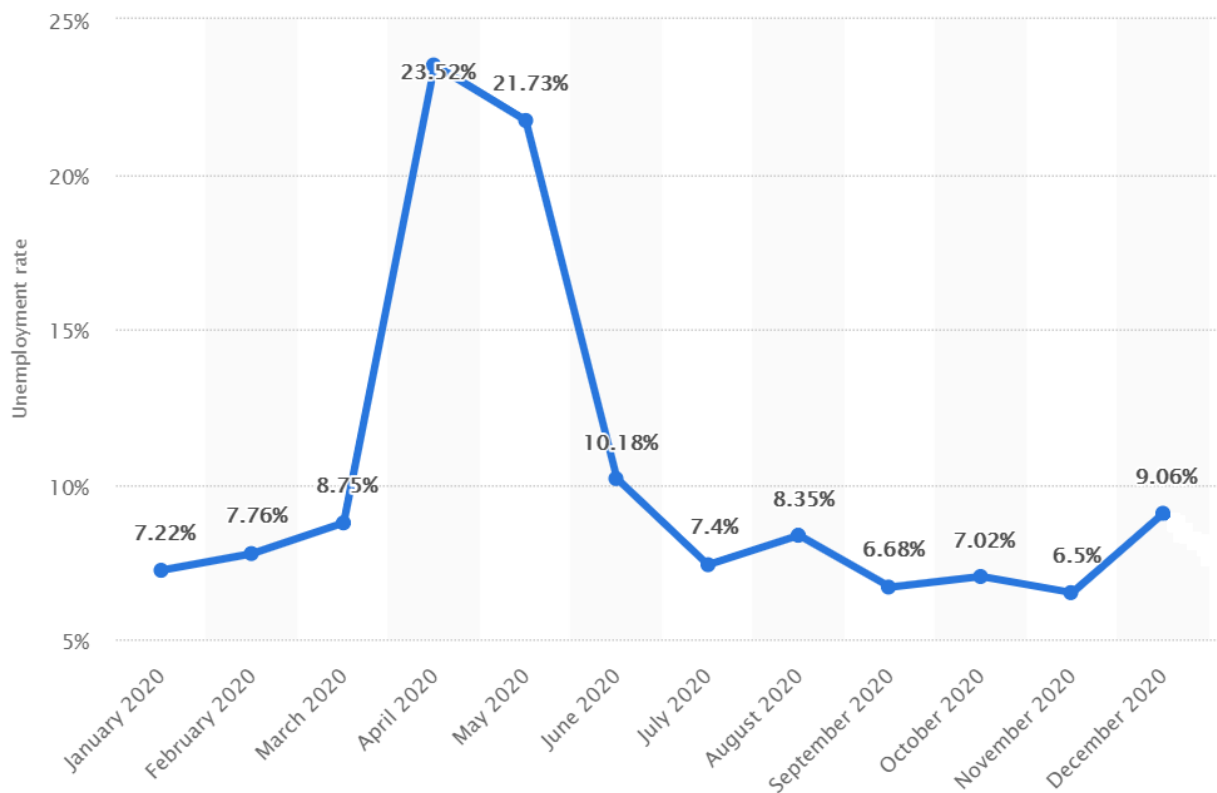
- ❖ **Vehicle Scrapping Policy** - On 18th March 2021 Road transport minister Nitin Gadkari said more than 15 year old vehicles will be de-registered from June 1, 2024, if they fail in an automated fitness test or their registration certificate is not renewed. Further, the government will advance roll out of the mandatory obtaining of fitness test certificates for personal vehicles from the automated testing centres in 10 most polluting cities.
  - These initiatives of the government will encourage more people( who can't afford to bought new vehicle after every 15 years interval ) to try our product in order rejuvenate their vehicle
- ❖ **Custom duties on import** - Finance Minister Nirmala Sitharaman, in her Budget 2021 speech, proposed to
  - reduce customs duty on imports of semi-flat steel—used to make machinery components, line pipes and other equipment—from 12.5% to 7.5%. The government also cut customs duty on longs, used to make rails and wire rods, from 10% to 7.5%.
  - Reduced custom duty on import of raw materials will make us benefit from manufacturing our product in India itself.



