

Last Draft: Project Develop

Grup: Scoreanzi Lisandro, Muñoz Joaquín

Company name's: S&M Solutions

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S & M Solutions.

1. Introduction.

Good morning my name is Lisandro Scoreanzi, and this is my partner Joaquín Muñoz he is 34 years old and I am 27 years old. My partner is from Parana and I am from Hernandarias, but I live here like Joaquin. Hernandarias is a small city in Entre Rios; it's 100km kilometers from Paraná. We are electromechanical engineers from UTN FRP, and we are the owners of S & M Solutions. S & M Solutions is a company that solves electrical or lightning problems with solar energy. I am the president of the company and I oversee some departments. My partner is the manager of the Engineering Department and he oversees it. Our headquarters is in Paraná. Now, the company only works in Paraná and it is in 1158 Almirante Zapata Street. We have worked together since 2013 when we created the company and we did all type of projects for other companies or people who want to have solar energy in their houses and people that want to stop using polluting energies.

The problem that our company would like to address is the poor lighting on Thompson beach.

We have organized the presentation this way:

First, we are going to describe to you our Company, starting by the Markets and services that we provide, next we going to show our Company organization and some of our Company History.

Next, we are going to give you a Tour round the Landmark, in this section you will see the area of the Thompson Beach and the camping area.

Finally, we are going to show you the lighting problems in the area, and what our action plan is in order to solve these problems if you choose our Company.

2. Company Description.

2.1 Markets and Services/Products

Ok, let's begin with Markets and Services. Our Company is dedicated to supplying and installing photovoltaic generation systems for lighting. To solve each project that we focus on, the materials used are imported from two large companies: Yingli Solar, which is a Company specialized in the manufacture of solar panels; and INVT, a leading Company in inverters for photovoltaic power generation systems.

In all the projects we develop, specific treatment is given to the needs of each client, for which we have a team of technicians and engineers who work to design the best solution for our clients' needs.

The sustainable lighting systems that we develop have many benefits:

With an efficient and programmable lighting system, you get 70% energy savings. Also, the maintenance and operating costs are reduced.

With these systems the client can improve the safety of public spaces.

These are some of our projects:

Streets and Roads	
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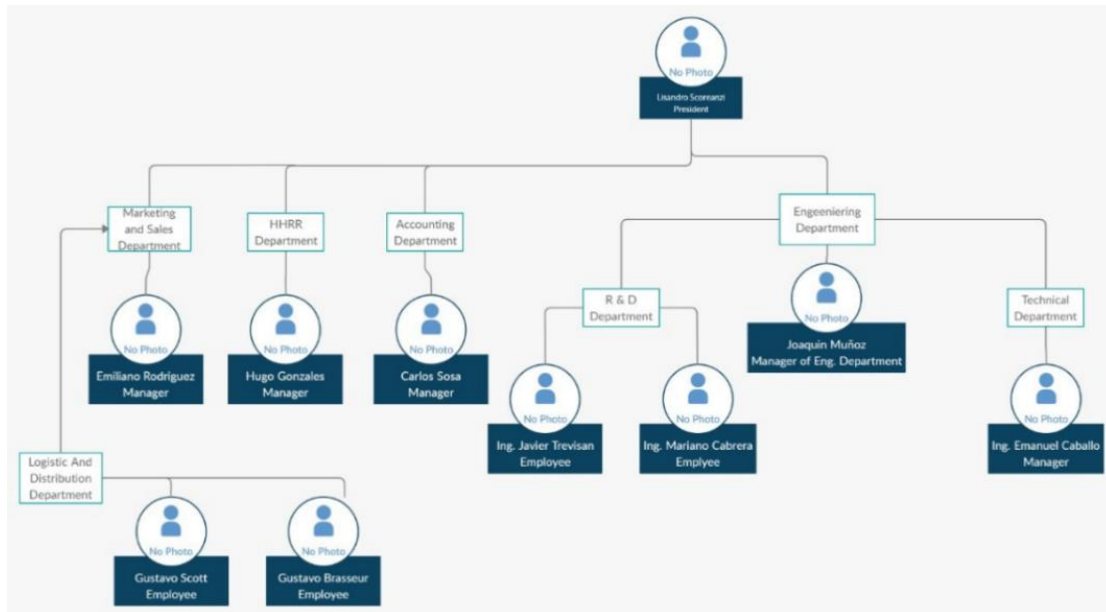
Industries and
Companies



