



**UNIVERSIDAD
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"Plan for the export of the TERMOPLASTIC electric shower of Acrylic Butadiene
Styrene to PIURA-PERU"

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Dedication

We dedicate this graduation research to our parents, who have been the main engine of our life; to our brothers, sisters for having shared our joys and sorrows.

Thank you for everything

Special thanks to

We must thank a large number of people who have shared this long road with us.

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Abstract

Ecuador is composed mainly of micro, small and medium enterprises (MSME), which are an important factor for the development and economic growth of the country. Many of these are able to expand and offer their products to other potential markets. Juan Alvarez Ltd. is a company from Cuenca that is dedicated to the production and commercialization of products for water heating and has managed to satisfy the demand of the local and national market. In the present work it has been determined that the company has the production capacity to achieve the internationalization of its product, electric shower, that is why it has sought to introduce its product to Piura - Peru, taking advantage of several export mechanisms promoted by the Ecuadorian government, thus achieving the consolidation of an international brand. To achieve this, it is proposed to carry out an internationalization plan for the Acrilo Butadieno Estireno electric showers, TERMOPLASTIC. Together with the plan, all the logistics processes will be analyzed, the demand of the Peruvian market will be studied and the importance of obtaining different quality certifications will be identified a product.

INTRODUCTION

The government of the Republic of Ecuador, through various programs and entities, such as the Productive Tax Consultative Council, has sought to achieve the development of MSMEs, since they constitute 95% of Ecuadorian companies. The strengthening of this business sector has been proposed, since it *“generates more than 50% of the Gross Domestic Product (GDP), being one of the main employment engines in the country and that worldwide promotes more than half of jobs of formal work* (Ministerio de Comercio Exterior e Inversiones , s.f.). For this reason, this titling work aims to encourage the Ecuadorian MSMEs to internationalize their products through the PRO ECUADOR or Exporta Fácil route, in addition to motivating the obtaining of quality certifications such as My First Certification or INEN Quality Seal.

This research uses Juan Alvarez Ltd as a practical model. Located in Cuenca - Ecuador, with more than 30 years of experience in the national market, in the production and commercialization of products intended for water heating. Over the years the products of the company Juan Alvarez Ltd have positioned themselves in the market as one of the best options at the time of making a purchase, so it has managed to satisfy the domestic market, wanting to internationalize their products.

The main objective of this titling work is to design and evaluate the internationalization process of Acryl Butadiene Styrene electric showers, TERMOPLASTIC, by Juan Alvarez Ltd. To Piura, Peru. Analyzing the company, the different export tools, the quality standards, the target market, to finalize with an internationalization plan for the product.

To obtain information, several secondary sources will be analyzed, including: books, scientific journals, papers, internet articles, degree works, among others. In addition, several virtual libraries will be used, such as: Ebrary, Ebsco, Scopus, proQuest. To conclude with the research within the quantitative part, the information will be obtained from: Trade Map, Mac Map, Central Bank of Ecuador, CIA. Factbook, National Institute of Statistics and Census, among others.

CHAPTER 1: THE JUAN ALVAREZ Ltd.

INTRODUCTION

Within this chapter, general issues are analyzed with respect to the importance and role of MSMEs in the country's economy, since they represent the 90.5% of existing companies. In the same way, we will be giving the definitions of these companies and the current situation of Juan Alvarez Ltd., In order to understand the role played by it in the economic and productive field of the country.

Likewise, the philosophical and operative dimensions of the Juan Alvarez Ltd. will be analyzed. That is to say, the main aspects of it will be developed as its: history, mission, vision, values, objectives, human talent, organizational structure and description of the areas and functions.

Regarding to the operational dimension, we will focus on the description of the TERMO PLASTIC shower characteristics, its guarantee and costs at the national level. In addition, a brief summary will be made of the production process of the same, with the purpose of emphasizing the control tests to which 100% of the produced showers are subjected, allowing the differentiation with the competition. On the other hand, regarding the company will be the description of its facilities and productive capacity.

IMPORTANCE OF THE MYPYME IN ECUADOR

The economy of Ecuador is composed mainly of small and medium enterprises (SMEs); being this a reality, and an important factor for the economic growth of the country and its development, since these are generators of employment and wealth. SMEs are currently able to expand and offer their products in larger markets. For the country it is also very important to promote exports from different productive sectors, since this can achieve an equilibrium in the trade balance, which is also a support to change the production matrix to try to stop being a country focused on exporting raw material, when we could be an exporter of internationally recognized value-added products.

According to the Organic Code of Production, Commerce and Investments and its Regulations, the article 53 defines the following:

"Micro, Small and Medium-sized companies as any natural or legal person who as a productive unit, exercises a production activity, trade and / or services, and that complies with the number of workers and gross value of annual sales, indicated in each category, in accordance with the ranges that will be established in the regulations of this code " (Guayasamín & Guayasamín, 2015)

Table 1 Number of companies by company size nationwide

Number of Companies by Company Size (National Level)					
Company Size	2012	2013	2014	2015	2016
Microenterprise	671,037	744,829	774,117	774,613	763,636
Small company	63,328	65,200	68,280	66,360	63,400
Medium company A	7.130	7,683	8.206	8.331	7,703
Medium company B	4.863	5,258	5,685	5.436	5.143
Big company	3.554	3.834	4.106	4,095	3.863
Total	749,912	826,804	860,394	858,835	843,745

Source: (Instituto Nacional de Estadísticas y Censos, 2016)

Table 2 Proportion of the company number by company size

Proportion of the number of Companies by Size of Companies		
Year	Size	Total
2016	Big company	0.5%
2016	Medium company B	0.6%
2016	Medium company A	0.9%
2016	Small company	7.5%
2016	Microenterprise	90.5%

Source: (Instituto Nacional de Estadísticas y Censos, 2016)

According to the data of the Directory of Companies and Establishment 2016 published by the National Institute of Statistics and Census (INEC), for the present year in Ecuador there were 843,745 companies. As can be seen in the table No. 2, according to the proportion of the number of companies by size, in Ecuador most of them are considered micro-enterprises; representing the 90.5% of its total, which guarantees the importance of these in the economy of the country.

Similarly, the participation of small, medium A and B and large companies represent 7.5%, 1.5% and 0.5%, respectively.

It is imperative to mention that the INEC groups companies by the number of people that comprise it and their annual income. Therefore, it is considered that:

- Medium-sized company: Is that productive unit that has between 55 to 199 workers and a value of sales or gross annual income between million one (USD 1'000.001.00) and five million (USD 5'000,000.00) United States of America dollars.
- Small business: It is that unit of production that has 10 to 49 workers and a value of sales or gross annual income between one hundred thousand one (USD 100,001.00) and one million (USD 1'000,000.00) of United States of America dollars.

- **Microenterprise:** It is that productive unit that has between 1 to 9 workers and a value of sales or annual gross income equal to or less than one hundred thousand (USD 100,000.00) dollars of the United States of America (Ecuadorian Normalization Service, 2016).

Table 3 Number of companies by company size in the Azuay

Number of Companies by company size (Azuay)					
Company Size	2012	2013	2014	2015	2016
Microenterprise	36,477	41,143	44,850	46,374	47,269
Small company	3,658	3,818	3,932	3,923	3,795
Medium company A	381	430	453	480	432
Medium company B	288	305	324	300	270
Big company	158	187	193	200	189
Total	40,962	45,883	49,752	51,277	51,955

Source: (Instituto Nacional de Estadísticas y Censos, 2016)

Table 4 Proportion of company number by size in the Azuay

Proportion of the number of Companies by Size (Azuay)		
Year	Size	Total
2016	Big company	0.4%
2016	Medium company B	0.5%
2016	Medium company A	0.8%
2016	Small company	7.3%
2016	Microenterprise	91.0%

Source: (Instituto Nacional de Estadísticas y Censos, 2016)

On the other hand, according to table No. 3, in the province of Azuay, 51,955 companies were registered in 2016. Most of the companies of the Azuay are considered micro-enterprises, representing 91%, 7.3% are small and 1.3 % are medium.

According to the classification / grouping of the INEC, at the moment, the company cuencana Juan Alvarez Ltd., is considered a "small company", due to its annual sales value (greater than USD 1'000,000.00) and its productive unit (50 workers). Taking into account the previous factors and as additional data, according to the magazine

business strategy of successes "the 200 largest companies of the Austro", the Juan Alvarez Ltd., in the year 2017 is ranked in the place 362 of the ranking 500 largest companies in Azuay (NGOS AUSTRO, 2017).

THE COMPANY

Historical review

Several years ago, exactly 18, before the banking crisis, the Eng. Juan Alvarez, current General Manager of the company. At the age of 19, he set up a small workshop in the service room of the department he rented with his mother at that time There he made a plastic thermo-forming machine and made a microcredit of 1600 sucres (currently USD 13.78) to the disappeared Banco Continental.

This loan allowed him to acquire certain materials such as drills, welders and other tools that helped him to manufacture both electric showers and plastic containers. Thus, becoming the beginning of the current Juan Alvarez Ltd., leader in water heating for homes, hotels, swimming pools and industry in general.

Due to the increased competition that was generated in the market, Eng. Juan Alvarez had to fight with the blinded thinking of the people "the imported electric showers are the best" taking the local and national market, leaving no space for commercialization and the sale of TERMO PLASTIC electric showers.

However, the opportunity to enter in the market was seen after, the banking crisis between 1999 and 2000, during this time the local businesses were undersupplied of imported products, allowing the incorporation of a national shower, thus making known to the population the product quality, thanks to its durability, guarantee and efficiency in the operation. With the passage of time, the TERMO PLASTIC shower has become the choice and predilection of most Ecuadorians, allowing occupy the first place in the market of the entire Ecuadorian highlands.

Due to the quality of the product, and the increase of the demand of the same by the population, the company currently produces around 5000 showers monthly, tripling

the production of 3 years ago; leading the company to decide and take measures for the export of the TERMO PLASTIC shower, initially to Piura-Peru.

Mission

The Ecuadorian company, Juan Alvarez Ltd, provides solutions for heating water with different products such as: electric showers, hot water tanks and solar panels, in order to meet all the needs of home, business, industry and projects at the national level.

Vision

The Juan Alvarez Ltd., is aimed to be the largest company in Latin America in water heating, to provide a permanent relationship with suppliers, employees and society in general. It aims to achieve the necessary certification for the export of its products internationally.

Objective

Its objective is to provide efficient solutions by providing products of the highest quality that exceed the expectations of each client, always considering respect for the environment and maintaining the commitment to the development of the country.

Values

The company has within its statutes some defined values to be able to carry out all the activities proposed and to achieve all the goals and objectives proposed by the directors of the same. Within these values it can find the truth, respect, honesty, quality, productivity, ethics and finally morality.

Human talent

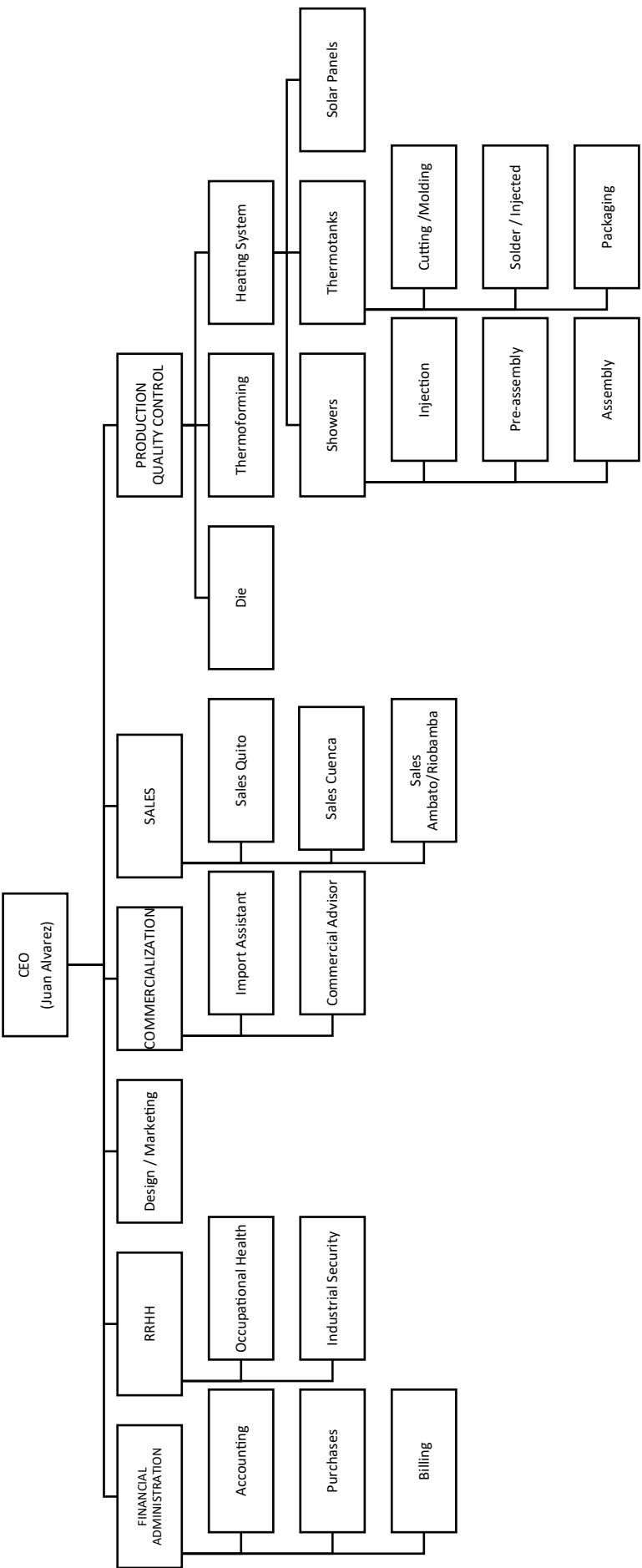
The Juan Alvarez Ltd. was created in 1987, in its beginnings it was dedicated to the production of electric showers. However, for diversification purposes, it is currently producing JA hot water tanks, JA solar panels, among others.

The productive process of the TERMOPLASTIC shower is determined in two parts: the first one, the manufacturing of the product, that is to say the manufacturing process of the same; and the second, the distribution of the products in the national market. Juan Alvarez Ltd., has 54 workers nationwide, of which 16 are administrative, 32 are plant and production, while 6 are sellers.

ORGANIZATION CHART OF THE COMPANY

Organizational structure

Illustration 1 Organizational structure



Source: Juan Alvarez Ltd. Authors: Alvarez - Ruilova

As can be seen in illustration No. 1, the Juan Alvarez Ltd. has a vertical structure, since in the descent of the chain each area is obtaining specific functions, thus decreasing the level of responsibility and authority of the management. At the top is the General Manager of the company, he is responsible for creating and implementing strategic plans for each area, supervising compliance of the activities and, of course the making decisions.

Description of the areas and functions

Although the company is divided into 6 areas: administration, human talent, design, marketing, sales and production; each one has its respective area manager that fulfill specific functions and responsibilities, and these are:

- **Administrative Department**

Administrative manager

Number of people supervised: 5

General purpose of the position: Increase sales and customer numbers

Activities

- Search sales strategies
- Thoroughly supervise sales agents
- Promote promotions
- Management of the SERCOP portal (National Public Procurement Service)

Responsibilities

- Maintain a fully trained sales team
- Maintain an active client portfolio

Administrative assistant

Number of people supervised: 2

General purpose of the charge: Maintain the order of billing, suppliers and payroll.

