STOP & RUN

LEAN BUSINESS PLAN COWORKING EOI

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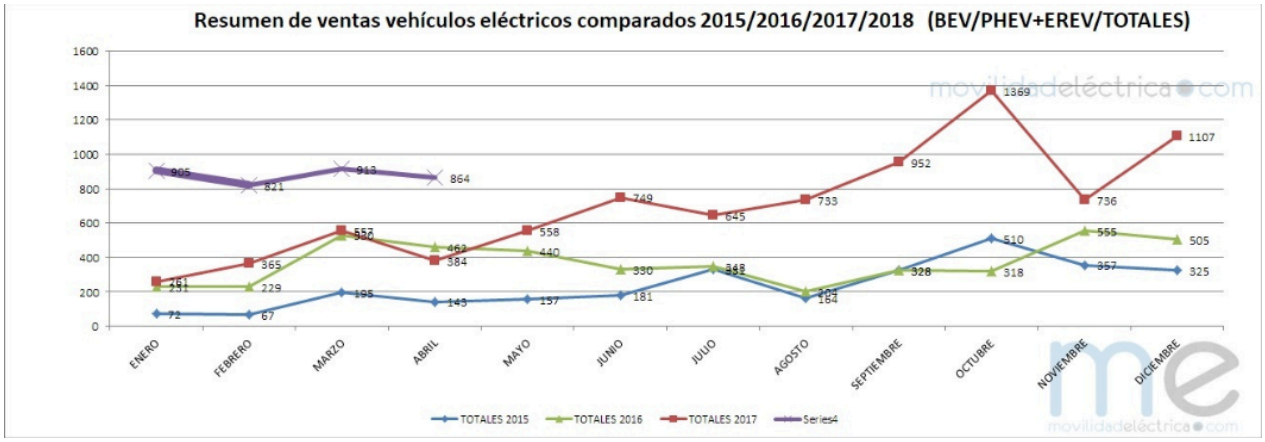
1. INTRODUCTION

1.1 Project presentation

The electric vehicles market is increasing day a day. This is due to many reasons such as a growing environmental awareness, several facilities by the government (circulation through downtown, parking...), gas saving and so on. As we can appreciate in the graphic bellow, every year there are more electric vehicles in our country. Many of them are in Madrid, since it is the capital and the more crowded community. Therefore, we are going to focus on this city.



After doing some interviews, we realize that the main worries of the users of electric vehicles and potential users were:

- **Can I afford to pay an electric vehicle?** The initial price of electric vehicles is higher than conventional cars, but the savings that supplies the electric ones make this investment worthy.
- **Where can I charge my electric vehicle?** There are not enough charge stations. The solution for this issue is very clear: increase the number of charge points around the city.
- **Will they be as efficient as the conventional vehicles?** The last developments of electric vehicles are making this kind of transport more efficient and with more km of autonomy due to the improvements of its batteries. Besides, its load is faster with every improvement.

The main idea of this startup was to load electric motorcycles by induction technology in the area destined to motorcycles in front of the traffic lights. The electric motorcycles, that are previously adapted to be loaded by this technology, would have an RFID sensor. This sensor would transfer all the information to an APP, which would be available for the client. The users would have the possibility of checking through the APP the electricity consumed, in both energy and economic thermals, the electricity rates consumed per minute, a map of the city with the different charging points. In addition, it would be interesting to also show curious data that would encourage the use of this type of vehicle, such as the amount of greenhouse gas emissions that have been discontinued due to the use of an electric vehicle. If the user does not want to recharge the battery of his vehicle for any reason, he could enable or disable the automatic charging of the motorcycle in the same application.

Likewise, there would be load services to both cars and electric motorcycles in private garages (apartments parking, mall parking, etc.) and public garages.

1.1.1 Restrictions

However, the initial idea presents several limitations, that are difficult to ignore, that hinder its execution currently:

- Induction charging technology is still in development. Although it is being widely marketed today with small devices (mobiles, toothbrushes, electronic devices, etc.), loading larger objects like cars is still a service that needs to progress to increase its efficiency. The limitation of time is an important issue, since it would be imperative a reduced period for the recharge (no more than 75% of the waiting time in front of a traffic light). Therefore, it is still necessary to develop this idea so that it would be effective to implement it on a day-to-day basis in the automobile field.
- The need to obtain licenses and concessions to the public administration due to the implementation of civil works to incorporate the induction plates on the roads would delay and hinder the project.
- The significant initial investment and high maintenance costs considerably worsen profitability. The rate of return would be too high, making the project lose attractiveness to future investors.
- Public administrations require experience in the sector for the implementation of the service on public roads.

- The volume of electric vehicles, although annually growing at an exponential rate, may be insufficient for such a costly project, since a small number of users would enjoy it.

The innovative nature of the idea brings with it a series of negative conditions, mentioned above, that hinder the execution of the project in the short term. However, also because of this nature, it is very interesting to continue developing the idea to be able to carry it out in the long term, once the technology has been developed and experience in the sector has been gained.

1.1.2 Solutions

The installation of induction plates will be carried out in private garages for the recharging of electric vehicles, due to the greater simplicity that means the implantation of this service in private locations. This would allow refining induction technology for the future. Therefore, it would be completely designed when implanted in the public road.

To increase the income, which are necessary to continue developing the induction technology and to offer profitability to the investors, the services provided will be increased. Another offered service is the mobile recharge through batteries. There would be a vehicle (at the beginning a bike and in the future a van) with batteries that charge the electric vehicles that require this services through an application. Not only private vehicles, but also vehicles from car-sharing and moto-sharing companies.

Therefore, the service provider company affected by the change of brand, although with the mentality of expanding services in the future so that it is responsible for recharging electric vehicles through the most effective and innovative technologies. The first service is through the induction in parking spaces of motorcycles and electric cars previously adapted in private locations. The second service is the mobile supply of recharges to electric vehicles that demand it through the APPLICATION. At the same time, the development of an initial idea prior to the creation of a motorcycle in front of a traffic light is planned to be carried out in the future.

Therefore, STOP & RUN will provide three kind of services from the beginning. However, the idea is to increase the offered services in long term. The company would be responsible for recharging electric vehicles through the most effective and innovative technologies in the

future. The first service will be to install pluggable charge station around the city (public and private locations). The second service is install charge station by induction technology. As this technology still in development, the number of these stations will be fewer than the traditional stations. The third service will be the movable charge. At the same time, it is planned the development of the initial idea (was to load electric motorcycles by induction technology in the area destined to motorcycles in front of the traffic lights) to be carried out in the future.