## ECONOMICAL:

- ❖ **Inflation Rate** - In recent times petrol and diesel has seen a sharp hike in their price this affects us on both the sides.
  - It's positive will be that it will encourage people to invest in our product to gain more output from the same amount of fuel as our technology increases the percentage of fuel utilised upto 50%.
  - It's negative impact will be that people belonging to lower class of the society may opt to use cheaper public transport rather than private transport which is not a good sign for our company.

- ❖ **Repo Rate** - (Repo rate is the rate at which commercial banks borrow money from RBI by using government bonds as collateral to achieve its fiscal goals.) - RBI Governor Shaktikanta Das announced the policy decision of the Monetary policy committee on Friday. Das said the Monetary policy committee decided to keep policy repo rate unchanged at 4%. This will benefit us in borrowing loan from the banks for our StartUp
- ❖ **High Unemployment Rate** - in December 2020, India saw an unemployment rate of over 9.06 percent. A damaging impact on an economy as large as India's caused due a total lockdown was imminent. Unemployment went up to nearly 24 percent in April 2020. This was possibly a result of a decrease in demand as well as the disruption of workforce faced by companies.
  - So being a StartUp will definitely us in creating opportunities and providing employment to the people belonging to various sectors of India





## ***SOCIAL:***

- ❖ **Population size & growth Rate** - As the population of our country is constantly increasing and stats show that over 35% of the working population consists of youth. High competition will ultimately help us in gaining most skillful and dedicated employees
- ❖ **Career Attitude** - In India majority of the people want to work in a metropolitan area, mainly because of higher income and better availability of essential resources. This trend will lead people to work in our company as our company is also situated in a metropolitan city and simultaneously be a part of our workforce.



## ***TECHNOLOGICAL:***

- ❖ **Research & Development Activity** - Improving the efficiency of vehicles by making it capable of utilizing upto 50% of fuel & and also increasing the life of the engine through our innovative research and development activity.
- ❖ **All in 1 Website** - We will be selling the products to the customers or the retailers through our website and will be handling customer complaints and feedback with the help of our website.



## ***ENVIRONMENTAL:***

- ❖ **Air Pollution** - Our Technology will ensure optimum utilization fuel, which will in curbing the air pollutants released by vehicles due to partial combustion of fuels.



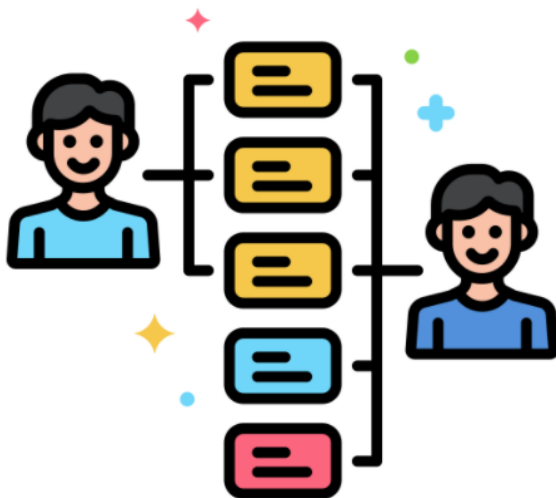
## LEGAL:

- ❖ **The Patents Act 1970** - In this Act One of the recommendations was the allowance of only process patents with regard to inventions relating to drugs, medicines, food and chemicals.
  - So we will patent our technology in accordance to Patent Act 1970 in order to gain advantage
- ❖ **Factories (Amendment) Act, 1987 (Act 20 of 1987)** - According to this act we will ensure occupational health and safety of workers working in our factories and docks. We will have strict safety rules and regulations concerning the safety, health, efficiency and well-being of the persons at work places.
- ❖ **Employees Provident Fund & Miscellaneous Provisions Act, 1952** - Provident fund is a welfare scheme for the benefits of the employees. Under this scheme both the employee & employer contribute their part but the whole of the amount is deposited by the employer. Employers deduct the employee share from the salary of the employee. The interest earned on this investment is also credited in the PF account of the employees. At the time of retirement, the accumulated amount is given to the employees, if certain conditions are satisfied.
  - We will ensure that all the employees working in our company have a provident fund account with utmost priority, so that employees have feeling of future security for him and his/her loved ones and hence can fully dedicate himself in the accomplishment the given task because it's our responsibility as the owners of the company to give a working environment for the employees.
- ❖ **Minimum Wages Act, 1942** - The Act empowers the Government to fix minimum wages for employees working in specified employments. It provides for review and revision of minimum wages already fixed after suitable intervals not exceeding five years. The Central Government has fixed Minimum Wages under the Minimum Wages Act, 1948 for 40 scheduled employment under the Central Sphere.
  - Our company will abide by this act and provide wages to employees according to their skill and not pay them below the minimum wages as prescribed by the law.

- ❖ **The Consumer Protection Act, 2019** - This act empowers consumers and help them in protecting their rights through its various notified Rules and provisions like Consumer Protection Councils, Consumer Disputes Redressal Commissions, Mediation, Product Liability and punishment for manufacture or sale of products containing adulterant / spurious goods. This act was implemented to provide for protection of the interests of consumers and for the said purpose, and to establish authorities for timely and effective administration and settlement of consumers.

➤ A company/organization works for the benefit of its customers and survives because of its customers . It's the topmost priority of a company to keep their customers satisfied. In order to achieve that goal we will take major customer friendly policy.

#### ■ Customer Reviews & FeedBack :



We will have a interactive customer review and feedback feature in our website where all our customers can are open to any kind of feedback or complaint and it will be entertained with utmost priority

- **Ensure secure & vast payment options:** We will use highly secure 128 bit SSL encryption for payment purpose and will have various payment options eg. Credit/Debit Card, Mobile Banking, Net banking, UPI, Cash On Delivery, etc to facilitate customers with ease in payment.
- **Speedy and Precise Delivery:** In the initial phase we will offer for home delivery of our product for customers residing in India, which we will try to expand to the neighbouring countries followed by the international market with progress.
- **Refund:** We will have a refund policy after 1 month of usage if the product does not live up to its expectations because we are confident in our technology.

## *4Ps of Marketing*

In order to promote our products into the market, we will follow the 4Ps of Marketing Mix strategies.

### *Product*

As we'll be selling two products through our company, namely InGen Energizer and InGen Maxx. InGen here will act as our brand name for our product.

#### **Brand Symbol**



#### **How to use our product & How it works?**

### *InGen Energizer*

Since an engine gets impaired due to continuous use of machine and wear & tear of machine, it's efficiency gets reduced and it requires larger amounts of fuel for doing the same amount of work and furthermore emits more pollutants. For eg. in case of automobile vehicles, mileage of vehicles decreases with time and they start emitting more pollutants.

InGen Energizer has to be mixed with engine oil and poured into the engine. It creates a coating around the engine, which protects it from the wear and tear done by the piston. Hence, if the vehicle is old, it repairs its engine and makes your vehicle function like a new one. It maintains the mileage and reduces the pollution. However, if a new vehicle can also use the energizer to maintain the fitness of the engine and make it function efficiently.

## *InGen Maxx*

Any vehicle uses fuel for its functioning, but utilizes only a part of it and the rest of them are emitted as pollutants. This is because of the larger size of the fuel molecules/ particles.