Activities

- Billing
- Sales
- Customer fees-payments
- Payments to suppliers
- Advances
- Purchases
- Payment roles

Responsibilities

- Updated portfolio
- Coordination of orders
- Request quotes from different suppliers
- Petty cash

• Production department

Injection Area

Number of people supervised: 2

General Purpose of the charge: production of parts

Activities

- Control and manage injectors and mills
- Change molds according to production
- Grind the material for reuse
- Cleaning and maintenance of injectors
- Mold programming setting
- Maintain quality in production

Responsibilities

- Make quality injected
- Correct operation of the machine
- Use and supervise the use of **PPE** (Personal Protective Equipment)

Warehouse

Number of people supervised: 2

General purpose of the position: Keep the warehouses organized and supply all the areas with the requested material.

Activities

- Cutting and making nickel for shower
- Dispatch of materials in process
- Dispatch of raw materials
- Expenses of **EPP** (Personal Protection Equipment)

Responsibilities

- Dispatch a quality product
- Dispatch correctly orders
- Use and monitor the use of **PPE** (Personal Protective Equipment)

Pre-assembly area

Number of people supervised: 4

General purpose of the charge: To inspect that all the processes are correct for a good internal functioning of the shower

Activities

- Receive daily raw material in process
- Armed, burned and placed of electrical resistance
- Preparation of an armed diaphragm
- Supervise the quality and procedure of each member of the area
- Inspect daily production
- Maintain personal order

- Coordinate weekly production and execution with assembly and warehouse

Responsibilities

- Is responsible for the materials and tools used for the pre-assembly
- Verify that the pieces are of excellent quality
- Keep staff working and with coordinated time
- Use and supervise the use of PPE (Personal Protective Equipment)

Assembly area

Number of people supervised: 5

General purpose of the position: assembly of showers and supervision of processes in the area

Activities

- Cable welded to the top contact
- Armed with bakelite, lid and base
- Shower assembly
- Leakage and continuity test
- Codification of shower production
- Cleaning the product
- Sheathed, stapled production
- Supervise the quality and procedures of each member of the area
- Maintain staff order
- Coordinate weekly production and execution with pre-assembly and warehouse
- Technical showers service inside and outside the company

Responsibilities

- Is responsible for the materials and tools used for the assembly
- Comply with the production commissioned
- Verify that the pieces are of excellent quality
- Keep staff working and with coordinated time
- Use and monitor the use of PPE

VALUE CHAIN

Collection and preparation of raw material

- Revision and control of raw material.
- Income of the raw material to the raw material storage warehouse.

Dehydrated area

- Dehydration consists of removing moisture from the plastic.

Plastic injection area

- The injection consists of melting the plastic (ABS) to give the shape according to the designated mold, which can be the base, cover, spout, switch lever, etc.

Printing area

- The printing of the TERMO PLASTIC brand and corresponding indicative of the same (shower) are made such as: on and off, hot and cold, etc.

It is imperative to mention that the ex-Ecuadorian Institute of Intellectual Property (IEPI), the current NATIONAL SERVICE OF INTELLECTUAL RIGHTS (SENADI), granted the registration of the distinctive sign TERMO-PLASTIC in favor of Mr. Juan Fernando Alvarez, through the procedure No. 83692, of December 12, 1997; same that expired on August 9, 2009. However, Certificate No. 1454, of May 21, 2009, renewed the denomination, which has an expiration date on August 9, 2019.

Warehouse of products in process

- In this area, you will find all the parts and pieces of the shower so that they can pass to the pre-assembly area.

Pre-assembly area

- In this stage all the internal part of the shower is armed like the diaphragm, nickel-plating, resistance, wire with contacts, switch pallets, etc.

First quality control area

- Consumption test: it allows to check the amperage and resistance¹ performance of the shower before moving into the assembly area.

Assembly area

- It is the area where all the main parts of the shower come together that came out of the pre-assembly as: the lid, base and spout.
- **The base:** it already contains the upper contacts, the cables (these are joined with the electrical wires of the house) and switch lever.
- **Base:** contains the diaphragm, lower contacts, resistance and resistance holder.
- **Spout:** contains the relief valve.

Second and third stage of quality control

- **Pressure resistance test:** all showers are subjected to 30 to 40 psi², to check that there is no water leakage.
- **Automatic system test:** allows us to see that the automatic turning on and off of the shower or heater works correctly.

Packaging area

- In this area, the finished product is put in bags with its respective instruction manual and guarantee certificate.

¹ Resistance is the device that heats the water, it is also sold and is known as Repair Kit

² Pound of force per square inch; pressure unit belonging to the Anglo-Saxon system of units.

Warehouse No. 1 of finished product

- In this place, all the showers are stored for distribution to the wholesaler and to the Warehouse No. 2 located in Quito-Ecuador.

It is important to mention that 100% of the showers, before going on sale, go through the three tests mentioned above under strict control.

FACILITIES

Juan Alvarez Ltd. is located in Paseo de Milchichig Street and González Suarez Ave. (Sector Los Eucaliptos). It has an area of 1500 m², with a construction of two plants of approximately three floors, of which only 30% is used for the production area.

Production capacity

Juan Alvarez Ltd., currently has a production of 5000 to 6000 showers monthly between the different models (Santorini, Fénix, Geiser, Afrodita, Termal and Vulcano), it is important to consider that the production amount is intended for local consumption and it may vary depending on the orders.

Table 5 Production quantity by model

MODEL	QUANTITY
Santorini	2100
Fénix	1800
Geiser	2100
Afrodita	200-300
Termal	200-300
Vulcano	200

Source: Juan Alvarez Ltd. **Authors:** Alvarez - Ruilova

* The production of the Afrodita and Termal electric heater lasts between 3 and 6 months and the production of the Vulcano water heater is 200 showers every six months.

The company presents an annual and continuous production of the showers, where the quality of each one is a determining factor for the productive process. Up to 400 showers are produced per day and varies according to the personnel in the assembly area.

Production flexibility

According to a study prepared by Eng. Juan Alvarez; General manager of the company; for the production of 5000 to 6000 monthly showers only 25% of the installed production capacity is occupied. That is to say, currently the plant is producing below the installed capacity, taking into account that the production is divided by days and each day it works 8 hours.

If it is determined that the production flexibility presented by Juan Alvarez Ltd., is 80%, taking into account that you can do 2 shifts per day focusing only on the productive area, the company would be able to produce around 15,000 showers per month, destined both for local consumption and for export.

PRODUCT CHARACTERISTICS

Product description

Illustration 2 Shower models produced by Juan Alvarez Ltd.



Source: Juan Alvarez Ltd.

The product can be defined as: an electrical device that heats the water automatically and immediately through a resistance (nickel) when opening the water tap. It is

imperative to mention that: the different models of TERMO PLASTIC showers and water heaters can be used in: bathrooms, dishwashers, beauty salons (hair washing), among others. Electric showers are useful and can be used in places that do not have or are damaged hot water pipes or in places where there is only a cold-water pipe.

Juan Alvarez Ltd., offers to the market TERMO PLASTIC showers, which have their base, cover and dispenser made with very high-quality materials such as Acryl Butadiene Styrene³. On the other hand, to avoid deformations of the plastic, the electrical parts of the showers are made of copper with bronze heat sinks and thermal insulation of asbestos. Additionally, the shower has a relief valve that makes it unique in the national and international market, which releases any excessive pressure that might be inside the shower.

Illustration 3 Components of the shower



Source: Juan Alvarez Ltd.

It is important to highlight and mention that the shower has packaging to seal water leaks; these will avoid in most cases and depending on the pipeline possible water leaks, otherwise you will have to add tape-teflon, and a pressure reducer in the water inlet that will help to stabilize the flow and temperature of the water. (Juan Alvarez Cía. Ltda., s.f.)

³ Acryl Butadiene Styrene or ABS is a hard thermoplastic, resistant to heat and impact.

Illustration 4 Components of the shower



Source: Juan Alvarez Ltd.

Finally, TERMOP LASTIC water heaters have a full one-year guarantee and cover any manufacturing defect. This guarantee consists in the free replacement of the defective spare part with a new one, plus the arrangement of the shower.

As established by the Organic Law of Consumer Protection section 1.1 THE CONSUMER Art.53 section j) *every producer or manufacturer must provide a guarantee for the service or, it is a "pristine tool that the consumer has to seek for the protection of their rights and avoid prejudicing their economic interests"* (Corporación de Estudios y Publicaciones, 2018). In the same way, in this literal it is indicated that the manufacturer must grant a product or service that assures the consumer the quality, security and the good functioning of the same; otherwise, the consumer may request the repair, replacement of the product or the return of his money.

Thus fulfilling, what is established in Chapter II "RIGHTS AND OBLIGATIONS OF CONSUMERS" Art. 4, numeral 8. The Consumer has the right to:

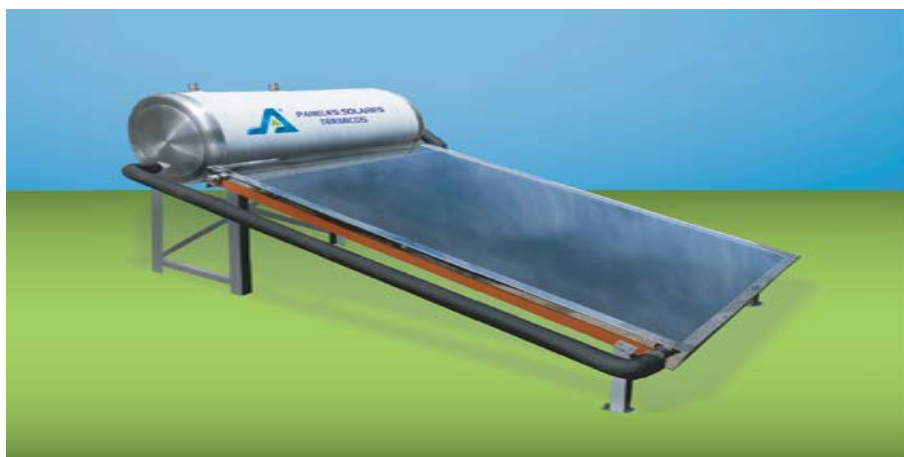
The repair and compensation for damages, for deficiencies and mass quality of goods and services (Corporación de Estudios y Publicaciones, 2018).

The price difference that exists between the products is not included in the production material, since they are manufacture with ABS; plastic used worldwide for mechanical

and chemical resistance at high temperatures, but in the extra accessories and sizes of the same, which will influence the price of purchase and sale of the product.

Within the portfolio of Juan Alvarez Ltd., include JA solar panels, a system for heating water through solar thermal energy for use in homes, hotels, swimming pools and industries in general and JA hot water tanks.

Illustration 5 JA Solar panel of 100 L



Source: Juan Alvarez Ltd.

Illustration 6 100 L electric hot water tank



Source: Juan Alvarez Ltd.

Product portfolio

The company sells several models of electric showers, heaters for kitchen and beauty salon, as well as electric hot water tank and hot water tanks, which are divided as follows:

Table 6 Product portfolio

PRODUCT	MODEL	CODE	CHARACTERISTICS	PRICE
<i>Showers</i>	Santorini	CD-2020	-Shower with large spout -3mts hose -Switch for temperature change and double suction cup	\$ 17.60 to \$ 23
	Fénix	CD-680	-Shower with flat spout of the same width as the Santorini	\$ 16.26 to \$ 21
	Geiser	CD-600	-Shower with small spout	\$ 13.91 to \$ 18
	Afrodita	CS-620	-Recommendable for beauty salons -Phone type hose	\$ 26.91 to \$ 34
<i>Heaters</i>	Termal	D0-975	- Small electric heater for kitchen with FV taps	\$ 46.92 to \$ 59
	Vulcano	SI-975	-Electric heater for kitchen with FV taps.	\$ 31.15 to \$ 39

Source: Juan Alvarez Ltd. **Authors:** Alvarez - Ruilova

PRODUCT TO BE EXPORTED

The product to be exported is the TERMO PLASTIC electric shower, designed with the highest quality materials. Which offers the benefit of enjoying hot water, with a simple installation, without worrying about the dangers caused by the inhalation of toxic gases, is silent, low power consumption, and only needs a cold-water network.

Tariff heading

The tariff heading that will be worked on is 8516.10.00. According to the Explanatory Notes of the Harmonized System of the Andean Community, Chapter 85 refers to "electrical machines, appliances and equipment, and their parts; sound recording or reproduction apparatus, television image and sound recording or reproduction apparatus and the parts and accessories of these devices" (Secretaría General de la Comunidad Andina, 2007).

Heading 8516 already specifies exactly at:

"Electric water heaters for instantaneous heating or accumulation and electric immersion heaters; electric appliances for heating spaces or floors; electro-thermal hair care apparatus (for example: hair dryers, curling irons, curling tongs) or for drying hands; Electric irons; other electro-domestic appliances; heating resistors, except those of heading 85.45" (Secretaría General de la Comunidad Andina, 2007).

Sub-heading 8516.10 refers to: "electric instantaneous or accumulation water heaters and electric immersion heaters, within this group are various devices such as:

- Instantaneous water heaters, which quickly raise the water temperature to the desired degree by direct contact with the covers containing the resistances.
- The accumulation water heaters, even under pressure, which are heat-containing deposits containing, generally placed in a sealed sleeve, submerged heating resistors. In these devices, the water heats up progressively.

- Mixed water heaters, which allow the combination of electric heating with another heating process, such as central heating. These devices usually have a thermostat that connects the electric heating when the other device is deficient.
- Electrode water heaters, in which an alternating current passes through the water through electrodes.
- Electric immersion heaters, which can be of various shapes according to their use, are used for the heating by immersion of liquid, pasty (other than solid) or gaseous materials. These devices are normally submerged in tanks or reservoirs. They are also used in saucepans, cups, bowls, etc., often provided with a thermally insulated handle and a hook that allows them to be suspended at the edge of the container.
- Electrical appliances to produce boiling water" (Secretaría General de la Comunidad Andina, 2007)

Duties

Peru applies some levies to different goods, among which we can find:

Table 7 Types of taxes that Peru applies to imports

Tribute	Rate
Ad Valorem	0% - 7% - 12% according to subheading
Anti-dumping or /compensatory duties	According to the product and country of origin
General sales tax	16%
Municipal Promotion Tax	2%
Excise tax	Variable rate according to subheading
Specific rights, provisional corrections	

Source: Guía de internacionalización a Perú DHL **Authors:** Alvarez - Ruilova

CONCLUSION

The familiar business Juan Alvarez Ltd. has been in the local market for more than 30 years offering electric showers of Acryl Butadiene Styrene. With the passage of time, the TERMO PLASTIC shower has become the choice and predilection of most Ecuadorians allowing the occupation of the first place in the market of the entire Ecuadorian Highland. Currently it has 54 workers that allow the production and distribution of its three star products (electric showers, hot water tanks and solar panels).

It is imperative to mention that the company does not compete in the national market for its price, because TERMO PLASTIC showers are the most expensive on the market, rather the product competes for its quality, becoming the priority for the company. To offer the market a quality product, the company considers important aspects that are indispensable to recognize again, and these are: the shower is made of Acryl Butadiene Styrene, material known for its high resistance to heat. It is the only product that has an exhaust valve, which makes it unique in the national and international market and finally, 100% of the showers go through the 3 quality controls, guaranteeing the consumer a reliable product.