1.1.3. Validation

In this section, the different ideas and validations that have taken place throughout the project to finally reach the final solution will be developed. As is known, throughout the project are reflected diversity of ideas that have to be put in common with potential customers to be able to adapt in the best possible way to the demanding market of the product. For this, different interviews have been conducted both to potential users, as well as companies within the public and private sector.

Potential customers

In the case of potential users, those people who are current mobility users of electric vehicles, either their own or through car-sharing / moto-sharing, have been taken into account. Throughout the interviews, we were able to realize the great concern that exists in the few recharging points for electric vehicles. This inhibits them when it comes to being able to buy an electric vehicle, as well as being able to make long journeys through the city, and may end up without a battery.

On the other hand, those users of electric mobility system raised the idea of how little they thought the fact of relying on a cable at all times and the need for support in that regard.
Due to the aforementioned, the proposals of different charging points were born throughout the city, being able to provide a service of movable charge, as well as of the induction charge, allowing to charge the battery without cables.

Public sector

It is vital to have the support and opinion of the public mobility sector, as their opinion and vision is supported by their years of experience in the sector.

To validate the different hypotheses exposed, STOP&RUN contacted the Madrid Transport Company (EMT). Likewise, Cesar Omar Chacon Fernandez (Mobility Technical Engineer) and Pedro José Viñuela Cornejo (Technological Projects Office, Technology Directorate) offered us a vision of the growing need to mature within the field of electric power as a power source of energy to vehicles, as well as the implementation of the induction system at traffic lights in the future.

Throughout the interviews, the existing load by induction that the load has on one of the bus lines in the center of Madrid was commented. This made take into account the percentages of loading of the vehicles, as well as start by providing an induction charging service in private car parks, with the ultimate goal of carrying it out in public areas with the support of the community of Madrid and by using the growth of STOP & RUN.

Private sector

Having interviewed potential consumers and the public sector, the opinion of the private sector became necessary. This provided a vision from the point of view of entrepreneurship of other companies and a contact with the reality of the current situation and future prospects within the field of electric vehicle charging.

WallBox Company: An enterprise dedicated to the design, manufacture and distribution of charging solutions for electric vehicles, and a global vision. They believe in sustainable transport and believe in its efficiency and practicality in every way, that's why we bet on a simpler and more attractive charging process for your electric vehicle.
They validated the possibility and ease of being able to offer charging services through plug in charge and induction charge in private spaces. They offered the possibility of entrepreneurship in this niche of the sector, since they indicated us of the increasing demand of this service of load and of the increase of electric vehicles existing in Spain.

1.2 Team Presentation

Bearing in mind the mean purpose of the project, the next step will be to know more about the team that will lead the plan. All the members are very concerned about pollution, climate change and therefore the air pollution from non-renewable fuels. At the same time, we decided to mix our deep concerns and our knowledge in renewable energies in order to

provide a strong solution from now on. Having said that, the team decided to focus in the transport field with vehicles charged by electricity. As this idea needed people with a big understanding in energy, some MERME students (Master en Energías Renovables y Mercado Energético) decided to start this new project. These awesome students are:

Arnal López, Carmen

Electrical Industrial Engineer by the University of Zaragoza & MERME by EOI. She was working for BAMESA in the Quality Department for a year, which made her as an entrepreneur who takes an existing idea or product and tries to develop it to its full potential, always trying to improve the different ideas given by the team. All these features will define her as one of the Idea Optimizers.

Calzada Revilla, María

Chemical Engineer by the University of Sevilla & Merme by EOI. She worked for DVA Energy Global Services. As she has being also working for other institutions, she is very open minded creating options in the form of actions that get results and gain acceptance for implementing a change or a new idea, therefore she is the Idea Implementer.

Pisonero Pérez, Pablo

Mining, Energy and Materials Engineer by the University of Oviedo & MERME by EOI. He worked for EDP Spain and he has also done some internships that have given him the experience to create options in the form of new possibilities or new problems that might be solved and new opportunities that might be capitalized on. According to that he could be defined as the Idea Generator.

Reoyo Pardos, Víctor

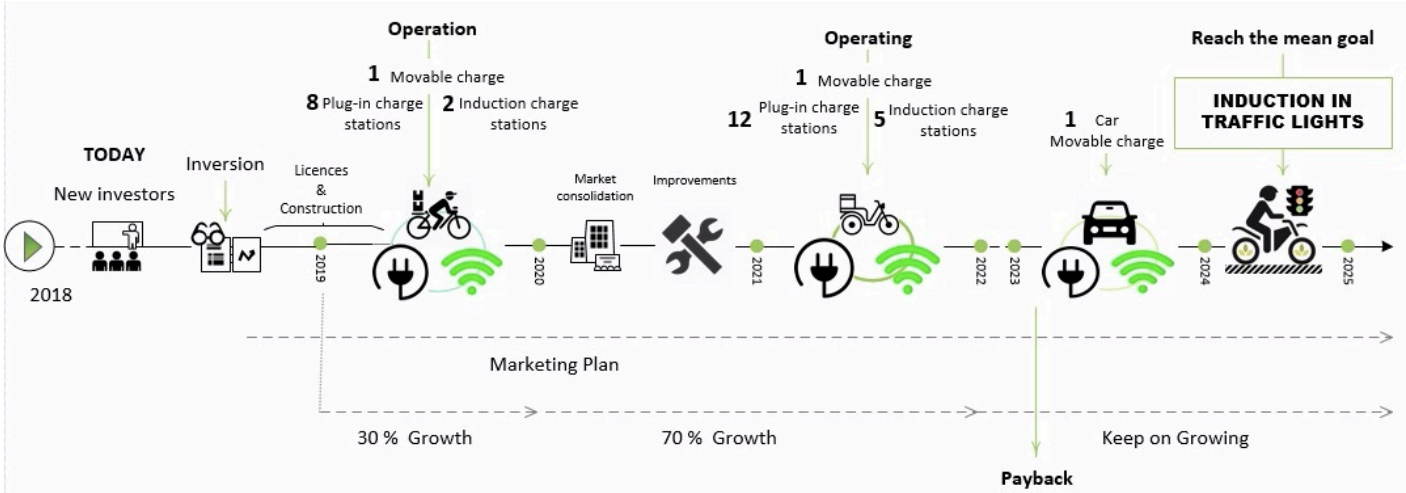
Environmental Engineer by the Rey Juan Carlos' University of Madrid & MERME by EOI. He worked for IMDEA Energy in the biotechnology department among other companies. As he has gained some experience in different fields, he can create options in the form of ways to get an idea to work in practice and uncovering all of the factors that go into a successful implementation plan, being one of the Idea Optimizers.