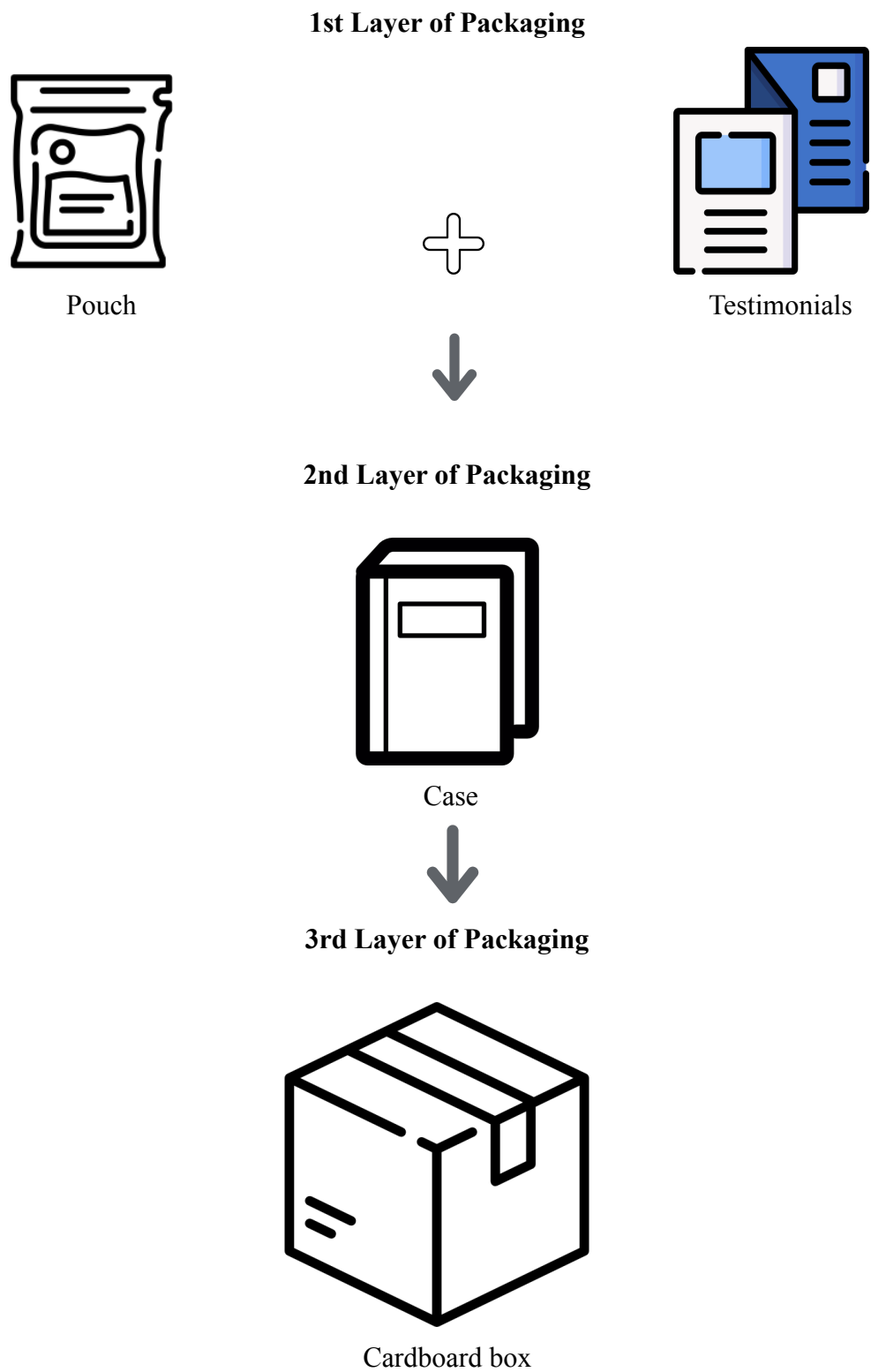
Here, the function of InGen Maxx comes into play. On mixing InGen Maxx with the coolant in the radiator of any vehicle, the heat from the radiator will make our Maxx technology emit far infrared rays which will break the fuel molecules into much smaller components. Due to the smaller size of fuel particles, there will be optimum utilization of fuel, which will result in increase in mileage of vehicle and furthermore save the engine from getting heated up quickly.