However, the company has been limited in a specific area, which, with the passage of time, will make it impossible to increase its offer. As a result, by offering its product abroad, its production would be increased, allowing 100% of the installed productive capacity to be occupied. The demand of the national market has been satisfied and the company has looked for a new alternative, the internalization of the product, fulfilling the standards of quality demanded by the national and international norms in relation to the massive product.

CHAPTER 2: ANALYSIS OF THE PRO-ECUADOR ROUTE FOR THE EXPORTER AND THE TOOL EXPORTA FÁCIL

INTRODUCTION

Within this chapter, two Ecuadorian programs that promote exportation will be analyzed: The PRO ECUADOR Route and Exporta Fácil. These tools are based primarily on the promotion of exports of Ecuadorian products, both traditional and non-traditional.

In the first part of this chapter the PRO ECUADOR Route will be developed, starting with a small introduction of what is PRO ECUADOR, its mission, vision, objectives and the services that it offers; among which the Route for the Exporter stands out.

This route refers to the traffic light, which contains three colors: red, yellow, and green. The red color is about "Guidance and Counseling" for entrepreneurs. The second phase is the yellow one, which consists of the "Training and Technical Assistance" in which the potential exporters are located, and the last phase, the green one, is the "Commercial Promotion" already dedicated specifically for exporters.

On the other hand, Exporta Fácil is a tool designed by Correos del Ecuador, with the creation of an agile and simplified web portal that allows the MSMEs and Artisans to export their products in a simple way. Promoting the use of instruments created by the National Government to encourage exports.

Finally, it can be said that the National Government created the PRO ECUADOR Route and the Exporta Fácil tool to support MSMEs, artisans, entrepreneurs and exporters already established, so that their products reach different international markets and stimulate the foreign trade of Ecuador.

PRO ECUADOR

According to the Organic Code of Production, Commerce and Investments:

"Art.95. - Non-financial promotion of exports. - The Institute for the Promotion of Foreign Exports and Investments is hereby created, attached to the Ministry responsible for foreign trade policy, which shall be structured and operate according to what is established in the Regulations." (Guayasamín & Guayasamín, 2015).

PRO ECUADOR is the Institute for the Promotion of Exports and Investments, created by the Ministry of Foreign Trade. This Institute is responsible for carrying out different policies and regulations to achieve the promotion of exports and investments of the country; all the work that PRO ECUADOR does is to promote the offer of traditional and non-traditional products of the country. This Institute offers different services that basically are summarized in: information on foreign trade, fairs and commercial promotion events; it can also be mention other services that are offered to people or institutions that are interested in becoming future exporters, among these you can find:

- Advice to the entrepreneur and regular exporter
- Training and technical training
- Programs and projects for strengthening of the exporter
- Promotion and promoting of fair and sustainable trade
- Development of business contacts
- Interinstitutional articulation

PRO ECUADOR has a network of seven offices in Ecuador, whose function is to identify the needs of the territory and to maintain direct contact with national producers and exporters. It also has 31 international offices whose function is to investigate and negotiate the opening of markets that may be beneficial for Ecuador. In order to carry out this investigation, the information was obtained from the PRO ECUADOR office in Cuenca, located on Calle Larga and Ave. Huayna-Capac, Office Building of the Central Bank, first floor.

Mission of PRO ECUADOR

The mission of PRO ECUADOR is about the implementation of policies and regulations on the promotion of exports and investments of Ecuador; Thereby achieving the diversity of both traditional and non-traditional products offered by the country to different markets, ensuring an insertion in international trade and achieve the objectives of the National Plan for Good Living.

Vision of PRO ECUADOR

Its vision is aimed at being an agile, inclusive and transparent public institution, so that Ecuador can position itself as a country that provides products and services of high quality and value added and as a destination for different foreign investments that generate productive and technological linkage.

Objectives of PRO ECUADOR

Within the objectives of the Institute for the Promotion of Exports and Investments are:

- Increase opportunities for foreign investment in Ecuador, in coordination with the 28 Commercial Offices Abroad.
- Promote the acquisition of investments that generate productive and technological chains through the execution of promotional events and comprehensive advice to potential investors.

In order to achieve its objectives and goals, PRO ECUADOR maintains an interinstitutional relationship, at an international level with different embassies and consulates; and at the local level with different ministries such as the Coordinating Ministry of Production, Employment and Competitiveness (MCPEC); Ministry of

Coordination of Strategic Sectors (MICSE), among others. In addition to different cameras, associations and guilds.

Within the website of PRO ECUADOR, various additional services mentioned above are listed, also offered by the same institution. Among which the following stand out: the promotion of public or private investments, assistance to investors within all the commercial offices of the Ecuador abroad, accompaniment in the visit to Ecuador and elaboration of a detailed agenda, total confidentiality with the information and relationship between the different parties (Instituto Nacional de Eficiencia Energética y Energías Renovables , s.f.).

Shafts of PRO ECUADOR

Likewise, PRO ECUADOR manages four fundamental axes that allow it to motivate, encourage and continuously guide producers and large companies to an export culture.

Balcony of Services

It is a department, where it initiates the support and work together with entrepreneurs and MSMEs, which are interested in venturing in the medium or long-term export. In order to meet the needs and doubts of each one, this department offers advice on foreign trade to the exporter.

These consultancies offer several specialized services and first-hand information, such as: basic requirements to be an exporter, documents needed to export a product, information about tariff barriers, non-tariff barriers, requirements that the exporter needs to access the market, etc. These data **are** used to know if the product is or is not ready to be exported and what that country requires.

Similarly, this department provides statistical information on the main countries that are demanding a product, also to know which the main competitors are.

Export Promotion

In this unit, PRO ECUADOR has an estimated group of 14 sector specialists according to the productive sector these people are responsible for managing together with the export sector international commercial promotion activities. To promote exports, various activities are carried out, such as: national and international trade fairs or conferences, international trade missions and reverse trade missions, which constitute the visit of international importers to Ecuadorian companies that are ready to receive and negotiate with them.

Business Intelligence

It is a technical area that is responsible for lifting all market and product studies, making technical data sheets for foreign trade, analyzing statistical information on the Ecuadorian products that are being demanded in the international market, analyzing logistic profiles, etc.

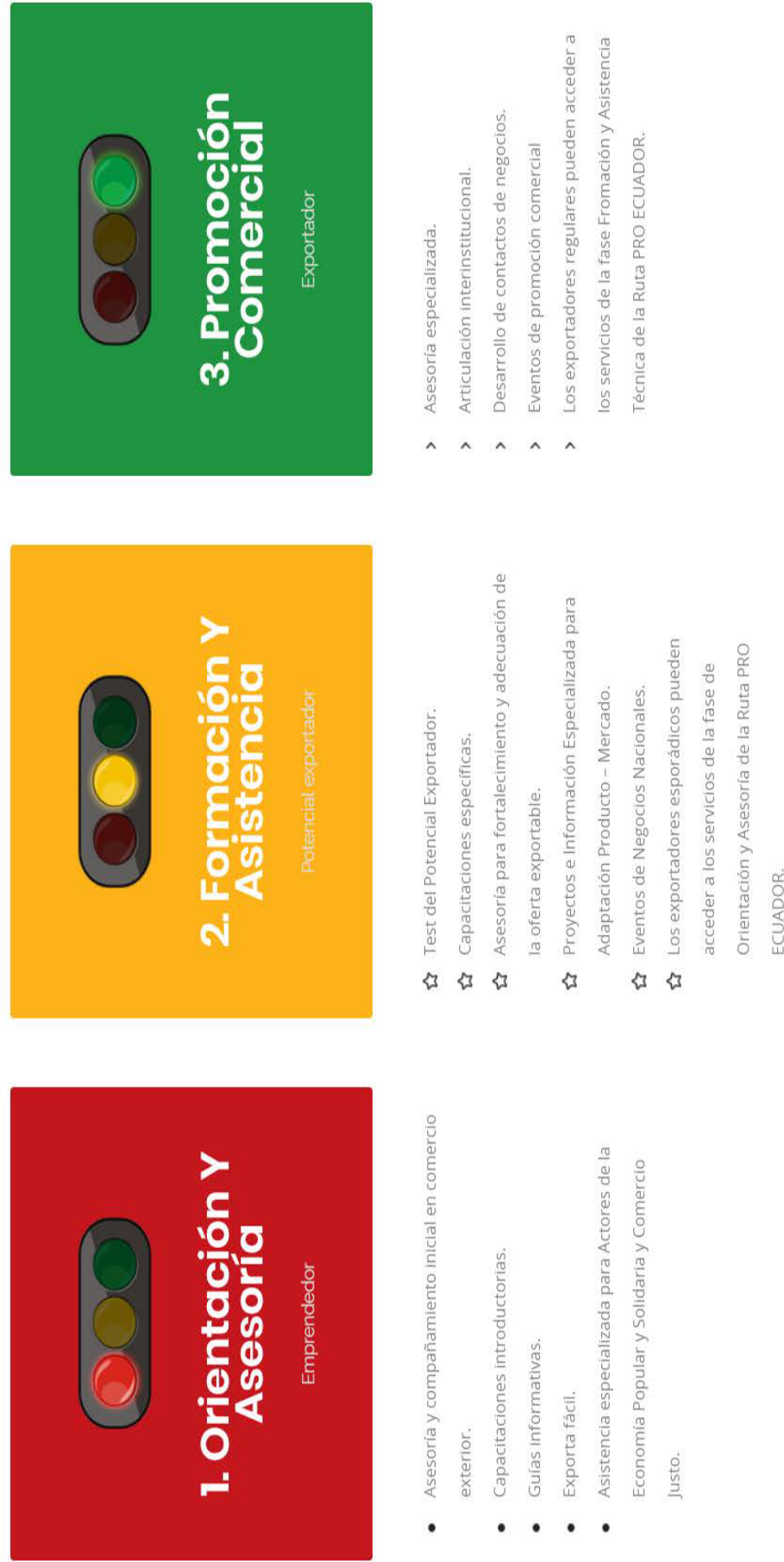
Investment Area

This area is responsible for bringing foreign investors to venture public-private projects.

PRO ECUADOR ROUTE FOR THE EXPORTER

Currently, many of the companies that are in the capacity to expand are looking for advice, necessary and attainable help from specialized entities to ensure the success of their imports. In this way, it has been chosen to encourage MSMEs and businesspersons who wish to export the use of a new tool called "Exporter's Route". The objective is to encourage Ecuadorian companies to seek new markets, both national and international.

Illustration 7 Exporter route



Source: Official Website of PRO ECUADOR <https://www.proecuador.gob.ec/ruta-del-exportador/>

On the one hand, the PRO ECUADOR Route

“It uses a methodology of traffic signaling services that consists of locating users in red, yellow and green colors. The red traffic light applies to businesses at the entrepreneur level, the yellow traffic light applies to companies at the level of potential exporter and green traffic light applies to exporting companies. All levels receive differentiated services to their capacity and to achieve the passage from one level to another it is necessary to meet certain criteria. For example, to change from yellow to green, the export potential test is applied, the result of which allows defining what the company should improve or develop” (PRO ECUADOR, s.f.).

On the other hand, this traffic signaling methodology evaluates each company with the objective of locating it on a level of the Route, be it red, yellow or green. Below is a review of each level of the Route.

Guidance and advice



This level is represented by the color red, it is directed and oriented to entrepreneurs who have the idea of a product or they are not yet suitable for the export. On the other hand, employers must have a RUC (Unique Taxpayer Registry) but do not have knowledge about foreign trade issues. Therefore, this user needs guidance and advice.

Likewise, future exporters will need help in the points that this level establishes, such as: advice and initial accompaniment in foreign trade and introductory training. In these two parameters, the companies obtain and know information about the restrictions in foreign markets and the requirements to be an exporter; which are:

1. Count with the RUC granted by the Internal Revenue Service (SRI), indicating the economic activity that will develop.
2. Obtain the digital signature certificate or Token, which can be obtained in the Civil Registry or Security Data.
3. Register as an exporter in Ecuapass, in the portal the entrepreneur will be able to: update his information in the database, create a username and password, accept the use policies and register the electronic signature. (Guía para el exportador)

In the same way, entrepreneurs will have access to the informative guides and market bulletins, which are published on the PRO ECUADOR website. These manuals provide useful information that helps in the export process; for example, labeling rules, certification information, exporter requirements, etc.

On the other hand, this level also provides advice about the Exporta Fácil tool, which formalizes and facilitates the shipment of different products abroad. Finally, another point to consider at this level is the specialized assistance for Actors of the Popular and Solidarity Economy (EPS) and Fair Trade.

It is imperative to mention that since 2011 through Art.1 of the Popular and Solidarity Economy Law (LOEPS) recognizes that the Popular and Solidarity Economy (EPS) is:

“a form of economic organization in which its members, either individually and collectively, they organize and develop processes of production, exchange, commercialization, financing and consumption of goods and services through relationships based on solidarity, cooperation and reciprocity, placing the human being as the subject and purpose of their activity” (SUPERINTENDENCIA DE ECONOMÍA POPULAR Y SOLIDARIA, 2018).

Furthermore, according to Article 4 of the LOEPS states that EPS actors are guided and work based on the following principles: The working relationship on capital and collective interests over the individual; fair trade and ethical and responsible consumption, gender equity; social and environmental responsibility, solidarity and accountability; among others (SUPERINTENDENCIA DE ECONOMÍA POPULAR Y SOLIDARIA, 2018).

On the other hand, fair trade is a commercial system that promotes another type of trade, which is based on dialogue, transparency, respect and fairness. According to the definition of the World Fair Trade Organization or known as WFTO, fair trade “*contributes to sustainable development by offering better trade conditions and ensuring the rights of small producers and disadvantaged workers, especially in the South*” (WORLD FAIR TRADE ORGANIZATION, 2016).

As a trade association, which seeks the development of the people and the fight against poverty, according to the State Coordinator of Fair Trade (CECJ); Spanish platform that groups together 27 organizations linked to fair trade. It is regulated by four principles ranging from labor, social, to environmental issues, these being:

- *Working conditions and adequate salaries*
- *No child labor exploitation*
- *Equality between men and women*
- *Respect for the environment* (Cordinadora Estatal de Comercio Justo, s.f.)

Training and Assistance



This level is represented by the yellow color, at this stage there is the potential exporter or that company that meets certain requirements, these being: a 100% formal product, greater experience and commercial maturity and its products have already been commercialized nationwide, but they have considered venturing into the export.

This being the case, the exporters have access to more services and benefits offered by PRO ECUADOR, that is to say, they are not only favored by the training sessions of the Guidance and Advisory phase (red level), but also by specific training oriented to the export for the strengthening and adaptation of the exportable offer.

Likewise, the entity links to the MSMEs in projects, where they receive specialized information for the adaptation of the product in the most appropriate market, such as: product redesign according to the target market, realization of a virtual store or website design, coaching to at exporter, design or packaging improvements. These tools help and strengthen the exporter by increasing the acceptance of the products to be exported.

Annually PRO ECUADOR has a calendar where, together with other public and private entities, carry out trainings, with the intention of that the entrepreneurs put into practice what they have learned in the practical workshops. For example, they work with the Ministry of Foreign Trade and Investment (MCEI) for the issue of Certification of origin or with the National Agency for Health Regulation, Control and Surveillance (ARCSA) for issues of phytosanitary certifications or sanitary notifications.