Robles Mejido, Roberto

Mining, Energy and Materials Engineer by the University of Oviedo & MERME by EOI. He worked for EDP as Junior Engineer, always showing a huge interest in the energy field being very analytical to solve complex problems given, he also creates options in the form of alternate ways to understand and define a problem or opportunity, and good ideas that help solve it.

2. Action Model

This point will discuss how STOP&RUN will work.



The beginning of the startup takes place in 2017 where the aforementioned group came to the solution STOP & RUN, due to the problem of the different access to recharge electric vehicles. Then, in order to complete the project, in 2018 it is necessary to search for new investors in the final presentation of the subject Venture Launchpad. From that moment and once the investment is made, the processing of licenses and construction of the different recharging points will begin.

By the year 2019, it is planned to finalize the documentation to be able to start the operation of the different recharging stations, which are: 1 Movable charge (via a bicycle), 8 Plug-in charge stations, and 2 Induction charge stations. All of them will be located in the vicinity of the center of the capital of Madrid.

In the following year 2020, bringing a year since the start of operation of the different recharging points, the startup will focus on giving better quality service with improvements, and a strong consolidation within the market with different marketing campaigns.

For the year 2021, the increase of some recharging points has been proposed (as is the increment in 4 plug-in charge stations and 3 Induction charge stations), and changes in the model of Movable charge, since it will be done by motorcycle.

In 2022 we will continue with improvements in the service, as well as in the applications and designs, in such a way that the consumers obtain a greater experience and to be able to continue growing and differentiating us from our possible competitors.

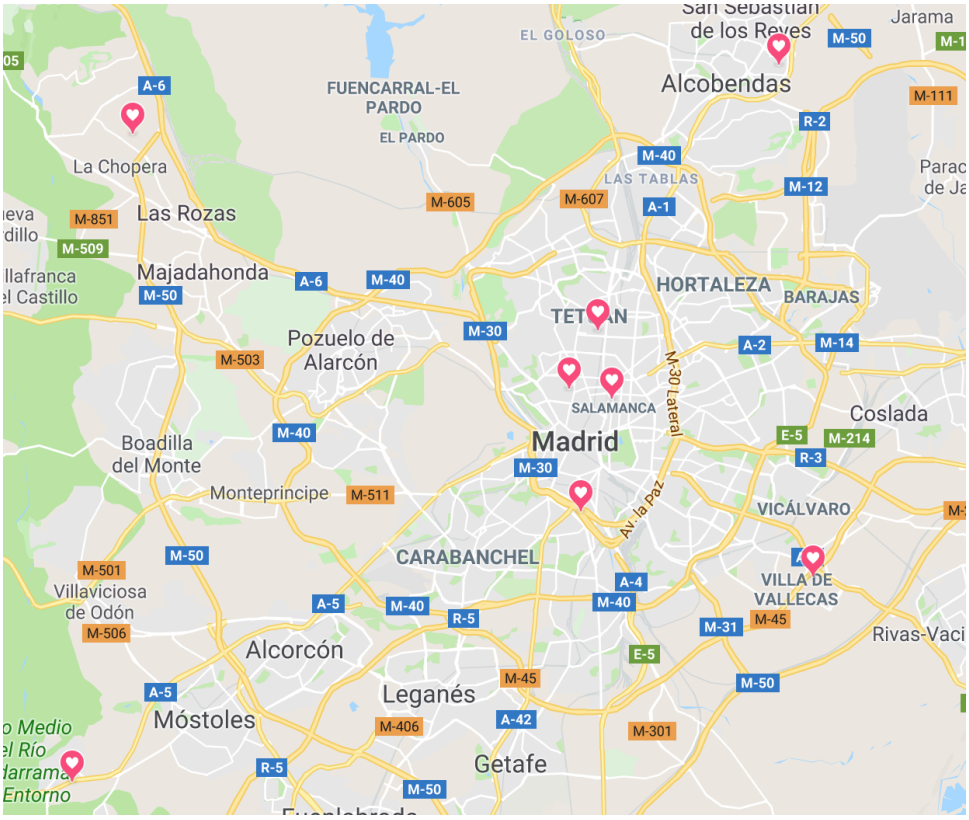
In the following year, 2023, the change will be described by the use of a vehicle for the Movable charge. This will provide speed in our services, and an increase in the demand of the consumers, reason why the income and the confidence in our brand will help us in the final purpose of the company, which will be conceived in the following year.

As already mentioned in the previous paragraph, the goal in 2024 is to give rise to the Induction Charge in Traffic Lights, which is why STOP & RUN was conceived. From this year forward, recharging points will be increased in number by the central area of Madrid, thus reaching the periphery of it and offer the service of recharging traffic lights comfortably and easily to our consumers.

At the beginning, the three mean electric charge methods are going to be defined. Those methods are: plug-in charge, induction charge and movable charge.

2.1 . Plug-in Charge

During the first year, we will install 8 charging stations of plug-in charge in Madrid. These charging stations will be strategically distributed in different points in Madrid as we can see in the following map.



The charge stations will be:

1- Las Rozas Village

2- Xanadú

3- Plaza Norte 2

4- Plaza Río 2

5- La Gavia

6- Parking general Peron

7- Parking Indigo Quevedo

8- Parking serrano

Included services:

- Recharge equipment, hose and hose holder
- Auxiliary panel with protections Energy control module
- Connection of the equipment to the general control panel
- Installation test, displacement and labor

The first 5 charging stations on this list are located in shopping centers. They are the 5 shopping center with more affluence of Madrid. This gives us two competitive advantages. The

first is that our charging point is going to be seen by users of electric vehicles and users of conventional vehicles. This gives us a lot of publicity for those people who are thinking about changing their conventional car for an electric car. The second advantage that we see is that the more affluence this mall has, the greater the possibilities of using our charging station.

The remaining 3 charging stations are located in parkings with a very high number of users. This also gives us more possibilities to increase the number of users of our charging station.

Our purchasing price of the equipment would be 800€, but we need to add more expenses like transport and installation that will mean around 200€ more. Taking into account all that we have stablished a sale price of 1250€ for our facility.

We have designed a benefit plan in order to try to make the service profitable. We have stablished a 250€ margin of benefits from the sale of our facility. Moreover, we will carry out maintenance service which would mean 12,50€ per month.

The price of electricity will be 0.40€/kWh.

2.2 Wireless charge

With the intention of offering a novel and disruptive product and at the same time diversify our service, we have thought of offering a wireless charging system using induction plates.
At the beginning, we will start with this service offering it in two locations in the center of Madrid located in private parking such as Serrano or the famous mall Plaza Río 2.
Given that induction plate systems still require further development before they can be installed massively, our idea is to start with this project as a pilot to study the adoption of this technology by users.