Public Spaces and Parks



2.2 Company Organization



Now, we are going to tell you about our Company Organization. In the picture we can see the company structure and there are seven departments. We have one or two people per department. We are hiring new employees now because the Company has been expanding very quickly in the last few years.

Lisandro Scoreanzi is the CEO of the company; all departments report to his office. He is a very busy man because he is attentive to every movement of the company in order to be the best company for our clients.

Mr. Emiliano Rodriguez leads the Marketing and Sales Department because he is an administration technician; he works in our headquarters and is responsible for overseeing the general advertising and promoting the sales of our luminary products or selling our services.

Below the Marketing and Sales Department is the Logistics and Distribution Department. The work of this Department is moving the products to their final location. This is never an easy task because the products are fragile and large, and they must be careful when lifting and moving them. Gustavo Scott y Nicolas Brasseur work in this Department.

Mr. Carlos Sosa is the manager of the Accounting Department. Mr. Sosa is an accountant and he has worked in the company since 2015. He keeps us informed about the numbers of the company, the taxes, profits, etc.

Hugo Gonzales is the manager of the Human Resources Department and is responsible for overseeing all the incorporations of the new employees if the company needs it or

he sometimes talks with other companies to help us in a big project if our employees need assistance.

Joaquín Muñoz oversees the Engineering Department. This is the Department in charge of developing the projects and putting them in action. His job is overseeing two Departments of S&M Solutions. They are the R&D Department and the Technical Department.

The R&D Department looks for the best solution to the client's problems or requests. They do the engineering to the projects and planning the steps for the implementation. The sustainable lighting systems are a relative new technology and many times this Department must find a way for linking this technology with very old electrical systems. Two people work in this department: Mariano Cabrera and Javier Trevisan both Electrical Engineers.

The Technical Department oversees the placing of products in their destination and putting them into operation. The employees of S&M Solutions have a lot of experience in their work areas. This Department also is responsible for the after-sale service and technical support. This Department is run by Emmanuel Caballo also an Electromechanical Engineer, and me.

2.3 Company History

At this point, we are going to tell you about our Company History:

S&M Solutions was founded in 2013 by Lisandro Scoreanzi, an Electromechanical Engineer from the National Technological University at Paraná. He hired me (Joaquín Muñoz) and we started working in the home market, offering alternative solutions to our clients for many situations implementing renewable energy.

In 2014 we hired more employees and had a restructure of the Company, including more departments in order to improve and upgrade our services to clients.

In the year 2015 the Company was opened to the industrial market by the association with Yingli Solar, which is a Company specialized in the manufacture of solar panels; and INVT, a leading Company in inverters for photovoltaic power generation systems. This associations were very beneficial for us, because we were able to get new and bigger clients of the industrial market.

In 2017 the Company had participation in the restauration of the Alvear Square, improving the illumination with photovoltaic panels and led lights.

The following year Our Company carried out national projects of highway lighting with led systems and photovoltaic panels.

Today S&M Solutions is the only company in the province with the commitment of developing every project using only renewable energy, positioning the company as an ecofriendly one which offers more rentable options for the costumers and which is responsible for our future.

Timeline

2013 - Lisandro Scoreanzi founds S&M Solutions.

2014 - The company expands with more employees and restructuration of the Company.

2015 - S&M Solutions partners with internationals companies.

2017 - The Company participates in a public project for first time

2018 - Lisandro Scoreanzi wins the tender for the lighting of a national highway.

2020 – S&M Solutions leads the photovoltaic lighting market in the province.