## *Packaging*

Our products will have 3 layers of packaging :-

1. **Primary layer** (1st Layer of Packaging) : The main product that is our petrochemical, will come inside plastic pouch packets which will contain 30 mL of Energizer/ Maxx. The plastic pouch will form the primary layer of packaging.
2. **Secondary layer** (2nd Layer of Packaging) : The pouch which contains the fluid chemical will then be packed inside a case (DVD like case) along with the testimonials of our product. The case like cover will form the second layer of packaging.
3. **Transportation packaging** : The final layer of packaging that will be used for transportation will be a cardboard box like structure which will have the capacity to hold 30 - 40 cases.

The layers have been illustrated with the help of a diagram as shown below.





## *Labelling*

We'll show the labelling on the pouch as well as the second layer of packaging i.e, on the case cover. The labelling on our product will consist of the following details :-

1. Brand Symbol on the front side.
2. How to use instructions on the back side of the case.
3. Date and Place of Manufacture on the back side of the case.

## *Price*

We'll price our products so that they are affordable and within the reach of the public. Furthermore, it should help us earn desired profits which are required for running the company. We will have 3 kind of offers -

- ❖ **InGen Energizer** - The quantity of Energizer required depends upon the capacity of the engine of the vehicle. For instance, a 5 litre capacity engine requires 1 pouch which contains 30 mL of InGen Energizer. It is effective till a vehicle runs for 40,000kms. We have decided to price InGen Energizer at a rate of ₹1599 per pouch for the distributors.
- ❖ **InGen Maxx** - The quantity of InGen Maxx required depends upon the capacity of the radiator. A 3L capacity radiator requires 1 pouch which contains 30mL of InGen Maxx. It is effective for a period of 1 year and has to be used with the coolant. We have decided to price InGen Energizer at a rate of ₹1399 per pouch for the distributors.
- ❖ **Combo Pack** - It is a special offer to provide a discount to the customers buying both the products simultaneously. In this offer, we provide both InGen energizer and InGen Maxx at a combined price of ₹2899.

## Calculations for Pricing of our Products

Total Expected Expense = Rs 1,19,00,000

Expense Ratio for InGen Energizer and InGen Maxx = 60 : 40.

Therefore,

Total Expense for InGen Energizer = Rs 71,40,000

Target Production of InGen Energizer in the First Year (in units) = 5000 units.

Expense per unit for InGen Energizer = Rs 1428

10 % Profit Margin = Rs 142

Combo Pack Provision = Rs 29

---

**Price of InGen Energizer = Rs 1599**

Total Expense for InGen Maxx = Rs 47,60,000

Target Production of InGen Maxx in the First Year (in units) = 4000 units.

Expense per unit for InGen Energizer = Rs 1190

10 % Profit Margin = Rs 119

Combo Pack Provision = Rs 90

---

**Price of InGen Energizer = Rs 1399**

Cost of Combo Pack = Cost of InGen Energizer = Rs 1599

+ Cost of InGen Maxx = Rs 1399

- Combo Pack Provision = (-) Rs 119

+ Profit on Combo Pack = Rs 20

---

**Price of Combo Pack = Rs 2899**

## *Place*

- ❖ **Petrochemical Industry** - Our product lies in the domain of the petrochemical industry as it deals with fuel solutions and has certain chemical ingredients. Therefore, the petrochemical industry is the correct industry where our product will be manufactured.
- ❖ **Automobile Industry** - Our target customers majorly belong to the Automobile Industry which includes a wide range of vehicles in terms of load and size. It covers two-wheelers motorbikes/scooter to cars and 14-20 wheeler trucks. Furthermore, we will also try to cover the transport industry which deals with transportation and tourism services.
- ❖ **Second Channel of Distribution** - Since our company is a startup, therefore, we will approach retailers and intermediaries to sell our products.