Included services:

- Vehicle adapter
- Parking platform
- Energy control module
- Indicator panel

Our purchasing price of the equipment would be 1800€, but we need to add more expenses like transport and installation that will mean around 200€ more. Taking into account all that we have stablished a sale price of 2500€ for our facility.

We have designed a benefit plan in order to try to make the service profitable. We have stablished a 500€ margin of benefits from the sale of our facility. Moreover, we will carry out maintenance service which would mean 14,95€ per month.

The price of electricity will be 0.40€/kWh, the same as in standard plug in system charge that we offer, matching ETM prices.

2.3 Movable charge

The first years of operation of the service will be carried out by two employees on two electric bicycles, each one with a 24kwh battery box. These battery boxes will be composed of 2kwh batteries, which will make a total of 12 of them. In total, there will be 2 boxes of batteries in simultaneous operation, and a reserve box that will be located in the vicinity of the site of the company.

The service will be given through an application, where the user can choose the time of recharging the electric vehicle, so that it is the user who chooses the amount of cargo. The costs that will be charged for the service will be the following: travel by zones 4€, and recharge of 0.35 €/min.

The areas where STOP & RUN will offer its services in the downtown area of Madrid (within the M-30). The payment method will be done through the app, where the user will have their bank details registered, in order to make their experience easier and more comfortable.

Finally, once the vehicle refill service has been completed, the customer will receive an email to his account, where he will be notified of the end of the service, the final cost of the service and the amount of recharge made.

3. Business Model Design

3.1 Empathy Map

What he or she sees. Consider aspects such as the characteristics of the surrounding environment; your friends and close people; What proposals does the market already offer?

- MARKET:
  - Moto sharing and car sharing
  - Public transport
  - Private transport
  - Conventional vehicle
  - Electric vehicle
- WHAT SURROUNDS HIM:
  - Friends
  - Couple
  - Family
- WHAT PROBLEMS DOES HE HAVE?
  - Car sharing and moto sharing
  - Dependence of availability
  - Limitation perimeter
- PUBLIC TRANSPORT
  - Depending on schedules
  - Lack of comfort during rush hour
  - Imposed route
- PRIVATE TRANSPORT
  - High price
- CONVENTIONAL VEHICLES
  - Difficulty for finding parking
  - Emissions of polluting gases
- ELECTRIC VEHICLES
  - High initial price
  - Few charging stations
  - Need a long time to complete the full load of the vehicle

What he or she says and does; how he acts when he is public, what he looks like; What is your attitude towards the proposals of the companies? What contradictions do you have?

- WHAT HE CARES ABOUT
  - The air quality of his city
  - The environment
  - Climate change
  - The image he gives to society
  - His economy
- WHO HE TALK WITH
  - Friends
  - Family
  - Couple
- DIFFERENCE BETWEEN WHAT YOU SAY AND WHAT YOU THINK
  - It is more important his economy than to take care about environment
- PUBLIC ATTITUDE
  - Nature lover
  - Respectful of the environment
  - Recycler
  - Aware of climate change
  - Modern and innovative

What does he or she hear: what your friends say, your family, your staff, your bosses, the influential people in your environment; what information reaches you through what communication channels.

- WHAT CONVINCES HIM
  - Recommendations of specialized communications media.
  - Recommendations of family and friends
- WHAT HIS PARTNERS SAYS
  - You should not spend much in the installation of the station charge
  - You can charge your car in public station

What he thinks and feels: what really matters to him; what are its main motivations, concerns, concerns, dreams and aspirations.

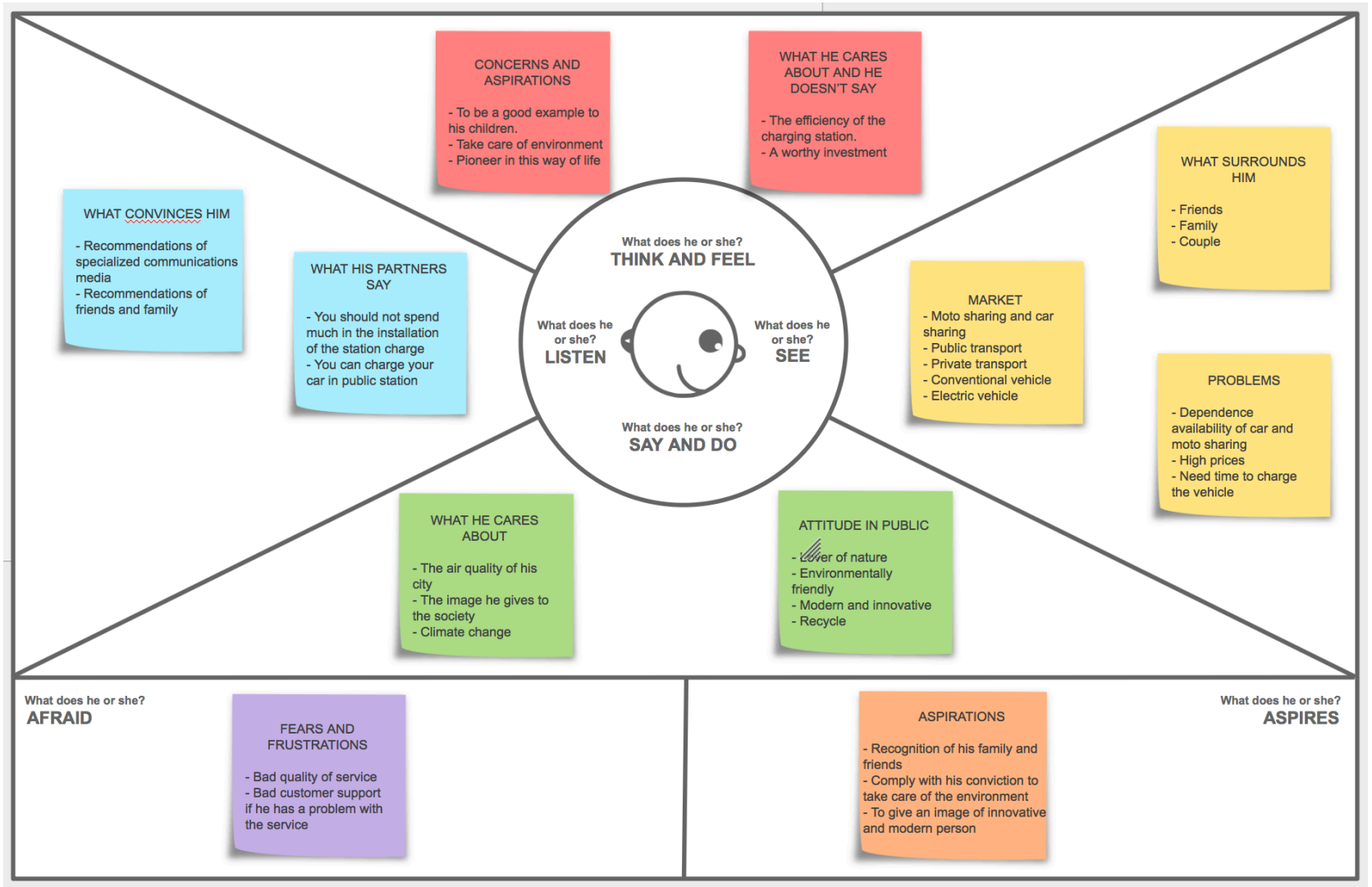
- CONCERNS AND ASPIRATIONS
    - To be a good example to his children
    - Take care of environment
    - Pioneer in this way of life
- WHAT HE CARES ABOUT, AND HE DOES NOT SAY
    - The efficiency of the charging station
    - A worthy investment