When companies look for these services, PRO ECUADOR visits them and applies the Test of the Exporting Potential, in this the specialists collect information, measure foreign trade knowledge, and analyze the corporate image and the productive development of the company. Based on these points, in terms of the level of the company, the specialists give a value to the company and categorize it at what level it is. For the promotion, the entity helps: to identify the tariff heading of the product, to analyze the market and its competition, etc.

Finally, the companies that implement the observations and suggestions are categorized into a subcategory that is considered Yellow AA. Which means that these companies can already participate in national promotional events such as the Macrorueda de Negocios (multisector event) or fairs such as the Aroma (activity focused on coffee and its processed).

In this subcategory, the entity recommends that companies should make a list of prices in terms of international negotiation (INCOTERMS) that comply with certain standards of INEN (Ecuadorian Standardization Service) and identify specific requirements according to the product, because the International markets can request compliance certifications.

The certificate of conformity consists that the INEN or any other body that regulates the issue of quality, issue a certificate confirming that the product complies with the regulations and technical specifications requested by the target market.

Commercial Promotion



The third level, identified with the green color, corresponds to exporters and those companies 100% trained in export issues, with a long history in the world of export or companies that seek new strategies to diversify their market. Precisely because of their training, they will be able to directly access to: activities and international commercial information, fairs or international missions or business conferences, which depend on and are in accordance with the productive sector.

When companies decide to access a fair trade or to different commercial missions, they must be registered in the database of the system, so that later they can receive a call, which confirms their participation in the fair or mission; they must also fill out an enrollment form.

Regarding the participation in fairs, the Committee of selection of companies informs the acceptance according to the evaluation and qualification of each company. Before making the trip, the MSME representative must attend a meeting to receive instructions and prepare any pending or necessary details. At the fair, participants have their own stand, which allows them to promote their product and develop new business contacts.

Regarding the participation of a company in the commercial mission, once accepted, the MSME must complete a commitment document and must comply with all the activities of the agenda established by the Commercial Office and Sector Coordinator. Later, after carrying out the different activities, the service obtained must be evaluated through the mission evaluation form.

As for the costs to attend a fair or mission, companies must cover certain expenses such as: flights, lodging and food. The costs related to the events cover by PRO ECUADOR.

Finally, exporters can access to all the services of the Training and Technical Assistance phase of the PRO ECUADOR Route.

Enterprise Level Analysis

After analyzing each level of the Exporter's Route, the Eng. Luis Salcedo, in charge of PRO ECUADOR in the city of Cuenca, told us that Juan Alvarez Ltd. is in the yellow phase of the Route. That is, it is considered as an export potential, because the company has: a 100% formal product, degree of maturity and experience in the marketing of the product at national level.

However, the company should take into account other requirements to become an exporting company. Among these, the company must consider the 12 criteria for evaluating the potential exporter test; they should comply once each point of the same is analyzed. These are:

- 1. The company has a Foreign Trade Operator Registry in ECUAPASS and is familiar with the preparation and issuance of support documents and accompaniment through it (DAE, DJO, CO, various certificates).*
- 2. Depending on the nature of the product, it has phytosanitary certification, sanitary registration, animal health certification, etc.*
- 3. The company knows how to structure the export prices of its products (FOB, CIF, DDP, etc.) (Consider that the Incoterms are specified in the commercial invoice as in the different payment instruments).*
- 4. The company has sufficient production / harvest capacity to meet market demands. (Daily, weekly, monthly).*
Depending on the nature of your product, specify the unit of measurement: units, kilograms, tons.
- 5. The company has a supply of raw materials that allow it to ensure the volume of production (imported or national raw materials). Indicate supply periods. (Daily, weekly, monthly).*
- 6. The company knows the standards of packaging, packaging, labeling, foreign regulations, quality standards of external markets.*
- 7. The company has resources or commercial promotion materials (website, brand, brochures, business card, etc.) in the language used in the target market.*

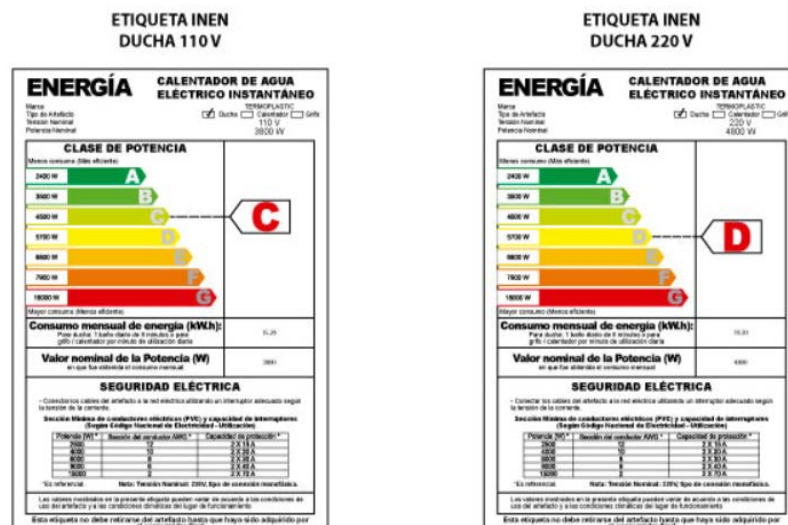
8. *The company has international certifications related to Quality Management, Processes, Health and Occupational Safety, environmental standards such as GMP, Global GAP, HACCP, ISO 9000/14000/26000, TAG4919, CE-marking, SA-800, OSHAS 1800, among others.*
9. *The company has technical specifications of products that you want to export.*
10. *The company has one / several people dedicated to customer service who handle the target market language.*
11. *The company has equipment that allows it to optimize resources and ensure product quality.*
12. *The company can vary its schedules in its production process in order to guarantee a timely delivery of its products.*

Although PRO ECUADOR has not carried out the test of the exporting potential in Juan Alvarez Ltd., the aforementioned points have been analyzed with the company's authorities, in order to identify the requirements that have not yet been fulfilled in order to become an export company. By virtue of the above, it is concluded that:

1. Juan Alvarez Ltd. has an electronic signature and is currently registered in the ECUAPASS as importers and exporters. Importers, due to the machinery that to be imported for the production of TERMOPLASTIC electric showers. Exporters, years ago already thought about exporting their products, however, first it was decided to satisfy the national market, especially the Highland region.
2. According to the nature of the product; electric shower, this does not merit to possess any type of sanitary or phytosanitary certification.

3. The personnel knows about the *Incoterms*, however, the sales costs have not been developed based on them, because a specific market had not been analyzed.
4. The company owns high technology machinery, which guarantees the production capacity. As mentioned in the previous chapter, the company occupies only 25% of its installed capacity. Daily, the company produces around 200 electric showers.
5. In addition, the company has no problem in the supply of raw materials. Because currently, to meet the demand of the national market has a stock that supplies for four more months. However, if more raw material were needed, monthly and quarterly purchases would be increased.
6. Regarding packaging regulations, the company has no knowledge of it. On the other hand, in labeling, compliance with the INEN RTE 247 regulation has been increased, which will be developed and deepened in the following chapter.

Illustration 8 Informative label



Source: Juan Alvarez Ltd.

7. The company has several commercial production materials, such as: web page (<http://www.juanalvarez.com.ec/>), which is managed in 2 languages, Spanish and English and will soon be implemented in German. In terms of social networks, the company uses Facebook, which is found as: *Juan Alvarez Cía. Ltda.* Finally, it has its own online and physical catalog.
8. The factory does not currently have international certifications, but its goal is to obtain them in order to access certain world markets and create more confidence with the consumer.
9. The technical specifications of the product are developed in the catalogue, in terms of product material, consumption and installation.
10. The company has a specialized staff that handles the target market language.
11. The factory has several teams that ensure the quality of their product, although the company has high-tech machinery, also has its own laboratory where they analyze and perform tests of resistance, performance and consumption of the electric shower, guaranteeing the quality of it. It is imperative to remember that 100% of the showers, before going on sale go through three controls (Consumption test, pressure resistance and automatic quality system).

Illustration 9 Juan Alvarez Ltd. Lab



12. Within the company, the schedules of the production process can vary, although it has a work shift of 8 hours, it could be increased to 2 production shifts of 8 hours, in this way we will use 90% of the capacity installed

On the other hand, among the plans of the company it is desired to be in the Yellow AA phase. For this purpose and according to the recommendations of the Eng. Luis Salcedo, the factory should carry out some market feasibility studies, quoting with different transport agents, analyze the competition in the market it wishes to enter (Piura), analyze tariff and non-tariff barriers, which can be seen in Trade Map and Mac Map. Finally, a cost analysis to determine how competitive the product is (Electric showers TERMOPLASTIC) in the chosen market and to be able to specify a final price.

ANALYSIS OF THE TARIFF DEPARTURE IN TRADE MAP

Trade Map is a tool developed to facilitate the different market researches that people wish to carry out. It is based on the constant monitoring of the commercial performance of each country and specific products; thus allowing each researcher to know if it has any competitive or comparative advantage, in addition some potential markets can be identified.

The first analysis that was carried out on this platform was from the countries that export electric water heaters to the whole world; having as a result that China is the main exporter of said product, followed by Mexico, Italy, the United States of America, Germany, Belgium, Egypt, Malaysia, the United Kingdom and the Netherlands.

Illustration 10 List of exporters of electric showers

ITC TRADE MAP
Estadísticas del comercio para el desarrollo internacional de las empresas.
(datos comerciales mensuales, trimestrales y anuales. Valores de importación y exportación, volúmenes, tasas de crecimiento, cuotas de mercado, etc.)

Inicio & Búsqueda Disponibilidad de Datos Documentos de referencia Otras Herramientas del ITC Más Ms. Jennifer Ruilova Español

Producto: 851610 - Calentadores eléctricos de agua de calefacción Grupo de productos: Ninguno
Mundo País: Todos Grupo de países: Ninguno
Socio: Todos Grupo de socios: Ninguno
otras criterios Exportaciones Serios de tiempo anuales por país Valores Dólar Americano

Lista de los exportadores para el producto seleccionado
Producto: 851610 Calentadores eléctricos de agua de calentamiento instantáneo o acumulación y calentadores eléctricos ...

Unidad: Dólar Americano miles

Tabla Gráfico Mapa Empresas Licitaciones públicas Datos IED Normas voluntarias

Descargar Período (número de columnas): 5 por página líneas por página: Por defecto (25 por página)

SAB	Exportadores	valor exportada en 2013	valor exportada en 2014	valor exportada en 2015	valor exportada en 2016	valor exportada en 2017
Mundo		2.183.378	2.407.648	2.144.948	2.107.698	2.321.209
China		398.956	441.558	317.723	347.089	345.951
México		196.432	261.067	310.878	246.078	259.443
Italia		216.810	228.009	183.118	183.579	212.579
Estados Unidos de América		159.539	200.044	206.698	171.630	192.590
Alemania		206.053	196.341	178.862	164.617	187.977
Bulgaria		86.883	87.995	88.260	97.865	101.760
Egipto		71.909	71.300	64.658	75.110	83.074
Malasia		52.404	64.437	54.920	49.422	75.995
Reino Unido		56.773	65.433	64.552	61.250	64.765
Países Bajos		48.026	46.385	44.925	49.827	58.156

Source: Trade Map

The second analysis carried out within this platform has been that of heading 851610. Taking into account the imports from Peru from 2013 to 2017, it was observed that in total the country imported \$ 51,705 thousand dollars of electric heaters from water, having an average annual purchase of \$ 10,341. It was also identified that the main countries that supply this product are: Brazil, China, Thailand, Israel, Bulgaria, Italy, Egypt, Colombia, United States of America and Malaysia.

Illustration 11 List of suppliers of electric showers markets in Peru

Búsqueda	Disponibilidad de Datos	Documentos de referencia	Otras Herramientas del ITC	Más	Ms. Jennifer Ruilova	Español
Producto	851610 - Calentadores eléctricos de agua de calef	Grupo de productos	Ninguno			
País	Perú	Grupo de países	Ninguno			
Socio	Todos	Grupo de socios	Ninguno			
Por criterios	Importaciones	Series de tiempo anuales	por país	Datos directos	Valores	Dólar Americano

Lista de los mercados proveedores para un producto importado por Perú

Producto: 851610 Calentadores eléctricos de agua de calentamiento instantáneo o acumulación y calentadores eléctricos ...

Gráfico	Mapa	Empresas	Datos IED	Datos arancelarios	Normas voluntarias
---------	------	----------	-----------	--------------------	--------------------

Exportadores	Valor importada en 2013	Valor importada en 2014	Valor importada en 2015	Valor importada en 2016	Valor importada en 2017
Mundo	10.521	11.686	10.195	9.850	9.453
Brasil	3.611	3.494	3.221	2.963	3.545
China	5.478	5.378	4.102	3.223	3.389
Tailandia	1	2	2	433	584
Israel	263	1.067	1.070	1.292	367
Bulgaria	0	377	326	430	331
Italia	36	429	456	313	281
Egipto	20	0	0	155	264
Colombia	306	324	289	254	248
Estados Unidos de América	392	321	342	478	213
Malasia	139	86	201	86	76

Source: Trade Map

In a third and last analysis, a comparison was made between the exports of Colombia and Ecuador (members of the Andean Community of Nations) of heading 851610 to Peru, with which it was observed that Colombia, despite not exporting large quantities, it is one of the top 10 suppliers of electric water heaters; exporting in 2017 \$ 245 thousand American dollars. While Ecuador only exported \$ 2 thousand American dollars. With this figure it can be deduced that Colombia is one of our most direct competitors in the export of this product, since it enjoys the same tariff preferences as Ecuador for being members of the Andean Community of Nations, Colombia also having the advantage of having an own currency and be able to negotiate on better terms and conditions.

Illustration 12 Bilateral trade between Colombia and Peru

Comercio bilateral entre Colombia y Perú
Producto: 851610 Calentadores eléctricos de agua de calentamiento instantáneo o acumulación y calentadores eléctricos ...

Unidad: Dólar Americano miles

Código del producto	Descripción del producto	Colombia exporta hacia Perú			Colombia exporta hacia el mundo		
		Valor en 2015	Valor en 2016	Valor en 2017	Valor en 2015	Valor en 2016	Valor en 2017
8516100000	Calentadores eléctricos de agua de calentamiento instantáneo o acumulación y calentadores eléctricos ...	236	252	245	1 066	905	815

Source: Trade Map

Illustration 13 Bilateral trade between Ecuador and Peru

Comercio bilateral entre Ecuador y Perú
Producto: 851610 Calentadores eléctricos de agua de calentamiento instantáneo o acumulación y calentadores eléctricos ...

Unidad: Dólar Americano miles

Código del producto	Descripción del producto	Ecuador exporta hacia Perú			Ecuador exporta hacia el mundo		
		Valor en 2015	Valor en 2016	Valor en 2017	Valor en 2015	Valor en 2016	Valor en 2017
8516100000	Calentadores eléctricos de agua de calentamiento instantáneo o acumulación y calentadores eléctricos ...	0	0	2	32	45	36

Source: Trade Map

ANALYSIS OF THE TARIFF HEADING IN MAC MAP

Market Access Map is a free tool designed to help exporters, and different commercial institutions to obtain information on customs tariffs, tariff preferences, tariff quotas, trade remedies, rules and certificates of origin, bound tariffs of WTO members, measures non-tariff and commercial flows.