## *Promotion*

- ❖ **Testimonials** - “Actions speak louder than the words so forget what you heard and believe in what you see”. For packaging of our product we will also provide the testimonials out of products tested on various branded automobile companies. It will act as a catalyst during our promotion phase as customers trust information from trusted sources easily and confidently.
- ❖ **Accessories** - One of our main sources of promoting the product, will be by providing our product as accessories that customers get while purchasing a new vehicle. In this way we will be using brand value of the well established Automobile companies in favour of promotion of our technology. And we are confident that our product will definitely reduce the rate of depletion of mileage with time, increasing the longevity of the engines and thus helping the companies to maintain /promote brand value of their products.
- ❖ **Petrol/Gas Stations** - People most often think about their vehicle time at maybe Petrol/gas station and we will be promoting our product by putting down banners at the fueling stations after seeking permission so that people can consider trying our product.
- ❖ **Mechanics / Service Centres** - We will try to collaborate with mechanics and repair centres. People contact a mechanic or bike/car service centres when their vehicles are either not performing at all or struggling to give the desired output and this is the high time when people think of rejuvenating their vehicle and this is where our technology can satisfy their needs in the most effective and efficient way.

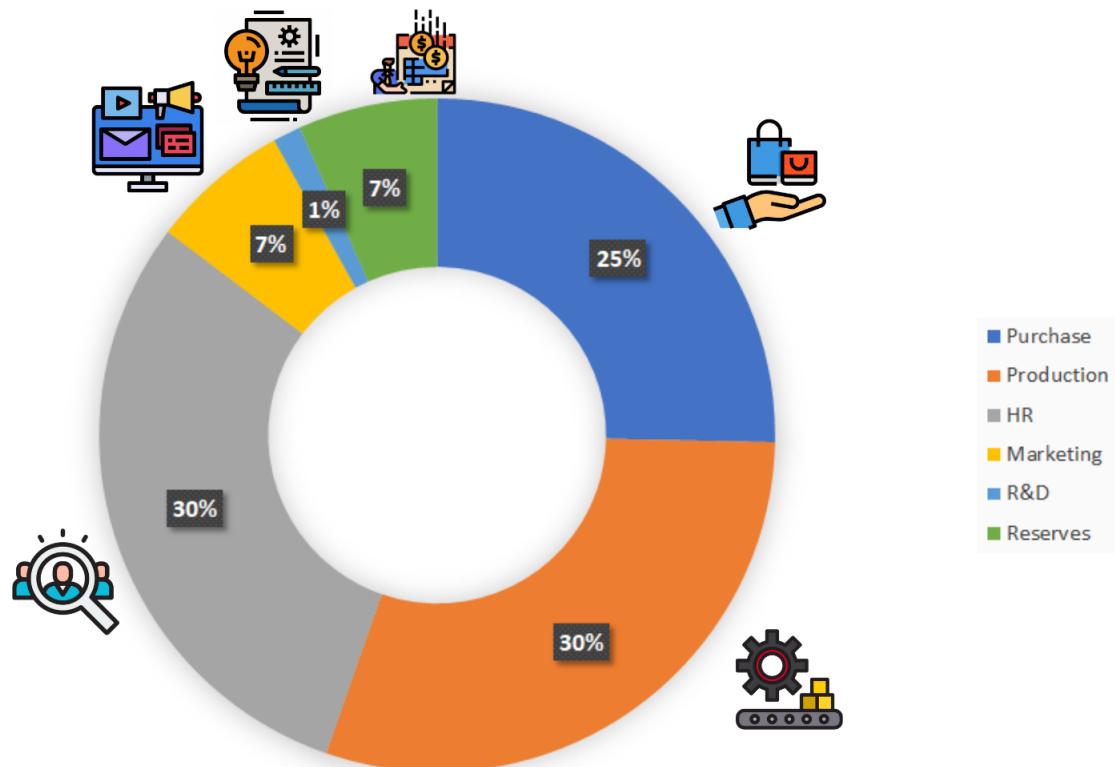
- ❖ **Retail Marketing** - Retail marketing companies use their networks to promote and increase the sales of products of a particular company. We will take the help of retail marketing companies like Vestige, etc which will help in promoting our products and will consequently lead to increase in sales of our products.