What are your main frustrations? What are the main obstacles to achieving what you want?

- FEARS AND FRUSTRATIONS
    - Bad quality of service
    - Bad customer support if he has a problem with the service

What are the benefits you can get? What do you really want to achieve? How do you measure success? What strategies would you use to achieve it?

- ASPIRATIONS
    - Recognition of their personal environment by the use of clean energies.
    - Fulfill your conviction to improve the environment.
    - Give an image of innovative and modern person


CONCERNS AND ASPIRATIONS
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WHAT HIS PARTNERS SAY
- You should not spend much in the installation of the station charge
- You can charge your car in public station
What does he or she?
THINK AND FEEL
What does he or she?
LISTEN
What does he or she?
SEE
What does he or she?
SAY AND DO
WHAT SURROUNDS HIM
- Friends
- Family
- Couple
MARKET
- Moto sharing and car sharing
- Public transport
- Private transport
- Conventional vehicle
- Electric vehicle
PROBLEMS
- Dependence availability of car and moto sharing
- High prices
- Need time to charge the vehicle
WHAT HE CARES ABOUT
- The air quality of his city
- The image he gives to the society
- Climate change
ATTITUDE IN PUBLIC
- Lover of nature
- Environmentally friendly
- Modern and innovative
- Recycle
What does he or she?
AFRAID
FEARS AND FRUSTRATIONS
- Bad quality of service
- Bad customer support if he has a problem with the service
ASPIRATIONS
- Recognition of his family and friends
- Comply with his conviction to take care of the environment
- To give an image of innovative and modern person
What does he or she?
ASPIRES

3.2 Value Proposition

The value proposition is the factor that causes a customer to choose one or another company and what it seeks is to solve a problem or satisfy a customer's need in an innovative way. It must answer what is going to be offered and for whom.

It's important to elaborate a value proposition that can make an update of the fact of maintaining the conversation with a client and understanding the need that they have.

The competitive advantage is an advantage that the company enjoys exclusively with respect to its competitors and that gives it a only and superior position in the market.

To create a correct value proposition we must take into account some factor, we have to know that we are creating a value for our ideal customer. First we have to choose who is going to be our ideal customer, it forces you to meet your customer perfectly, to know what are their concerns, needs, motivations, pains, etc.

Once defined our ideal customer, we will focus our efforts on making the service adapt perfectly to the client performing the tasks that cover the needs of the client, making it provide value.

The value preposition should answer the following questions:

1. **Products and services**: products or services that you offer to your customers to help them with the daily activities that they realize.

2. **Pain relievers**: How you solve the problems or needs of your customers (saving time, comfort, easy access to the information, cost…)

3. **Gain creators**: how you are bringing benefits to your customers based on the expectations of your customers mentioned above.

Regarding the customer segment that we address:

1. **Customer Jobs or daily activities:** Different activities related with your product or service that the customers are doing usually.

2. **Pains**: Situations or unwanted costs that your clients experience when carrying out the previous activities:

- It takes a long time, it costs a lot of money, it requires considerable effort, etc.
- What does it feel bad? Frustrations, discomfort, things that give them a headache, etc.
- Are there other low performance solutions? It lacks features, performance, malfunction, etc.
- What difficulties and challenges do they encounter? About how things work, difficulties to do things, resistance, etc.
- What common mistakes do you make? Errors of use, etc.
- What barriers does your client find in the adoption of solutions? Initial investment costs, learning curve, resistance to change, etc.