The analysis of heading 851610 was carried out in this platform to identify the tariff and non-tariff measures that must be met to export the electric water heaters to Peru. Obtaining as a result that to export said product the Most Favored Nation (MFN) regime is applied

giving an *Ad Valorem* tariff with a rate of 6% for the rest of countries, but being part of the CAN, there are 0% tariff preferences for Ecuador. However, no record was obtained in the search for non-tariff measures.

Illustration 14 Tariffs applied by Peru

Aranceles aplicados por Perú

Producto: 851610 - Calentadores eléctricos de agua de calentamiento instantáneo o acumulación y calentadores eléctricos de inmersión
 Socio: Ecuador
 Fuente de datos: ITC (MacMap)
 Año: 2017
 Nomenclatura: HS Rev.2017
 Metodología EAV: EAV basado en los Perfiles arancelarios en el mundo (PAM)

Nueva búsqueda Modificar búsqueda

Código del producto	Descripción del producto	Régimen arancelario	Arancel aplicado (como reportado)	Arancel aplicado (convertido)	Arancel equivalente ad valorem total
8516100000	Calentadores eléctricos de agua de calentamiento instantáneo o acumulación y calentadores eléctricos de inmersión; aparatos eléctricos para calefacción de espacios o suelos; aparatos electrotérmicos para el cuidado del cabello (por ejemplo secadores rizadoros calentatenacillas) o para secar las manos; planchas eléctricas; los demás aparatos electrotérmicos de uso doméstico; resistencias calentadoras excepto las de la partida 85.45; Calentadores eléctricos de agua de calentamiento instantáneo o acumulación y calentadores eléctricos de inmersión	MFN duties (Applied)	6.00%	6.00%	6.00%
8516100000	Calentadores eléctricos de agua de calentamiento instantáneo o acumulación y calentadores eléctricos de inmersión; aparatos eléctricos para calefacción de espacios o suelos; aparatos electrotérmicos para el cuidado del cabello (por ejemplo secadores rizadoros calentatenacillas) o para secar las manos; planchas eléctricas; los demás aparatos electrotérmicos de uso doméstico; resistencias calentadoras excepto las de la partida 85.45; Calentadores eléctricos de agua de calentamiento instantáneo o acumulación y calentadores eléctricos de inmersión	Preferential tariff for CAN countries	0%	0%	0%

Tamaño de la página: 50

Página 1 de 1, elementos 1 a 2 de 2.

Nueva búsqueda Modificar búsqueda

Source: Mac Map

Illustration 15 Non-tariff measures applied by Peru

ITC MARKET ACCESS MAP
Mejorando la transparencia en el comercio internacional y el acceso a mercados

Sesión iniciada por RUILOVA, Ms.
Jennifer
Mi cuenta
Cerrar sesión
Spanish

Búsqueda rápida Análisis avanzado Descarga de datos Análisis de país Opciones Materiales de apoyo Otras herramientas del ITC

Inicio > Búsqueda rápida > Encontrar medidas no arancelarias > Resulta

Encontrar medidas no arancelarias
Paso 2/3

Nueva búsqueda Modificar búsqueda

8516100000 - Calentadores eléctricos de agua de calentamiento instantáneo...

No hay registros disponibles

Nueva búsqueda Modificar búsqueda

Source: Mac Map

EXPORTA FÁCIL TOOL

Exporta Fácil is a program promoted by some State institutions (mentioned in point 2.6.7), whose main purpose is that MSMEs and artisans achieve their competitiveness by increasing their exports to new markets.

What is Exporta Fácil

Exporta Fácil is an export tool created within a Program of the National Government of Ecuador. MSMEs and handicraft producers can use this. This is based on an agile, simple and economic export system of postal deliveries through Correos del Ecuador.

How does it works

Exporta Fácil allows you to export one or several packages with merchandise up to 30 kilos each, whose FOB⁴ value does not exceed \$ 5,000 dollars, accompanied by a Simplified Customs Declaration (DAS)⁵. Tracking of the shipment is included, in addition you must hire a compulsory insurance after \$ 50.00.

Objectives of Exporta Fácil

This program was created with several objectives, which are listed below:

- Create a web portal with an agile, economic and simplified service integrating several computer platforms of different entities. That also intervene in the export process such as: Ministry of Industries and Productivity, Correos del Ecuador, and

⁴ FOB: (Free On Board): Incoterm

⁵ DAE: Customs Declaration of Exportation - DAS: Simplified Customs Declaration. They are electronic documents that contain the data of the exports; they are signed electronically. A DAE is done when you want to export along with accompanying and support documents. The DAS for exports is an electronic document for the realization of exports under the exception regimes "Postal Traffic" and "Accelerated Courier or Courier".

National Customs Service of Ecuador, this system will facilitate to the MSMEs and the artisans of Ecuador to make their export from any point of the country in which there are offices of the public operator Correos del Ecuador.

- Promote the inclusion of MSMEs and artisans in international markets, contributing to the competitiveness of Ecuadorian products.
- Provide institutional services such as National Government that generate value added to Exporta Fácil, such as training, technical assistance in the use of the tool, in foreign trade, in search of international markets (Ministerio de Industrias y Productividad, s.f.).

Requirements

There are different requirements that must be met by MSMEs and those who wish to access this service, such as:

- Have RUC
- Register at the portal www.exportafacil.gob.ec with your RUC
- Fill out the DAS (Simplified Customs Declaration)
- Have an invoice
- Have the packing list in each box
- Depending on the merchandise, the permits or accompanying documents required for customs clearance in the destination country of destination (Ministerio de Industrias y Productividad, s.f.).

Modalities

To meet the needs of the exporters of Exporta Fácil, there are two types of shipments:

- Easy Export Service - EMS: it is the fastest postal service given by physical means and has an express treatment.
- Easy Export Service - CERTIFICATE: in this service a barcode is assigned to the package sent to have an adequate tracking, this has a standard treatment.

Illustration 16 General information of Exporta Fácil

</

Source: Exporta Fácil Website

Services

Within the services of Exporta Fácil, you can find:

- Productive Advice of the Ministry of Industries and Productivity: some projects and programs are designed that help to promote the “production of goods and services with high added value and quality, in harmony with the environment, which generate decent employment and allow their insertion in the internal and external market” (Exporta Fácil , s.f.).
- Advice to the Exporter of PRO ECUADOR: this Institute offers specialized services regarding information on foreign trade, commercial promotion according

to the level in which each company is located after carrying out the export potential test.

- Events and trainings: the Exporta Fácil website offers users a calendar with the different events and training they offer.
- Attention to the User of Correos del Ecuador: it is the entity in charge of being the designated postal operator, besides being the one in charge of promoting and offering this tool in its platform.

Entities participating in the program

Table 8 Entities participating in the Exporta Fácil program

Ministry of Industries and Productivity
Ministry of Telecommunications and Information Society
Ecuadorian Post Office CDE EP
National Customs Service of Ecuador SENA
Export Promotion Institute PRO ECUADOR
Cultural Heritage Institute INPC
National Direction of Anti-Narcotics DNA
Internal Revenue Service SRI
National Postal Agency

Source: Ministerio de Industrias y Producción

After analyzed the two tools, some interviews were conducted, one with the Inter-American Center for Popular Arts (CIDAP), also with the Eng. Lucía Vintimilla, in charge of supporting the Exporta Fácil program in Azuay, and finally with the Eng. Luis Salcedo in charge of the Offices of PRO ECUADOR in Cuenca.

Regarding the issue of Exporta Fácil, it is said that the reception of this tool has been positive in the province of Azuay; especially for artisans and MSMEs who want to export their products abroad. It was mentioned that the products that are most exported under this regime from Cuenca are: straw hats (Panama Hats), handicrafts, and ribbons for hats. One of the main reasons for using Exporta Fácil is the simplicity of the process and the documents that are needed, in addition to the support of different public entities such as: MIPRO, Ministry of Foreign Trade and Investment and PRO ECUADOR, there is a base of joint data for the facilitation of procedures. Another important issue that was touched was how the Correos del Ecuador EP supports to the people who decide to export with Exporta Fácil, these are the training provided by this institution periodically.

As negative aspects of the service, it was only mentioned that many documents are repeatedly requested in the country of destination of the goods; the weight and the maximum amount of export are not considered as problems when exporting with this program. Since they comply with the requirements of the airlines and mainly the products that are exported with this service do not exceed the allowed limit in weight, as in money. As a general comment on the use of this service, the Eng. Vintimilla mentioned that there has been an increase in exports from the province, since the people who use it emphasize the low cost that it has for both the exporter and the importer. In addition, the product once in the country of destination arrives directly in the hands of the importer, without the importer having to carry out the customs clearance process. Finally, the approximate number of artisans and/or MSMEs that use Exporta Fácil are 40 in Azuay. It was not possible to have an exact number, since the real statistics are managed by the MIPRO and are national. As an additional data it was obtained that, they export approximately every two months.

An interview was held at CIDAP, because we wanted to know if the artisans who are supported by this institution have managed to export through Exporta Fácil or the Exporter's Route of PRO ECUADOR. The result obtained was that CIDAP participates in the business roundtables and international fairs organized by PRO ECUADOR, resulting in many artisans getting in touch with potential customers and exporting their product. It was mentioned that once the client is obtained, the artisans have to start the whole process to become an exporter; this is where the Institute of Promotion of Exports intervenes, since, by means of the traffic signaling of the route it begins to train and to help the artisans to become potential exporters.

In the interview with PRO ECUADOR, Eng. Luis Salcedo, he commented that there are several companies, MSMEs and artisans who come to his office looking for advice for export. However, as the process followed by the Route for the Exporter is not simple, many give up on the road. It was mentioned that many of the companies that do not complete the route, access the services of Exporta Fácil, since they do not involve any lengthy or expensive procedure. Since, it must be emphasized that to use the PRO ECUADOR Route, a lot of investment and training must be done within the company. Juan Alvarez Ltd. is able to use the Route for the Exporter since its product is already consolidated, has several years established in the market, so it does not mean a big investment, and it becomes a simpler process.

CONCLUSION

It can be concluded that the two tools created by the corresponding public entities, have as a sole purpose the promotion and diversification of the exports from Ecuador, to open international markets where traditional products and non-traditional products produced in the country.

The PRO ECUADOR Route for the Exporter, created by the Export Promotion Institute (PRO ECUADOR), is in charge of supporting potential exporters to achieve the internationalization of their products with several trainings, specialized assistance that it is carried out in stages.

Red stage, “Guidance and Counseling” applies to entrepreneurs, training on foreign trade is offered, among the subjects, exports are prioritized, in which information on the advantages and restrictions of the different markets can be found. The second stage is “Training and Technical Assistance”, yellow stage. This is already aimed at potential exporters, people or companies that already have products formed; they are determined to be potential exporters after performing a test. The different trainings offered at this stage are already specifically on exports, in order to achieve a consolidation of the exporter as such. The green stage, called “Commercial Promotion”, is based on the promotion of the products to be exported in different international fairs, trade missions or business rounds; thus making these internationally known.

Finally, Exporta Fácil is a tool that can be used by MIPYMES and artisans who wish to export their products in an agile and simple way, only making a Simplified Customs Declaration (DAS), the package is sent through Correos del Ecuador (CDE) and it can be traced.

It can be concluded that both tools are indicated for people who are willing to venture into foreign trade, internationalizing their products. Exporta Fácil, involves a simpler process than the PRO ECUADOR Route, however the two can be used by anyone. As for Juan

Alvarez Ltd. the Route for the Exporter is the best option to venture into foreign trade. Because when we are in the Yellow phase, this process becomes simpler, however what the company expects is to become Yellow AA, in order to participate in the different business fairs offered by PRO ECUADOR; in the same way, they will continue participating in all the trainings dictated by the same Institution. Regarding the use of the tool Exporta Fácil del Correos del Ecuador, it is not an option for this company since the weight of the product that is intended to be exported (TERMO PLASTIC electric shower) does not meet the requirements to be able to use this tool.

With the interviews conducted, it was observed that both programs are very good for the promotion of exports; however, each product has its most appropriate tool. Exporta Fácil, helps in a more beneficial way to artisans and MSMEs that market small items. While, companies can use the Exporter's Route in a better way, it is to say, MSMEs already established that are dedicated to the commercialization of larger articles, that can not benefit from the tool of Correos del Ecuador EP, in addition that they must already have the requirements of PRO ECUADOR to become potential exporters

CHAPTER 3: MY FIRST CERTIFICATION AND OBTAINING THE INEN QUALITY STAMP

INTRODUCTION

At the present, companies constantly seek to streamline their processes and achieve economic development through programs and policies that allow them to manage and improve the quality of their processes and products. For this reason, the National Standardization Service INEN has motivated and achieved that Ecuadorian companies seek to implement certain requirements for their production to be certified, achieving positioning in the national and international market.

One of the programs that it is born under the initiative of the National Standardization Service is My First Certification. This program encourages Ecuadorian MSMEs to comply with all the requirements that promote the labor well-being of both the high-ranking officials and employees. In addition, it seeks to create products with excellent quality, in order to obtain a competitive advantage in comparison to others companies that do not certify their products or services.

Within this chapter, this certificate will be analyze more in depth, thus being able to determine its pros and cons, in order to establish if Juan Alvarez Ltd. company can obtain the above-mentioned certification.

In addition, all processes of the Certificate of Conformity with the INEN Quality Seal and make use of the Certificate will be studied. These certifications guarantee that the companies comply with all the requirements established by the current Ecuadorian technical regulations.

Finally, there will mention and realize an analysis of the current Technical Regulations that the TERMO PLASTIC showers must permanently comply with in order to obtain the aforementioned certifications.

ECUADORIAN SERVICE OF NORMALIZATION

The beginnings of the INEN date back to the 70s, exactly on August 28, 1970. Date when a Supreme Decree creates the Ecuadorian Institute of Normalization, with the purpose of being the entity in charge of carrying out all the Ecuadorian Technical Standards, in order to meet and satisfy local needs and allow that the national and international trade should be simple.

Mission

Within the mission of this entity is that the Ecuadorian Quality System be strengthened through processes of "normalization, technical regulation, conformity assessment and metrology" (Servicio Ecuatoriano de Normalización , s.f.), in order to achieve compliance with the needs and requirements of the Ecuadorian society.

View

The vision proposed by the National Standardization Service, intends that all the processes of normalization, technical regulation, conformity assessment and metrology are of excellent quality, in order to achieve a total guarantee of citizen rights. Civil right related to the "safety, protection of life and human, animal and plant health; preservation of the environment and consumer protection; promoting and encouraging the culture of quality, contributing to productivity, competitiveness and employment generation" (Servicio Ecuatoriano de Normalización , s.f.).

MY FIRST INEN CERTIFICATION

What is my first INEN certification?

My first certification is a certification granted by INEN to MSMEs, which is born with the interest that the products of the companies that obtain this certificate are more competitive and productive, in order to improve the quality of business management, always complying with all the Ecuadorian requirements, norms or technical regulations.

Goal of My First Certification

This type of certification aims for companies to start having an implemented management system in the internal part of the company, allowing them to grow up formally, that is, that entrepreneurs should fulfill with the legal part, human resources, staff training and have controlled manufacturing process with quality.

Scope of My First Certification

It is possible to apply this certification to micro, small and medium companies that are dedicated to the manufacturing of products that comply with the Ecuadorian requirements, norms or technical regulations imposed by the INEN. Manufacturing companies that already have a product and controlled processes, and service companies in order to attend to the consumer on a clear, precise and correct way can request My First Certification.