## Finance

Since our organization is a startup and produces only 2 products, therefore we found **functional structure** to be the most suitable organizational structure for the effective functioning of our company. We have allocated a budget of Rs 1.5 crore for our company.

Our budget distribution in various departments has been shown below by the donut chart:

**Percentage Distribution of Budget**



## Budget

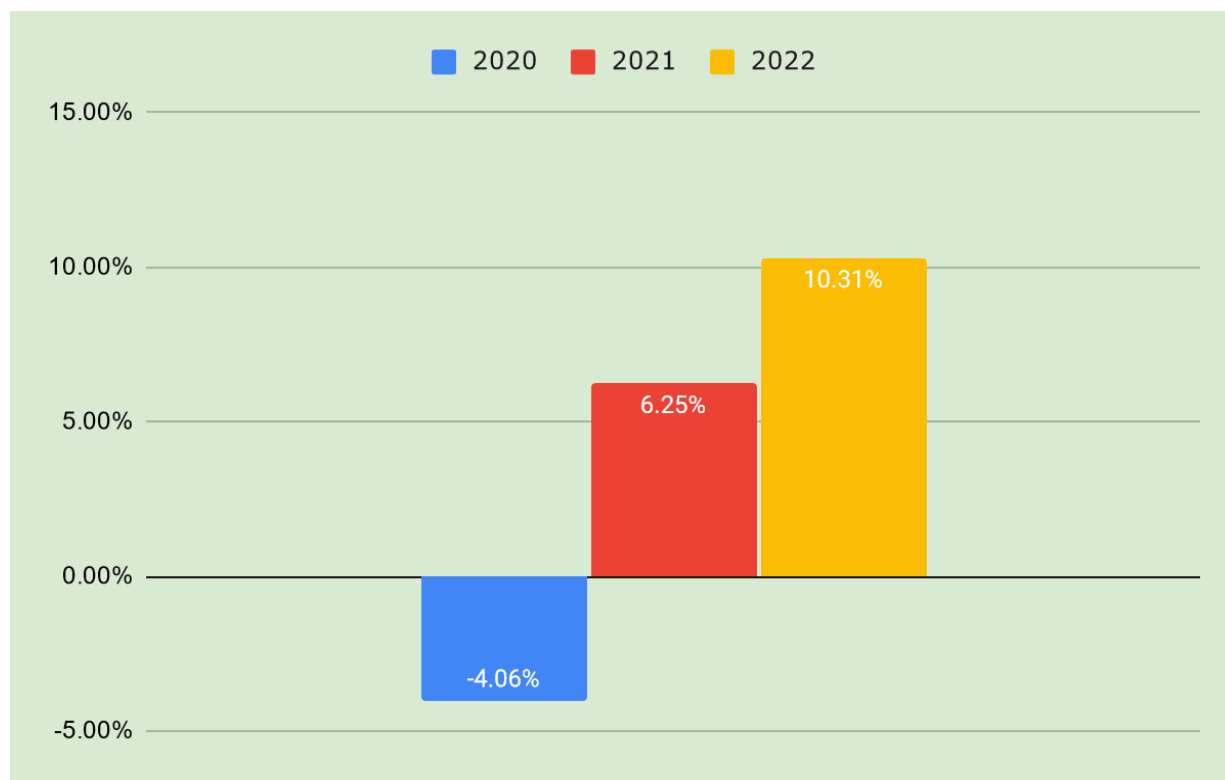
### Balance Sheet

Projected Balance Sheet	
	In Rs.
<b>Assets</b>	
<b>Current Assets</b>	
Cash Equivalents	40,00,000
Cash in Banks	40,00,000
Inventory	25,00,000
<b>Fixed Assets</b>	
Machinery	20,00,000
(-) Depreciation	2,00,000
Vehicles	10,00,000
Furnitures	2,00,000
Other Assets	15,00,000
<b>Total Assets</b>	<b>1,50,00,000</b>
<b>Liabilities</b>	
Wages / Salaries	45,00,000
Rent / Lease	12,50,000
Interests	9,00,000
Creditors	8,50,000
Bad Debts	5,00,000
<b>Total Liabilities</b>	<b>80,00,000</b>
<b>Capital</b>	
Equity	40,00,000
Retained Earnings	30,00,000
<b>Total Capital</b>	<b>70,00,000</b>
<b>Liabilities + Capital</b>	<b>1,50,00,000</b>

## P&L Statement

Profit & Loss Statement	2021	2022	2023
<b>Sales</b>	In Rs.	In Rs.	In Rs.
Sales of InGen Energizer	73,80,000	1,08,00,000	1,45,39,800
Sales of InGen Maxx	49,20,000	72,00,000	96,93,200
<b>Total Sales</b>	<b>1,23,00,000</b>	<b>1,80,00,000</b>	<b>2,42,33,000</b>
<b>Expenses</b>			
Direct Expenses	40,00,000	55,00,000	70,00,000
Marketing expenses	10,00,000	20,00,000	30,00,000
Payroll / Salaries	45,00,000	50,00,000	60,00,000
Research & Development Expenses	2,00,000	3,00,000	5,00,000
Utilities	3,00,000	4,00,000	6,00,000
Depreciation	2,00,000	2,00,000	3,00,000
Lease	7,50,000	7,50,000	8,00,000
Other Expenses	2,00,000	3,00,000	5,00,000
Provision for Bad Debts	5,00,000	6,00,000	7,00,000
Insurance	2,50,000	2,50,000	3,00,000
<b>Total Expenses</b>	<b>1,19,00,000</b>	<b>1,53,00,000</b>	<b>1,97,00,000</b>
EBIT	4,00,000	27,00,000	45,33,000
Interest @9%	9,00,000	9,00,000	9,00,000
Taxes @25%	0	6,75,000	11,33,250
Net Profit	-5,00,000	11,25,000	25,00,000
<b>Profit%</b>	<b>-4.06%</b>	<b>6.25%</b>	<b>10.31%</b>