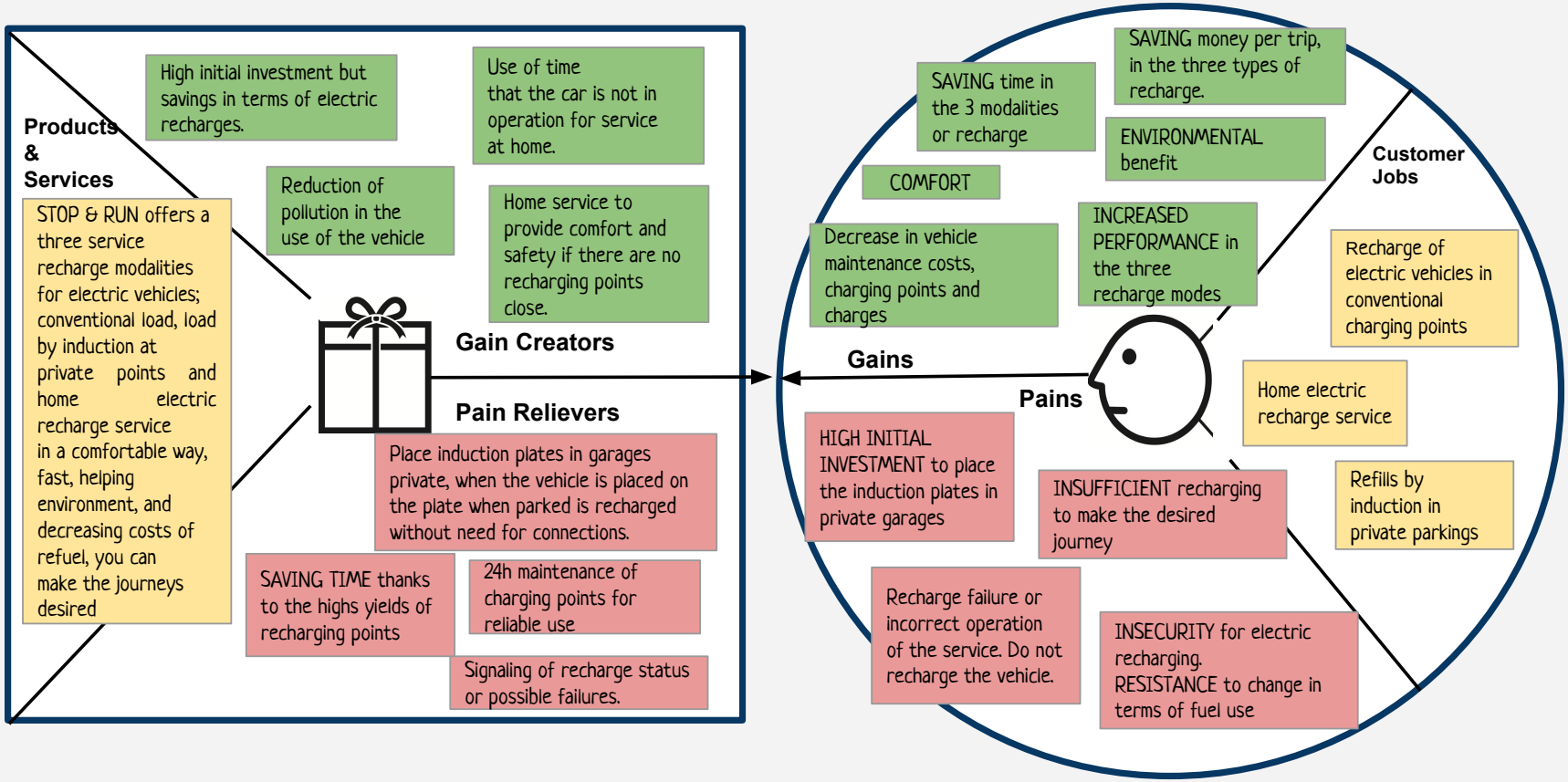
3. **Gains (benefits)**: Benefits that your clients expect to obtain when performing these activities:

- What savings makes your client happy? In terms of time, money and effort, etc.
- What results and expectations does your client expect? In terms of quality level, more than something, less than something, etc.
- How do you excite the current solutions to your client? Characteristics, performance, quality, etc.
- What are the clients looking for? A good design, guarantees, specific characteristics, etc.
- How would you measure the success and failure of your client and failure? In terms of performance, cost, etc.
- What would increase the probability of adopting a solution? Lower cost, less investment, less risk, better quality, performance, design, etc.

The Value Proposition Canvas

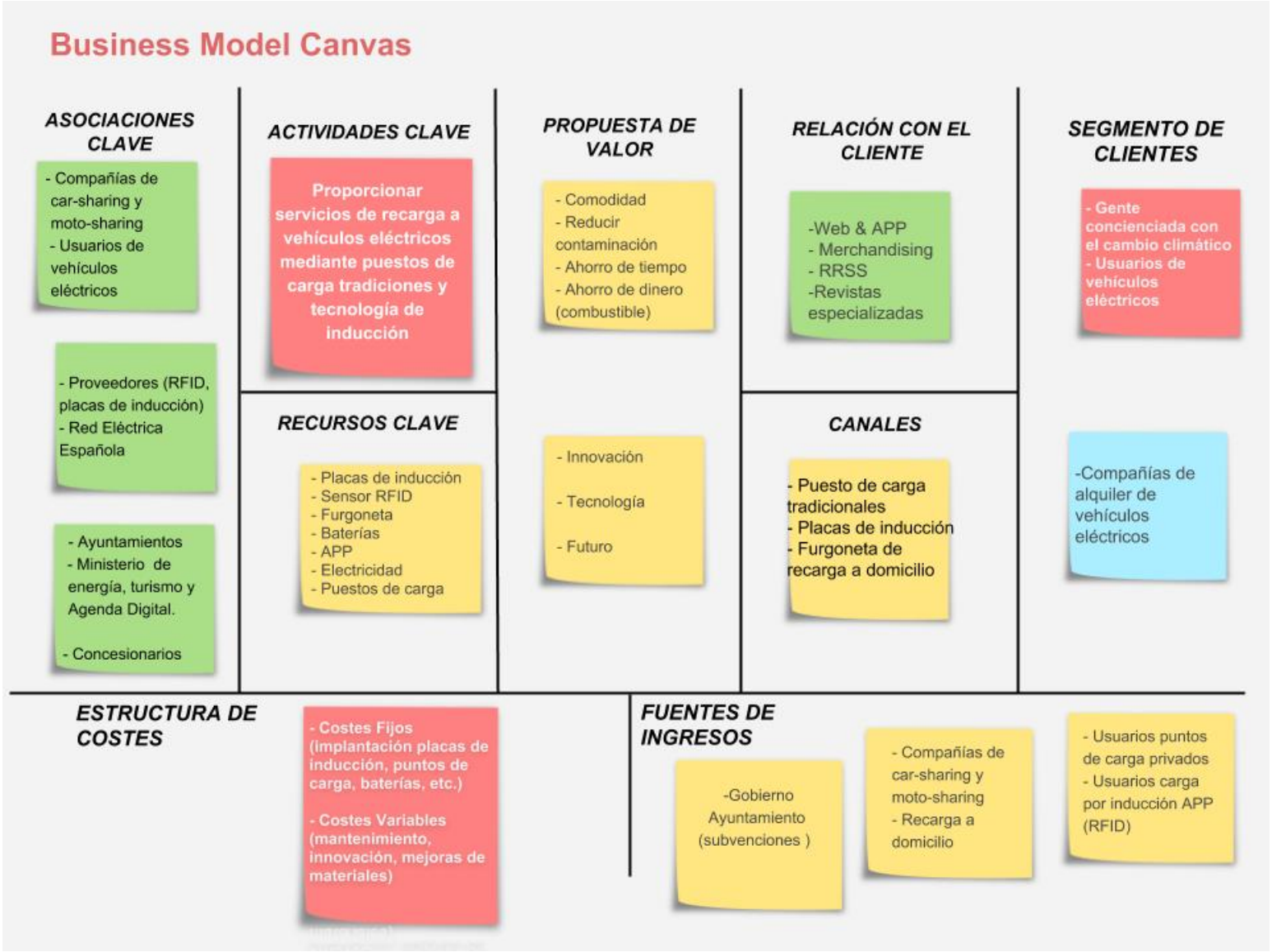
Value Proposition	*STOP & RUN*

Customer Segment	Automotive and energy sector customers



3.3 Canvas

Business Model Canvas is a strategic management and lean startup template for developing new or documenting existing business models. It is a visual chart with elements describing a firm's or product's value proposition, infrastructure, customers, and finances. It assists firms in aligning their activities by illustrating potential trade-offs.