Advantages of My First Certification

There are some advantages mentioned by Eng. Cecilia Valdivieso, Ex-Coordinator of the INEN in the zone of the Azuay, pointing following:

- Formal growth of companies that obtain the certification
- Opening of the local, national and international market

- Manufacture of products in compliance with the Ecuadorian norms, requirements or technical regulations of the INEN
- Waste is avoided in the factories, since measuring everything can be controlled, thus achieving an increase the profits and reduce the losses

Procedure to obtain My First Certification

To obtain the certificate of management of MSMEs, it is necessary to follow a set of requirements, that will allow the companies to continue with the whole procedure.

The requirements are:

- a) Legal requirements
- b) Financial management
- c) Management of Human resources
- d) Customer service
- e) Purchase Management
- f) Production Management
- g) Product quality
- h) Conservation and Delivery of the Product
- i) Innovation and Entrepreneurship
- j) Health and security

Once fulfilled all the requirements, the process to obtain My First Certification continues, whose steps are as follows:

A. **Application for certification:** the first thing that must be done to obtain the certificate is to submit a written request addressed to the Executive Director or the Technical Director of Validation and Certification, in which it is necessary to specify the following information:

- i. Name of the organization
- ii. Complete address of the establishment

- iii. Productive activity
- iv. Product and Commercial trademark

Along with the application, you must attach some documents, such as:

- i. Records or documents that demonstrate the rating as micro, small, or medium-sized companies
- ii. Single Taxpayer Registry (RUC) or Simplified Ecuadorian Tax Regime (RISE), as the case may be.
- iii. Documentation that demonstrates the legal constitution of the organization

B. Review of the application: The Technical Director of Validation and Certification or the competent staff is responsible for reviewing the application and documentation, to ensure that the organization has submitted sufficient documentation to be able to continue with the certification process.

C. *In-situ* evaluation of the organization: After verifying the viability of the organization, the institution is evaluated *in situ* to verify the compliance with the certification requirements.

i. Selection and appointment of evaluators: The Technical Director of Validation and Certification assigns the evaluators of the INEN who will carry out the evaluation.

ii. *In-situ* evaluation: the evaluator will carry out his work by applying a checklist developed by the Verification and Certification Department for micro, small and medium-sized companies.

Table 9 In-situ evaluation table

EVALUATION	QUALIFICATION	DESCRIPTION
NULL	0	The organization has not developed any action to comply with the requirement or know the requirement.
GOOD	1	The organization does not fully comply with the requirement; however, it maintains adequate mechanism in the implementation process.
VERY GOOD	3	The organization complies with the requirements and maintains effective mechanisms to ensure the compliance with the requirement.

Source: Resolution 2016 - 022

The results of this evaluation are formally communicated to the legal representative of the organization. In order that the company could reach the certification, it has to reach at least a minimum of 80% of the fulfillment of the requirements. If the company has to make changes or modifications, these will have to communicate to the INEN and its technical staff will verify its implementation.

iii. Process of review of the compliance of the certification

requirements: the evaluators will issue a report with the information corresponding to the compliance with the requirements of the requesting organization. Another person from the Verification and Certification Department, who has not participated in the evaluation process, should check that all the requirements are in order to continue with the certification process.

iv. Decision making about the certification: The Technical Director of Validation and Certification and one part of the technical staff that has not participated in the evaluation are responsible for this activity. If everything is correct, the "Certificate of management of micro, small

and medium enterprises" will be issued. It is valid for three years, subject to renewal after undergoing to a new visit and inspection, if everything is correct; it has a duration of three years again. The certification is denied when the organization does not comply with all the requirements; this denial is informed by means of an official letter.

v. **Issuance of the certificate and agreement:** When the awarding of the certificate is positive, the following documents are elaborated:

- Certificate of management of micro, small and medium enterprises
- Agreement for the use of the certificate of the management of micro, small and medium enterprises

Use of the certificate of management of MSMEs

Once an enterprise obtains the certificate, the organization must comply with some dispositions, which are:

- The reference to certified organization can appear in informative, commercial or advertising documents of the organization or in web pages and other advertising documents of the organization.
- You cannot mark any type of reference to your status as a certified organization in the products that you produce, in advertising or in the catalogs relating to the product.
- You cannot mark your condition of certified organization in technical reports, test reports or certificates of your products.
- Companies cannot transfer to third parties the Certificate of management of MSMEs. If the organization sells its facilities and

commercial brand of its products to another organization, automatically the certificate remains canceled.

- Comply permanently with the dispositions established in the Agreement for the use of the Certificate and this procedure.
- You cannot use the certificate in any situation that may lead to an incorrect interpretation of the scope of the certificate or that could induce to think that the products that the companies elaborate are products certified by the INEN (Director Ejecutivo del Servicio Ecuatoriano de Normalización, 2016).

Conditions for the suspension or withdrawal of the certification

- a) Suspension:** for incurring the following reasons, the INEN may suspend the Certificate of the management of micro, small and medium-sized companies for up to 6 months.
- i. At the request of the legal representative of the certified organization.
 - ii. The organization presents successive breaches with the requirements of the procedure.
 - iii. When INEN it is not notified in writing that legal changes have been made to the organization, company name or transfer of facilities.
 - iv. When it prevents the work of the assessor of the INEN.
 - v. When the value of the fees corresponding to the services provided by the INEN is not paid.
 - vi. For the disposition of the Executive Director of the INEN

The above-mentioned suspension will retire when the term has been expired and the breaches that originated the measure have reformed, followed by a favorable report from the Verification and Certification Department.

b) Withdrawal: this condition occurs when:

- i. At the request of the legal representative of the certified organization.
- ii. The organization presents successive breaches with the requirements of the procedure, or has not raised a suspension in the times established by the INEN.
- iii. When the productive activities are interrupted for six consecutive months.
- iv. Because of the dissolution of the organization.
- v. For infractions that harm the consumer or that constitute unfair competition.
- vi. Undue use of the Certificate of the management of micro, small and medium enterprises.

Rights and Obligations of the organizations certified by the INEN

a) Rights:

- i. Confidentiality in the information provided to the INEN.
- ii. Request to the INEN certain services such as calibration of equipment and instruments for inspection, measurement and testing.
- iii. To have the technical services of the INEN laboratories.
- iv. That the content of the reports generated by the evaluations are known by the organization.

- v. Voluntarily request the temporary suspension (6 months) of the Certification.
- vi. Voluntarily request the withdrawal of the Certification.

b) Obligations:

- i. Expire permanently with the dispositions established in the Agreement for the use of the certificate.
- ii. Use the certificate in accordance with the dispositions established in the law.
- iii. To facilitate the necessary documents to the assessors of the INEN
- iv. To inform timely the changes that are realized inside the company
- v. To keep records updated.
- vi. To pay the corresponding values and fees/rates.

Option to obtain the INEN seal of quality

All the organizations that manage to obtain the Certificate of the management of micro, small and medium enterprises have the capacity to start the process of obtaining the INEN Quality Seal for their products. When the company decides to opt for this process, they must follow the dispositions established in the Instructions for obtaining or renewing the INEN Quality Seal. It is published in the INEN website.

CERTIFICATE OF CONFORMITY WITH THE INEN QUALITY STAMP

The Ecuadorian Service of Normalization INEN, through the adoption and application of technical regulations, encourages the Ecuadorian producers as well as importers to comply with certain technical standards applicable to each product. The aim of this Technical

Regulation is to control the quality of a product, satisfying local needs and facilitating national and international trade.

The quality of a product is a factor that determines the competitiveness of this one and the company that produces it, both in the national and international market, providing in a direct way the confidence of the clients and consumers. To do this, the INEN through the Instructions ⁶ for the obtaining and renewal of the Certificate of Conformity with Seal⁷ of INEN Quality, issued the procedure for above-mentioned certification for products manufactured in the Ecuador.

The manufacturing companies interested in obtaining the Certificate of Compliance with the INEN Quality Seal for their product, with the zeal to improve their competitiveness and to replace the demand of the market with national products must meet the following requirements:

- **Product quality**

The quality management system consists of the fact that the product that is going to be certified complies permanently with the requirements established in the current normative. In the case of the Juan Alvarez Ltd, its product (TERMO-PLASTIC electric showers) must comply with the Ecuadorian Technical Regulation RTE INEN 247 "safety and energy efficiency for instantaneous electric water heaters without water accumulation ".

The authorized technical personnel of the INEN will verify the compliance of this requirement through audits to the quality of the product.

⁶The Instructions establishes the requirements that must be met for the obtaining and renovation of the Certificate of Conformity with the INEN Quality Seal for a product.

⁷ It is the official recognition granted by INEN to a product that is manufactured under a quality system approved by the INEN and expires permanently with the requirements established in the Reference Normative Document; This certification scheme is expressed through the INEN Quality Seal, which is marked in the product that has been obtained (Servicio Ecuatoriano de Normalización , s.f.).

Likewise, if the product does not comply with the requirements established in the above-mentioned Technical Regulations of reference, the INEN will notify the detected breaches in writing to the legal representative of the company. Subsequently, the company must implement the corrections and respective actions, if the technical personnel of the INEN detect that the infractions were not corrected, the process gives itself finished and the company will be notified of the completion of the certification process.

It is necessary to mention that, the company can restart the process for obtain the Certificate of Conformity with Quality Seal, presenting a new certification request. The same must attach the necessary documentation that shows the implemented corrections. On the other hand, if a new breach is detected in the product, the certification process is definitively terminated, and this is notified to the company.

- **Quality management system**

With any of the following options, the company can certify that it maintains a quality management system.

-Quality management system of conformity with the requirements established in the ISO NTE 9001⁸. Quality management system. Requirements, in the elements related to the manufacture of the product.

-Management system of conformity with the NTE INEN 2537⁹. Integral management system for micro, small and medium enterprises.

⁸ This norm is an adoption of the International norm ISO 9001. *Quality management system-Requirements*. The norm ISO 9001 is a quality management system recognized internationally, it provides the infrastructure, procedures, processes and resources needed to help organizations to control and to improve their performance and to lead them towards efficiency, customer service and excellence in the product (Lloyd's Register, 2018).

⁹This standard aims to increase the level of formality, economic returns, sales, and competitiveness of the MYPIMES to contribute to the development of the country, through the creation, implementation and review of an Integral Management System.

-Good Manufacturing Practices - GMP

-Management system of conformity with the ISO 22000 Standard. Food safety management system. Requirement for any organization in the food chain or similar, from farmers or ranchers, processors, transportation, to point of sale (Servicio Ecuatoriano de Normalización , 2017).

Obtaining the Certificate

The process of obtaining the INEN Quality Certificate of Conformity for a product begins with the presentation of a request addressed to the Executive Director of the INEN or to the Technical Director of Validation and Certification by the natural person or legal entity interested in obtaining said certification.

This request can be found on the official INEN website, www.normalizacion.gob.ec .

If the application or the requested documents do not contain all the necessary information, the applicant will be informed in writing, who will have to realize the pertinent corrections.

The INEN technical staff reviews each application and verifies that the same ones have enough information about the product and the manufacturer to continue with the procedure to obtain the certificate. In the same way, the auditors analyze if the company has all the means to carry out each process of the respective evaluation, and determines the scope of the certification.

Once checked the documents, and if the company meets the criteria of above-mentioned request, the Technical Director of Validation and Certification or his delegate makes an

initial evaluation of the company. After executing the evaluation, a report is issued verifying that:

a. The company has a testing laboratory, which allows it to perform all the respective tests that the normative document established. Otherwise, if the company does not have a laboratory, the same one must have an access to external laboratory.

Juan Alvarez Ltd. Company has its own testing laboratory for its products: JA Thermotanks, JA Solar Panels and TERMO PLASTIC electric showers.

b. All the measuring and testing instruments of the factory and laboratory must have a calibration or verification record.

c. In the same way, the company must maintain a record of each inspection and test of the product.

d. The company must have all the legal documents requested such as: registration of the product brand, appointment, constitution of the company, ID and voting certificate of the legal representative. These documents can be a faithful copy of the original documents.

If the applicant company complies and expires with every requirement mentioned above, the competent authority issues a favorable evaluation report, if it does not expire these requirements, the INEN will notify to the factory in order that they can make the changes and respective corrections.

Subsequently, when deemed necessary, the auditors¹⁰ of the INEN will carry out a study of the quality of the product prior the certification. They have the duty to do it based on

¹⁰ The Technical Director of Validation and Certification or its delegate designs the auditors.

the instructions established in the reference normative document, with the purpose of checking and verifying that the respective guidelines are complied with.

The results obtained by the specialized auditors will be formally notified to the legal representative of the company. In the same way, if the product does not comply with any of the requirements of its regulations, the INEN will notify the legal representative in order that it implements the respective and necessary corrections. Once corrected the breaches, the company must inform to the INEN the changes made by it. Once again, the auditors verify these corrections, if the officers detect the same breaches the process gives itself finished, same that will be notified to the company.

It is important to consider that the applicant company must maintain a quality management system, the INEN to check will perform an audit every 2 years from the initial certification.

The report issued by the auditors plus the supporting documentation requested will allow the Director of Validation and Certification to make a decision, which must be recorded in the evaluation report.

If the decision is favorable:

The Director of Validation and Certification has the production of the following documents: Certificate of Conformity with INEN Quality Seal, Agreement and Resolution for the use of the Certificate¹¹ and Mark of Conformity "INEN Seal of Quality"¹² according to the scope defined in the report of the corresponding evaluation (Servicio Ecuatoriano de Normalización, 2015).

¹¹ The Legal Representative of the company or its delegate, and the Executive Director of the INEN or its delegate must sign the agreement.

¹² Symbol approved by the INEN to be use by a certified product, which guarantees that the product complies permanently with requirements specified in a Technical Reference Standard (Servicio Ecuatoriano de Normalización, 2015).

Duration of the Certificate

The INEN Quality Seal Certificate of Conformity will be valid for 3 years, and may be renewed for the same period. For the renovation, a favorable report is needed and it is addressed to the Technical Direction of Validation and Certification. The Convention for the use of the Certificate of Conformity "INEN Seal of Quality" is a legal document in which there are detailed the rights and obligations of the parts; likewise, it contains the certified product, the commercial brand and the normative reference document.

Vigilance of the certification

Once obtained the Certificate of Compliance with INEN Quality Seal, the INEN to verify the quality of the product will realize three annual audits for the first three years and two annual audits in the renovations of the certificate. In the same way, it will make an evaluation regarding the quality management system of the company.

To verify the compliance of the requirements of the product the INEN will take samples of the same one, either in the company or in the market, to realize their respective tests. If the manufacturer does not comply with the requirements established in the reference normative document, the INEN has the duty to send an official letter to the legal representative of the company notifying him of the non-compliance. The factory has to correct and implement the corrections in the shortest possible time. Subsequently, it must inform to the INEN of the changes made.

On the other hand, if the company does not realize the corresponding actions or the same ones are ineffective, the INEN will suspend the certificate for 6 months, in the same way it will inform to the legal representative. During the time of suspension, the INEN will perform extraordinary audits, which consist of verifying the corrections or modifications that the company made after notifying them of the non-compliance of the product based on the reference regulations. Of equal form, after this audit, the specialist must make a report and send it to the Technical Direction of Validation and Certification, if the

company has not realize the necessary changes the INEN will proceed to definitively withdraw the INEN Quality Seal.