3. Project Development.

3.1 Tour round the landmark

Ok, now, let me give you a tour round Thompson Beach.



This is the map of the Thompson beach and park. It's a small part of the coast of the river in Paraná, where the beach and the park area are.

If we walk on the main street, Augusto Bravard, we can see one or two fish restaurants, which are rustic and very nice. Then, we can see the beach on the right side of the main street.



There is a public swimming pool and a pub. To the left of the main street, there are games for children and some beach volleyball courts and a camping area.



At the end of the street there is a roundabout. If we turn left, we can see some bungalows for rent. And if we turn right, we can see the entrance to Puerto Sanchez, where you can buy fish and some homemade meals.



Thompson Beach is an area close to the city, where people can go on foot or by public transport.

Problem Statement

3.2.1. Problem Description

Next, we are going to describe to you the problem that our company wants to solve. If you decide to go for a walk in this area at night, you will notice that in many places the lighting is insufficient.

In fact, many people that arrive at this location to do exercise, go biking, go to a restaurant or simply relax with their family, discover that when the night comes, this place becomes a very dark zone and all the people in this site are at risk of an assault.

In these pictures we can see this problem in the different places of this area.

In the beach area, we can see that when the night comes, the artificial illumination is poor, and that does not bring comfort to the users.

Also, in the camping area all the trees make the area darker and unsafe:



3.2.2. Reasons why the Thompson beach is a dark area:

Now, we are going to name the different factors that give rise to this problem.

- The illumination in the area is very poor because there are few lamps and the area is very large.
- The lamps in this place are halogen ones and this is an old or inefficient technology.
- This old technology tends to be damaged or broken easily in open areas.
- The halogen lamps use is connected by means of underground cables and this is a problem because when the Paraná River's water levels go up all the zone floods.
- Another problem with underground cables is that some people steal them.
- A factor that exacerbates the problem is that there are a lot of large trees in the area and this prevents the lamp from illuminating the area correctly.
- All these problems result in a very dark area/zone because for the most part the lamps are broken all the time and a big part of this is from a poor investment from the Municipality.

Project Development

3.3.1. Stage I

Talking about the first stage we can say that we need to follow some steps before the installation of the luminary. The area where we are going to work has a lot of trees and vegetation that complicates the project development because the vegetation there does not allow solar radiation to reach the solar panels. The first step before starting to work is to clear the zone and cut all the large trees in the area of work allowing the solar radiation to reach the panels. The second step is removing all the old luminaries that we are going to replace.

3.3.2. Stage II

After stage one is completed, we can start to work in the project. In this stage the first step is to prepare the luminary structure where each lamp and solar panel are going to be installed. This structure is made by carbon steel tubes with various welded reinforcements. These reinforcements make the whole structure stronger and allow to hold all the components of the system.

The second step is preparing the electric part of the luminary and all the components of these. This step including the pre-assembled and the test run of each luminary on a workbench over a period of at least two days.

The third step is to carry all the lamps that will be installed to the zone of work. For this step, we need the support of a Hydro lift, and all personal protections items that safety of our employees requires. Finally, we will install first the luminary structure or the post and after this we will install all the electrical parts.

3.3.3. Contingency Plan

For the development of the stage one and two we need good climatic conditions because if it rains for some days, the conclusion of the project can be delayed. In the case that we have some days of rain, we have a contingency plan. The plan consists in assembling all the luminaries in the workshop of the company and carry the lamps ready for installation to the place. Another part of this plan is installing the posts with a crane in order to do the work more quickly but that is more expensive.

4. Conclusion

Finally, we believe that our Company is the best choice that you have in order to solve these problems and, at the same time, improve the area with this new, free maintenance and ecofriendly technology.

Now our Company leads the market at regional level and provides employment to many families of this city. It is a local Company that grew in a few years because of the quality of our products and projects that made us the first choice of our clients continually.

The quality of our products is one of the best reasons why you should choose us. We have the support of two of the biggest Companies of photovoltaic technology, from which not only we buy the materials, bus also they provide us with constant capacitation for our employees.