Business Model Canvas
ASOCIACIONES CLAVE
- Compañías de car-sharing y moto-sharing
- Usuarios de vehículos eléctricos
- Proveedores (RFID, placas de inducción)
- Red Eléctrica Española
- Ayuntamientos
- Ministerio de energía, turismo y Agenda Digital.
- Concesionarios
ACTIVIDADES CLAVE
Proporcionar servicios de recarga a vehículos eléctricos mediante puestos de carga tradiciones y tecnología de inducción
RECURSOS CLAVE
- Placas de inducción
- Sensor RFID
- Furgoneta
- Baterías
- APP
- Electricidad
- Puestos de carga
PROPUESTA DE VALOR
- Comodidad
- Reducir contaminación
- Ahorro de tiempo
- Ahorro de dinero (combustible)
- Innovación
- Tecnología
- Futuro
RELACIÓN CON EL CLIENTE
-Web & APP
- Merchandising
- RRSS
-Revistas especializadas
CANALES
- Puesto de carga tradicionales
- Placas de inducción
- Furgoneta de recarga a domicilio
SEGMENTO DE CLIENTES
- Gente concienciada con el cambio climático
- Usuarios de vehículos eléctricos
-Compañías de alquiler de vehículos eléctricos
ESTRUCTURA DE COSTES
- Costes Fijos (Implantación placas de inducción, puntos de carga, baterías, etc.)
- Costes Variables (mantenimiento, innovación, mejoras de materiales)
FUENTES DE INGRESOS
-Gobierno Ayuntamiento (subvenciones)
- Compañías de car-sharing y moto-sharing
- Recarga a domicilio
- Usuarios puntos de carga privados
- Usuarios carga por inducción APP (RFID)

4. Planning

4.1 Marketing plan

The main function of STOP&RUN is to offer a green and economic mobility service to the people who live in big cities such as Madrid, where we aim to start our project. Our target is to make the maximum profit out of our users' payments anytime they use our services. Moreover, as an eco-friendly startup that will help big cities to reach their international CO2 emissions treats, we will try to get some public allowance to increase our profit and make us a successful business.

STOP&RUN promotes users commodity thanks to a quick and complete service, which will lead into a great customer experience.

We have designed a complete and accurate marketing plan that can allow us grow up within the market as a new startup. In order to present a properly made marketing plan we have designed an extensive SWOT analysis in order to identify our strengths and opportunities, as well as our threats and weaknesses. Furthermore, we have been working on an accurate PESTLE analysis, so we can take into account not only our main political and economic challenges, but also our main technological and social challenges as well as the main legal and ecological situation.

Moreover, we have added our marketing mix where we can easily see our product value, our price strategy as well as our promotion plan and our place of action.

In addition, we have designed a complete digital marketing strategy in which we have selected not only our possible earned and owned media, but also our paid media as well as our shared media.

In order to complete this extensive marketing plan, we have also designed our future business path that we aim to follow and in which we identified some special targets that we hope to achieve in the future.

4.1.1. SWOT Analysis

As we said before, we have carefully made our SWOT analysis so we can identify our main strengths and weaknesses as well as our main threats and opportunities.

- Strengths:

We have identified our most important strengths such as our Eco-Friendly value and the time saving fact for our users. We also think that one of our main strength will be the use of public services as well as the charging service on demand that we believe could help us diversify our services.

- Weaknesses:

After a careful analysis of our weaknesses, we have identified some of the most important ones such as the lack of time to offer a complete charge to our users as well as the dependence on government for the use of public spaces. In addition, we have realized of the need for a further development on induction charge as this technology is not being used on a massive scale yet.

- Opportunities:

After the analysis, we have also realized that we have many opportunities that we should use in order to reach success for our business. Some of them are related to the green future that seems to wait for our cities, such as Cero Emissions Plans and the idea of a future where everybody will drive an electric car. But others are related to our innovative service, for example the save of time that we offer to our user and the fact that we would be first in business to offer several ways to charge your vehicle are some of our biggest opportunities.

- Threats:

Some of the threats we are more concerned about are de difficulties that we can find to set up induction surfaces on public roads as well as the competition in charging stations business as there already exist some companies that offer this service. Moreover, moto-sharing companies already have their own charging systems and may find our service less attractive to them.

4.1.2. PESTLE Analysis

With this analysis, we aim to know every scenery that we will need to face as a green mobility startup. This means to realize of our political, economic, social, technological, legal and ecological situation.

- Political:

We believe we are in a fair situation here, as Madrid city council will only allow electric or hybrid cars within the city center in 2020.

- Economic:

Our margins could be short and it may be difficult to get profits at the beginning

- Social:

We see a favorable situation in here as people concern with environment is growing fast. On the other side, the change of vehicle and its costs may become an important barrier for this change to happen.

- Technological:

Technology is already in use but in the case of induction charge, it still need more development in order to make it more profitable.

- Ecological:

This is our main strength as STOP&RUN provides several benefits for the environment.

- Legal:

We depend on public organisms such as the City Council for the use of public spaces and this could be problematic, although we hope they will be happy to collaborate with us as a green initiative.

4.1.3. Marketing Mix

With the representation of our marketing mix we intend to analyze the combination of the four controllable factors that affect our company. These factors are:

- Product:

We present several strengths here like a fast, easy and time saving service. At the same time, we offer on demand service and all together make us a really innovative company.

- Price:

We plan to charge the electricity costs to our users plus an added fee in terms of the innovative service that we offer. This fee could vary depending on the chosen service, but it will be the same for plug in charges and induction charges.

- Place:

As we offer three different services, we will be available on demand by the user at any location within Madrid city center, but at the same time we will be offering charging service at several shopping malls and car parks.

- Promotion:

For the promotion of our company we are going to focus on Social Media and Online advertisement as we believe that young people are more related with IT technologies and more concerned about the environment. Nevertheless we are also going to present our product with some events that will be promoted with Facebook and Instagram.

4.1.4. Digital Marketing

Given that we see digital marketing as the main marketing channel for our start up, we have decided to analyze every type of digital marketing that could be useful for us.

- Earned Media:

We will be present in green energy events as well as urban mobility conferences take every interview we can in order to gain visibility within the market.

- Owned Media:

This type of media consists mainly in our web and app, but also we will be present in crowded places within the city so many people can see us on the street.