Finally, if the company needs to expand or reduce the scope of certification, the legal representative of the company must submit an application, notifying the new scope¹³ or the reasons for why it wants to expand or reduce. The request need to be address to the Executive Director of the INEN or the Technical Director of Validation and Certification.

Suspension or withdrawal of the certification

The suspension or withdrawal of the Certificate of Compliance with the INEN Seal of Quality can occur because of the same reasons of withdrawal or suspension of the management certificate of MSMEs (My First Certification).

When the Certificate of Compliance with the INEN Quality Seal is withdrawn to the company, it loses the right to commercialize a product in which it exhibits that it manufactures products certified by the INEN, in the same way the owner must return all the original documents issued by the company related to the certification process.

Cost

Once realize the request to obtaining the certification, the company has the obligation to cancel any invoice, either by; tests, audits of the quality of the product, mobilization or travel expenses if it is necessary; issued by the Ecuadorian Standardization Services. The list of rates for services can be found on the INEN website.

¹³The scope consists of changing or incorporating new trademarks, models, types or classes of the product that obtained the Certificate of Conformance with the INEN Quality Seal.

MARK CERTIFICATION “INEN QUALITY SEAL”

In addition to complying with all the requirements of the current reference regulations and once the INEN Certificate of Conformity with the INEN Quality Seal has been approved by the INEN, the companies can make use of the Certification or Compliance Mark "INEN Quality Seal" ¹⁴ in the certified products. It is important to remember that the Certificate of Conformance with the INEN Quality Seal has a validity of 3 years. The Certification Mark will be able to renew by the same period.

The certification mark must be placed in the label or packaging of the product. Otherwise, if the product does not have enough space for the use of the certification mark, it can go with other information that accompanies the product such as manuals or reference catalogs.

Structure of the certification mark "INEN Quality Seal"

Illustration 17 Structure of the certification mark "INEN Quality Seal"



Source: (Servicio Ecuatoriano de Normalización, 2015)

¹⁴ Symbol approved by the INEN to be use by a certified product, which guarantees that it complies with all the requirements of the current Reference Standard.

The logo of the certification mark is develop based on the chromatic coordinates that the Procedure establishes for the use of the Certification mark "INEN Quality Seal". In the same way, the logo can be in gray scales.

In the procedure for the use of the Certification mark "INEN Quality Seal" also specified that the dimensions of the certification mark do not have a specific size. The certification mark just needs to be legible, and preserve the original proportion. It cannot be in a fund that prevents the reading.

This procedure also emphasizes that the INEN Quality Seal can be use in the product or products that are certified, otherwise the INEN notify to the company the suspension or cancelation of the same one.

On the other hand, if the company cannot use the "INEN Quality Seal" symbol due to technological changes in the process or costs, the products can use the following phrases:

- *"Product with norm INEN Quality Seal XXX"*
- *"INEN Quality Seal INEN NTE XXX"*
- *"Product certified with INEN Quality Seal"* (Servicio Ecuatoriano de Normalización, 2015).

ECUADORIAN TECHNICAL REGULATIONS RTE INEN 247

To obtain the Certificate of Compliance with the INEN Quality Seal for the TERMO PLASTIC electric showers, besides the use of the Certification mark "INEN Quality Seal", Juan Alvarez Ltd. **company** must comply with all the requirements established in the Ecuadorian Technical Regulation RTE INEN 247 "Safety and efficiency for instantaneous electric water heaters without water accumulation ". This Technical Regulation establishes the safety parameters and efficiency that all the electric showers must follow in order to prevent risks in people and avoid practices that may induce error when the companies are manufacturing their products.

Within the Ecuadorian Technical Regulation RTE INEN 247, as part of the product requirements, in the section 5.2., it mentions that the instantaneous electric water heaters without accumulation must comply with all the energy efficiency requirements.

To calculate the energy efficiency of the TERMO PLASTIC shower was in use the following equation:

$$\eta = Q \times 418000 \times Q (T_s - T_e) / U \times I$$

Where:

η is energy efficiency, in percentage,

Q is the water flow, in liters per second,

T_s is the water outlet temperature, in degrees Celsius,

T_e is the water inlet temperature, in degrees Celsius,

U is the measured electrical voltage, in volts,

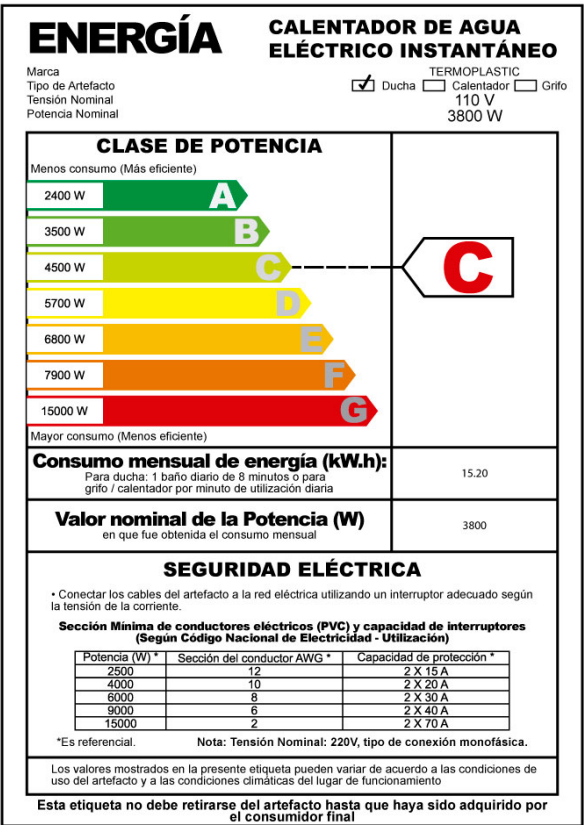
I is the electric current, in amps.

With the above-mentioned formula, it was possible to obtain that the TERMO PLASTIC electric shower has a percentage greater than 95% of energy efficiency and it complies with the requirements that the norm said, “To be efficient an electric shower must have a value greater than 95%”.

Similarly, the Technical Regulation RTE INEN 274 is mandatory for the certification of electric showers. In addition, it establishes the labeling requirements that TERMO PLASTIC shower must fulfill in order that it can be commercialize in the country. One of the requirements that establishes the norm and Juan Alvarez Ltd. company comply is that their TERMO PLASTIC shower presents an informative label on energy performance.

Informative label of the TERMO PLASTIC electric showers

Illustration 18 Informative label of the Electric showers



Source: Juan Alvarez Ltd.

As its shown in the image, the informative label must have the following legends:

1. A legend that says "Energy".
2. A legend that says "INSTANTANEOUS ELECTRIC WATER HEATER".
3. A legend that says "brand", "types of artifact", "Nominal Tension (V)" and Nominal Power (W).
4. A legend that says "Class of power", in this one is the different ranges for the classification of the equipment according to the nominal power of the product.

The Technical Regulation establishes the following table, in which it is possible to observe the Power Class and Nominal Power.

• **Power Classes**

Power class	Nominal power (P)
A	$P \leq 2400 \text{ W}$
B	$2400 \text{ W} < P \leq 3500 \text{ W}$
C	$3500 \text{ W} < P \leq 4600 \text{ W}$
D	$4600 \text{ W} < P \leq 5700 \text{ W}$
E	$5700 \text{ W} < P \leq 6800 \text{ W}$
F	$6800 \text{ W} < P \leq 7900 \text{ W}$
G	$7900 \text{ W} < P \leq 15000 \text{ W}$

Source: Resolution No. 16 046 of the Ministry of Industry and Productivity.

The TERMO PLASTIC electric shower has a nominal power of 3800 (W), therefore, according to the table, the company's electric showers are in the category C, because they are within the range of $3500 \text{ W} < P \leq 4600 \text{ W}$.

5. A legend that says "Monthly energy consumption (kWh)".

To take the monthly consumption of the electric shower it was consider the following formula with the following data.

$$\text{MONTHLY CONSUMPTION} = \frac{\text{Power (W)} * \text{hours of use per day} * \text{days per month}}{1000}$$

$$\text{MONTHLY CONSUMPTION} = \frac{3800 * 0.13333 * 30}{1000}$$

$$\text{MONTHLY CONSUMPTION} = 15,199 \text{ kWh}$$

For shower: one daily bath of 8 minutes

Applying the formula it was possible to conclude that the monthly consumption of every TERMO PLASTIC electric shower is of 15.20 kWh, taking into account one daily bath of 8 minutes.

6. A legend that says "Nominal value of the electric power".

7. A legend that says "Electrical safety".

In the Technical Regulation RTE INEN 247, the box of this legend is predetermined.

8. A legend that says; *"the values showed in the present label can change according to the conditions of use of the appliance and to the climatic conditions of the place of operation"* (Director Ejecutivo del Servicio Ecuatoriano de Normalización, 2016).

9. A legend that says; *"This label should not be removed from the appliance until it has been purchased by the final consumer"* (Director Ejecutivo del Servicio Ecuatoriano de Normalización, 2016).

Finally, to comply with the requirements of the labeling, the product to obtain the Certificate of conformity with "INEN Quality Seal ", also it must have the following information.

1. Model and serial number.
2. Name or brand of the manufacturer.
3. Country of origin.

This information can be verified in the following way:

Illustration 19 TERMO PLASTIC shower- Model: Santorini - Code: CD-2020



Source: Juan Alvarez Ltd.

Every TERMO PLASTIC shower or water heater has an adhesive seal in which it has the following information: series, code, model, voltage and wattage.

Illustration 20 TERMO PLASTIC Electric shower



Source: Juan Alvarez Ltd.

Likewise, every TERMO PLSTIC shower or water heater has printed its respective brand and guarantee, guaranteeing the point two previously mentioned.

Illustration 21 Holder of the electric shower- model Santorini



Source: Juan Alvarez Ltd.

Finally, each shower contains a cover holder, in which it is possible to observe the following information: The reverse part of it contains; the guarantee certificate, technical services authorized throughout the country, model of the shower, the material with which the shower is made, web pages and telephone numbers of the Juan Alvarez Ltd. company.

On the other hand, the reverse of the case cover contains; the brand of the product, the warranty year, shower voltage and an image in which says "Proudly Ecuadorian product" determining the country of origin and complying with the point 3 previously mentioned.

Tests to evaluate the conformity

To carry out the test that established the Technical Regulations RTE INEN 247, Juan Alvarez Ltd. company had its own laboratory allowing obtaining the results previously mentioned.

In the tests there was analyzed the consumption of electrical energy. Taking into account that, in Ecuador only it allows the commercialization of instantaneous electric water heaters without accumulation of water that present an energy efficiency value higher than 95%.

In the same way, it is important to consider the hydraulic and electrical installations of the laboratory. On the other hand, the laboratory has all the measuring instruments that this standard requests. These instruments allow the realization of the test and measure:

- The intensity of the current
- Time
- Temperature
- Electric tension
- Flow
- Environmental conditions

The instruments cannot pass the ranges that established the norm RTE INEN 274, which is in the Resolution No. 16 046.

CONCLUSION

It is very easy to identify the facilities that the Ecuadorian Standardization Service offers in order that the MEMEs could manage to create products with a unique quality. The Juan Alvarez Ltd. company took the decision to obtain My First Certification, considering all the benefits that a certification could grant to its products.

This process began in the middle of September 2018; there were two visits, the first one by the Engineer Cecilia Valdivieso, she was the INEN Zonal Coordinator. The purpose of her visit was to inform about the procedure and to guide the senior officials of the company on the objectives, processes and benefits that My First Certification has.

In the second visit, made by INEN evaluators, the company obtained some suggestions. First, that the company carries out a document and portfolio where it proves that all the requirements that the INEN need are being met. Second that the enterprise realizes a classification of the suppliers of raw material, in order that the INEN can determine the origin of the raw material. Finally, the last suggestion that the company had was to create a production record, in which specify the test control of the electric shower.

All these suggestions the company took into account and the INEN evaluators checked the execution of their suggestion. Nowadays, Juan Alvarez Ltd. were informed that is has been approved to be crediting of this certification.

The Certificate of Conformance with the INEN Quality Seal submits with the purpose of guaranteeing that the products of Ecuadorian manufacture comply with the requirements established in the normative reference in force. In the same way, it establishes all the steps that each company must follow to obtain, grant, maintain, renew or withdraw the certification for the products.

On the other hand, once the company obtains the Certificate of Compliance with the INEN Quality Seal, it can use the certification mark “INEN Quality Seal”, which is the symbol

that allows consumers to recognize that the product that they are going to acquire complies with every requirement established in the normative document, guaranteeing their safety.

When seeking to obtain the above-mentioned certificates, the Juan Alvarez Ltd. company has made certain changes in its product allowing to improve constant with every process. One of the changes implemented by the company was the adhesion of the informative label on the energy performance of the shower. When this one was implemented the company had to realize several tests in which is verified and certified that the monthly consumption of the product is 15.20 kWh. In addition, the company had to calculate the energy efficiency of the TERMO PLASTIC shower, guaranteeing that the same one is efficient.

By carrying out all the tests mentioned above, the company has continuously improved with each manufacturing process with the objectives of: to increase the prestige of the product, to satisfy the customer generating confidence in the TERMO PLASTIC showers, and to improve the competitiveness and image of Juan Alvarez Inc. Ltda. which seeks to expand to international markets. Likewise, the factory is committed to the permanent compliance with the requirements established in the Ecuadorian Technical Regulation RTE INEN 247 and in the RTE INEN 110 Regulation for its products such as; electric hot water tanks JA.

CHAPTER 4: MARKET RESEARCH

INTRODUCTION

In this chapter, Juan Alvarez Ltd. will develop a plan of internationalization to the city of Piura-Peru. The objective of this chapter is to determine through a market research the viability of the exportation of electric showers. It is imperative to mention that the study will help the company to know the behavior of the Peruvian market and the acceptance of the product to be exported.

Besides this study, all the processes to export the product will be analyzed, including an internal, external analysis, the market selection, segment and form of entry, the possible export price, as well as the environment where the product will be developed. Within the internal analysis, the strengths, weaknesses, opportunities and threats of the product are determined: electric shower brand TERMO PLASTIC. Likewise, before carrying out the market research, certain factors were considered which motivate the company to maximize the production of electric showers, allowing to study Piura's city as a potential market for the company.

To carry out this market research, we made a trip from Cuenca - Ecuador to Piura - Peru. In this city, we stayed 5 days, in which we visited some recognized entities in the field of foreign trade, besides other directions that supported this research. The specific purpose of the trip was to know the destination market and determinate how the people react to the TERMO PLASTIC showers. Two surveys were conducted one to owners of hardware stores in the different areas visited and the other one to possible final consumers of the product. With these surveys, we were able to determine the impact of our product in Piura, and the way in which we would reach the market in the best way.

DIAGNOSIS OF INTERNATIONALIZATION

Before starting to write about the internationalization of the chosen product, we will make reference to the export and what it entails.

In Ecuador, an Ecuadorian or a resident foreigner can do an exportation. In addition, any natural or legal person can do this process. To be an exporter people need to follow some requirements, such as,

- To possess the Unique Taxpayer Registry (RUC), the Internal Revenue Service (SRI) grants it and it details the economic activity that companies carried out.
- To obtain the digital signature certificate or TOKEN, the Civil Registry or the Security Data sells it.
- In the Ecuapass it is necessary to realize a record as exporter. Within this registry, you can; update the personal information in the database, create a username and password, accept some usage policies, and register the electronic signature.