## Net Profit Chart



## *Funding*

The funds that have been allocated above to various departments can be acquired through three ways:

1. **Self brought funds** through family, relatives and friends.
2. **Debts(Loans)** through banks and other financial institutions.
3. **Equity** by attracting investors to invest in our company.

Since our company is a startup and a major part of our funds will be financed through debts, therefore we have decided to keep the **debt-to-equity ratio 2 : 1**.

- ❖ **20%** of our funds will be **self-invested** i.e Rs 30,00,000.
- ❖ **53%** of our funds will be financed through **loans and debts** i.e Rs 80,00,000 will be investment through debts.
- ❖ **27%** of the funds will be financed through **equity shares** i.e Rs 40,00,000 will be through the help of the major investors.

## *Getting Funds through Investors*

### **Who will be our target investors?**

Our main focus will be to target investors of the automobile industry. Our products will be used in motor vehicles which are manufactured by automobile manufacturers, therefore by showing them the benefits of investing in our company, we will try to attract them to invest in our business.

### **How will we attract our investors?**

We have decided to use the following steps in order to attract the investors:

1. **Attending various investor's conferences and seminars** : We will showcase our product in the investor's conferences and show them how our products will benefit the customers which will consequently increase the sales of our company. As a result of which, it is advantageous for them to invest in our company.
2. **Scheduling meeting with various automobile manufacturers** : We will schedule meetings with various automobile manufacturers, and show them testimonials of our products tested on the various vehicles.



3. **Scheduling testing of our products :** We will try to reach out to the manufacturers and schedule the testing of our products on their vehicles and showcase the effects of our products on their vehicles, which will help us to gain the trust of the investors.