- Paid Media:

We have stablished a marketing budget of 2.000€ for our first year that will make us able to be present in several web pages and magazines related with cars and green energy business. Moreover, we plan to make some advertisement out of the internet, on the street with classical adds and fliers. In addition to that we will paid for advertising within famous social networks like Facebook, Instagram and Twitter.

- Shared Media:

Instagram and Facebook are going to be the main way to promote our services as they are proven to be really effective when we talk about connecting companies with final users

4.1.5. Growth Strategy

Our growth strategy can be divided in three main targets we aim to achieve in the future and which will make us a reference for the sector.

1. **Market Penetration:**

This is our first target as we will try first of all to be known within citizens and we will focus on reaching as many users as possible.

2. **Increase service range:**

Once we have an acceptable amount of loyal users we plan to increase our service range so we can get new users and we can to satisfy a bigger demand.

3. **Massive implementation of inductive charge system:**

Finally, and after some developing time for our inductive charge technology we plan to set it up all around the city.

4.2 Finance plan

The financial plan includes the economic study of the viability of the project. For this, an Investment and Financing Plan has been made. In addition, a Profit and Loss Account.

The Investment Plan gathers all the expenses that are necessary to launch the start-up. Not only the equipment to start offering the services, but also the office, the furniture and the entire infrastructure. As we can see in the table, the total amount of initial investment is 52.850 €.

INVESTMENT PLAN	
CONCEPT	**COST (€)**
Office Rental	4.800,00
Furniture and equipment	1.500,00
Deposits and sureties for rental of premises	1.600,00
Technological equipment	500,00
Transfer rights / Patents and brands	150,00
Formation and start-up expenses	300,00
Provisions (unforeseen expenses)	1.000,00
TOTAL	**9.850,00**
OFFERED SERVICES	
CONCEPT	**COST (€)**
Plug-in charging equipment	800,00
Plug-in charging transport	50,00
Plug-in charging labor	100,00
Plug-in charging other expenses	50,00
Wireless charging equipment	1.800,00
Wireless charging transport	50,00
Wireless charging labor	100,00
Wireless charging other expenses	50,00
Electric bicycle	1.000,00
Batteries	30.000,00
TOTAL	**43.000,00**
TOTAL INVERSION	**52.850,00**

On the other hand, the Finance Plan shows how is financed the company. As the table shows, the total amount of share capital and own resources is 15.000 €. Each partner supplies 1.500 €.

FINANCE PLAN	
CONCEPT	**AMOUNT (€)**
Share capital	7.500,00
Own Resources	7.500,00
TOTAL	**15.000,00**

The profit and loss account gathers all the information about the income and expenses of the company for the first three years. The first year we are going to supply eight plug-in charging stations, the second year this amount will be increased by two and the third year too. The first year we are going to supply two wireless charging stations, the second year this amount will be increased by two and the third year by one. For the movable charge, at the beginning we will have one electric bicycle and the third year we would get another one. To get the services sale income it has been necessary to estimate the frequency of the use of the services. The price of the plug-in and wireless charge is 0,40€/kWh. We assume an average of 3 daily uses of 35 kWh of plug-in charge service for the first year, 5 daily uses for the second year and 7 daily uses for the third year. On the other hand, we assume an average of 2 daily uses of 35 kWh of wireless charge service for the first year, 3 daily uses for the second year and 4 daily uses for the third year. The price of movable charge is 4€ per service plus 0,35€/min. We assume 3 daily services of 15 minutes for the first year, 5 for the second and 7 for the third. In addition, a maintenance service will be charged to the station owner: 12,50€/month for plug-in charging station and 14,95€/month wireless charging station.

On the other side, the charging station purchase shows how much we pay for the equipment of all the stations. The expenses include the equipment transportation and the labor for the installation. The other expenses are specified in the following table.

As we can see in the table bellow, the first year the loss is very high. However, since the second year we start to earn money. The payback would be situated between the third and the forth year.

PROFIT AND LOSS ACCOUNT			
INCOME	**FIRST YEAR**	**SECOND YEAR**	**THIRD YEAR**
Plug-in charging stations sale	10.000,00	2.500,00	2.500,00
Wireless charging stations sale	5.000,00	5.000,00	2.500,00
Plug-in charging services sale	15.330,00	25.550,00	35.770,00
Wireless charging services sale	10.220,00	15.330,00	20.440,00
Movable charging services sale	12.592,50	20.987,50	33.580,00
Plug-in charging stations maintenance	1.200,00	1.500,00	1.800,00
Wireless charging stations maintenance	358,80	717,60	897,00
TOTAL	**54.701,30**	**71.585,10**	**97.487,00**
EXPENSES	**FIRST YEAR**	**SECOND YEAR**	**THIRD YEAR**
Plug-in charging stations purchase	6.400,00	1.600,00	1.600,00
Wireless charging stations purchase	3.600,00	3.600,00	1.800,00
Plug-in charging stations expenses	1.600,00	400,00	400,00
Wireless charging stations purchase	400,00	400,00	200,00
Equipment maintenance	1.000,00	2.000,00	3.000,00
Electric bicycle	1.000,00	0,00	1.000,00
Batteries	30.000,00	0,00	0,00
Autonomous insurances	1.271,05	1.271,05	1.271,05
Salaries	20.000,00	23.500,00	27.250,00
Social security	8.000,00	9.400,00	10.900,00
Publicity and promotion	2.000,00	2.500,00	2.500,00
Supplies (electricity, water, telephone, gasoline, etc.)	1.200,00	1.200,00	1.200,00
Office rental	9.600,00	9.600,00	9.600,00
Furniture and equipment	1.500,00	250,00	250,00
Deposits and sureties for rental	1.600,00	0,00	0,00
Technological equipment	500,00	150,00	150,00
Transfer rights / Patents and brands	150,00	150,00	150,00
Formation and start-up expenses	300,00	0,00	0,00
Insurances	1.000,00	1.000,00	1.000,00

Maintenance and repairs	200,00	200,00	200,00
External services (agencies, ...)	300,00	300,00	300,00
Constitutional expenses (notaries, registries, ...)	150,00	150,00	150,00
Miscellaneous expenses (stationery, etc.)	150,00	150,00	150,00
Allowance for depreciation of property, plant and equipment	5.075,00	1.495,00	1.415,00
Amortization to depreciation of intangible assets	3.612,11	4.032,11	4.537,11
Provisions (unforeseen expenses)	1.000,00	1.000,00	1.000,00
TOTAL	101.608,16	64.348,16	70.023,16
INCOME - EXPENSES	**-46.906,86**	**7.236,95**	**27.463,85**
Profit before taxes			

Profit after taxes	**-35.180,14**	**5.427,71**	**20.597,88**