The internationalization

The decision of a company to internationalize one of its products, born of some needs, such as access to new markets abroad to start diversification, or as is the case of the Juan Alvarez Ltd, to begin to fully exploit its productive capacity. If a company wants to start this process, it must consider several issues such as, "the costs of production, labor, raw material, income and the comparative advantage of the countries, besides the theories of transaction costs" (Garcia, 2013).

Benefits of the internationalization

As already mentioned, the internationalization brings several benefits, such as,

- Not only depend on the national market, but that the products can be sent also to other markets.
- That is in use the 100% of the productive capacity of the company, since the local market is already established.
- To obtain and to develop new cutting-edge technology, in order that it optimized the production.
- To take advantage of the trade agreements signed between countries for the tariff preferences.
- Companies can access to a markets that have more potential.
- A minor vulnerability exists in the case of crisis in the native land (PRO MÉXICO Inversión y Comercio , n.d.).

INTERNAL AND EXTERNAL ANALYSIS

Internal analysis

Table 10 SWOT of the TERMO PLASTIC electric showers

<p>Strength</p> <ul style="list-style-type: none"> • 30 years of experience in the market • Quality of the product • Clients' Wide portfolio • Technical knowledge • Bestselling product in the highland region. • Product has complete stock of supplies • Immediate technical service • 1 year of warranty • The company possess advertising, design and tooling department • The product does not depend on a distributor, the companies have their own sellers 	<p>Weaknesses</p> <ul style="list-style-type: none"> • The product is the most expensive on the market. • There is no innovation in the design of the electric shower. • The company is not a direct importer of raw material, it depends on several suppliers • Lack of participation in fairs
<p>Opportunities</p> <ul style="list-style-type: none"> • To the being the product bestselling in the Ecuadorian highlands, the company expands its sales in other regions such as the Coast. • By complying with all the corresponding standards that certify the quality of the product, the company can export the product to other markets • Sale of the product for internet 	<p>Threats</p> <ul style="list-style-type: none"> • Competition with alternative systems such as gas heating. • Increase of competitors, entry of new brands such as, FV, Tramontina, Safiro, Irma, etc. • Competition prices are lower • As they are not direct importers, there is high possibility of shortage of raw material.

Source: Juan Alvarez Ltd. **Prepared by:** Alvarez - Ruilova

External analysis

Demographic Environment

According to studies conducted by the National Institute of Statistics and Informatics, it is estimated that the total population of Peru in 2017 was approximately 31,237,385 habitants, ranked 43rd in the world population table; There are several ethnic groups in the country, predominantly mestizos with 60.2% of the population, followed by Amerindians, Whites, African descendants, and others. Within the population pyramid, we can identify that the largest number of the population is concentrated in the ranges of 25 to 54 years (Central Intelligence Agency, 2018). On the other hand, Piura is a city that has approximately 1,856,809 inhabitants. It is consider the home of the 6% of the national population. Its population density is 50.1 inhabitants per square kilometer. Finally, 74% of the inhabitants of Piura live in the urban area (Piura Perú. Org , n.d.).

Economic factor

Several studies indicate that between the years 2009 to 2013, the Peruvian economy was in a boom, since it grew approximately 5.6% per year, maintaining a stable exchange rate and a relatively low inflation; this moment was due to the high export prices of metals and minerals. However, for the years 2014 to 2017 there was a decrease in growth, since the market devalued the prices of these products. Among the data that stand out, we can mention that Peru has:

Purchasing power parity of \$ 424.4 billion

GDP: \$ 215.2 billion

GDP per capita: \$ 13,300 (Central Intelligence Agency, 2018).

The Peruvian economy is the 51st economy in the world, due to its volume of GDP; by the year 2016 Peru has a public debt of “4 3,063 million euros, with a debt of 24.38% of GDP. Its per capita debt is €1,368 per inhabitant” (Datos Macro, n.d.).

Piura's economy is based on the oil industry, which has been developing since the nineteenth century. The agricultural sector of Piura is also important because they have "114 126 agricultural units (UA) with 1 218 320 ha" (Piura Perú. Org , s.f.), these hectares are dedicated to animal husbandry. Piura mining occurs in an area called Bayóvar, since it is a place with large deposits of phosphates, used in the manufacture of fertilizers. Finally, Piura for being a coastal city has the privilege of being a fishing port as well, with a large distribution of marine species.

Geographic Factor

The neighboring country Peru is located in the western part of South America. It borders with Ecuador, Colombia, Chile, Brazil and Bolivia. It has an area of 1,285,215 km², and it is listed as the third largest country in Latin America. This country has 59% of jungle, 30% of highland and 11% of coastline. The climate varies depending on the area, for example, in the jungle the climate is humid and tropical, in the mountains it is dry and temperate, and on the coast it is sunny all year round.

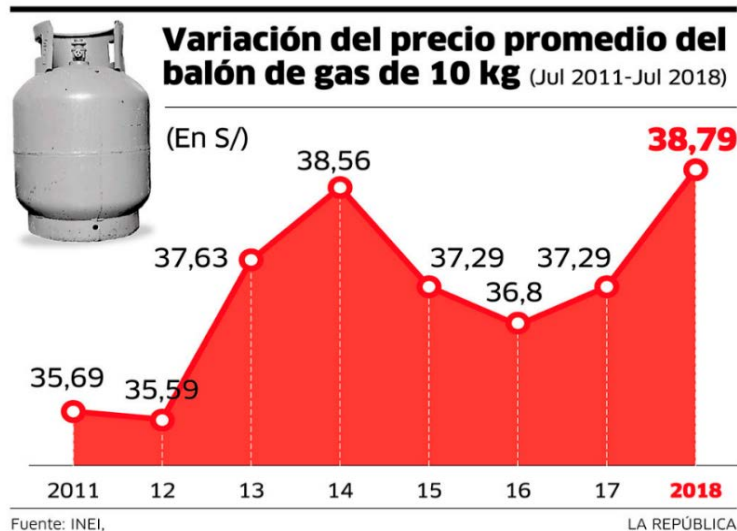
The department of Piura is located on the north coast of Peru. Its border includes Tumbes and Ecuador to the north, Cajamarca and Ecuador to the east, Lambayeque to the south and with the Pacific Ocean to the west. It has an altitude between 2.0 m a.s.l. and 3,960 m a.s.l. The area of this department is 35,892 km² and as mentioned above has a large number of inhabitants. The department of Piura is divided into provinces, which are the following Piura, Ayabaca, Huancabamba, Morropón, Sechura, Paita, Sullana and Talara. These provinces are divided into 65 districts (Instituto Nacional de Estadística e Informática , 2018). This department is located on the coast has a warm climate throughout the year with an average temperature of 26 °C.

MARKET SELECTION

At the time of choosing the destination of Piura - Peru for the products of the Juan Alvarez Ltd. some aspects had to be considered, which determined Piura as an opportunity for the company.

One of the reasons for choosing Peru as a target market was due to the price of gas in the country. According to INEI (National Institute of Statistics and Informatics), the average price of the domestic gas balloon of 10 kilos or cylinder of liquefied petroleum gas until July of 2018 was S/ 38.79, that is USD 11.50.

Illustration 22 Average price of a 10kgs gas cylinder in Peru



Source (Bessombes, 2018)

On the other hand, according to the president of the Peruvian Agency of Consumers and Users (Opecu) Hector Plate, in Piura since 25 April 2018 the price of the gas cylinder of 10 kilos is marketed up to S/ 45, 40, that is to say USD 13.40. Likewise, Plate pointed out:

"In Piura more than 50% of stores sell the gas balloon between S/ 40 and S/ 45.45, being almost 80% of Solgas brand, which is also the most expensive in the northern region" (GESTIÓN , 2018).

To get an idea, it is imperative to mention that in Ecuador the price of the subsidized domestic gas tank of 14 kilos in the deposits is USD 1.60. However, delivery cars sell the product at USD 2.50; this increase is due to transportation costs.

As can be seen, the cost of the gas tank in Peru has caused that more and more people choose to use electrical products, thus becoming an opportunity for the Juan Alvarez Ltd. company with its products electric showers.

On the other hand, another factor that determined the choice of Piura - Peru as a target market, are the similarities it has with Ecuador as: language and culture.

According to the results of the National Census 2017 Piura of the INEI, the 98.36% of the population stated that their official language is Spanish (INSTITUTO NACIONAL DE ESTADÍSTICA E INFORMÁTICA , 2018). Becoming an advantage for the TERMO PLASTIC electric showers, because the information of the holster and manuals are adaptable to this market and there is no need to make changes or alterations to them, because that information is easy to understand.

Another important factor to consider Piura as a potential market is its proximity to Ecuador, especially with Cuenca, since the distance between Cuenca and Piura is approximately 479.1 kilometers. Arriving in Piura from Ecuador fluctuates between 8 hours 30 minutes approximately, without counting the time at the border (migration). Being a short distance from other countries or cities, logistical costs decrease. Finally, the consumption capacity was another factor to consider.

Market segment selection

Juan Alvarez Ltd. has determined that the market segment to which it will be directed are specifically the hardware stores in the area. Since these are the ones who make sure the product rotates all over the city. Hardware stores were chosen because at the time of

analyzing the market, it was found that people come to them to get tools they need for their home.

Selection of the entry form

After an exhaustive analysis in the city of Piura, it is considered that the best way of entry of the product would be Importer - Distributor. This decision was taken because when trying to distribute a new product in a relatively small city, most of the distances traveled are short and a distributor, preferably Peruvian, would be able to reach as many hardware stores as possible, covering a large territory. As there are several urban settlements, they feel isolated; however, the chosen distributor must cover all these areas, which are 20.

Negotiating conditions

Incoterms

They are known as International Commercial Terms or Incoterms, are responsible for helping both sellers and buyers to identify the degree of responsibility of the merchandise that is being sold. There are 11¹⁵ Incoterms dictated by the International Chamber of Commerce in Paris, these are not mandatory but they are of common use in the international trade. The last update of these was issued in 2010. These are divided into 4 groups, depending on the point of transmission of responsibility for the merchandise.

a) GROUP E:

- a. EXW: EX WORK, the only international commercial term in which the seller is solely responsible for the goods and the rest of the liabilities pass to the buyer. The seller must only generate export documents, packaging and some other services. All risks are transferred to the buyer.

¹⁵ Below are listed 12 Incoterms however; the DDU was deleted in 2000, so it does not appear in the list of Incoterms 2010.

b) GROUP F: this group differs from the others as it occurs in maritime transport and the others (aerial, terrestrial and railway).

a. FCA: Free Carrier, the seller is responsible for the goods until it arrives at the buyer's transport company at a particular location. The seller is responsible for issuing the documents, packing, freight to the agreed location, and transportation to the local port.

b. FAS: Free Along Ship, maritime Incoterm, at more than the previous service, the seller is responsible for the goods until it is left on the side of the ship, then the risk is passed to the buyer.

c. FOB: Free on board: In this Incoterm, the responsibility of the seller reaches until the goods are on the ship within the designated port.

c) GROUP C: this group offers additional services and the seller has a greater number of responsibilities

a. CFR: Cost and Freight, it is a specifically maritime Incoterm. All costs are borne by the seller, including freight from the factory to the final destination, customs, and export costs. The goods are delivered on board the ship.

b. CIF: Cost, Insurance and Freight, in the same way it is maritime Incoterm and the seller delivers the goods on board the ship. National and international transport cost, minimum insurance and export procedures are paid by the seller.

c. CPT: Carriage Paid To, the seller delivers the goods to the carrier or designated person at an agreed location. The seller must contract and pay transportation costs to the place established in the contract.

d. CIP: Carriage and Insurance Paid To, the seller is responsible for delivering the goods to a carrier designated by him, the seller covers the necessary transport costs for the goods to arrive at the place of destination, and it must purchase insurance.

d) GROUP D: it is the most complete, within this group the seller takes charge of the costs that are generated of transport, in addition the risks that the goods could suffer during its transport are also assumed.

a. DAT: Delivered at Terminal, the seller delivers the goods unloaded it from the means of transport; the whole process is carried out until it reaches the terminal. The seller assumes transportation costs, insurance (not mandatory). The responsibility of the seller ends until the disembarkation of the goods in terminal.

b. DAP: Delivered at Point, the seller delivers the goods but it does not unload, the goods only arrives at the agreed place of destination. It follows the same DAT processes, excluding the download process. The seller takes care of transportation and insurance (not mandatory). The goods are left ready for unloading and in the hands of the buyer.

c. DDP: Delivered Duty Paid, the seller delivers the goods when it is shipped for import and is ready to be unloaded at an agreed place of destination. This Incoterm is the maximum responsibility for the seller, since it covers all expenses including transportation, insurance, import and export expenses, among others. The buyer only pays for the merchandise.

d. DDU: Delivered Duty Unpaid, the seller fulfills its obligation when the goods have been placed in the country of importation. The seller

assumes all the costs and risks of transporting the goods and the customs formalities.

Exportation price

The exportation price consists of a document that establishes the rights and obligations of both parties to the negotiations; it is to say, the exporter and importer. This document contains:

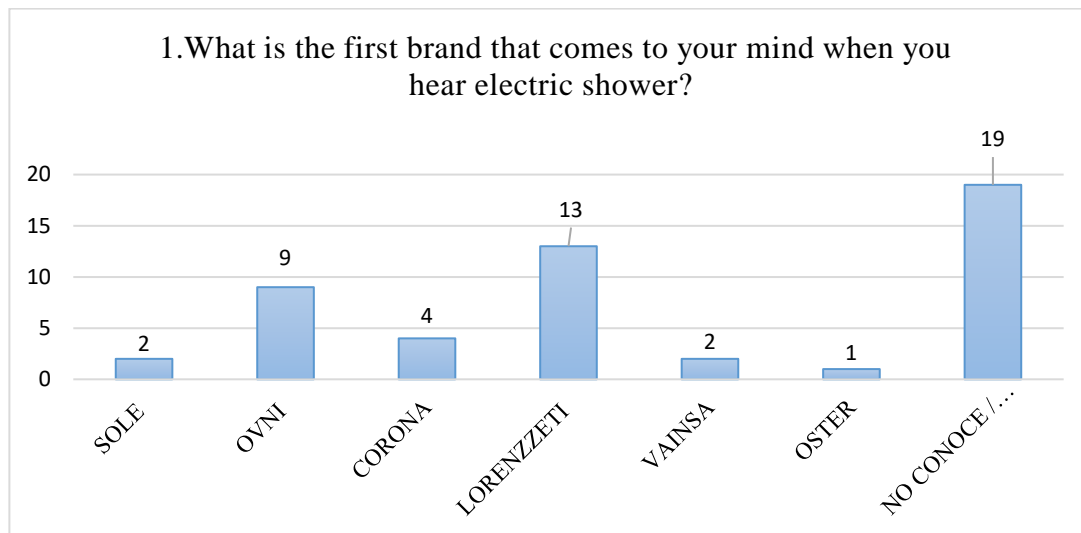
- Object: This part specifies the characteristics of the product
- Payment methods: The payment clauses are established, depending on the method that has been chosen.
- Product and Packaging: This category specifies the type of packaging that will be in use in the product.
- Delivery of the goods: This is one of the most important points, since specific the day and the exact point of delivery of the goods depending on the type of Incoterm that has been chosen (Siati Group, s.f.).

MARKET STUDY

To know exactly if the market of Piura - Peru is willing to accept the product TERMO PLASTIC electric shower, offered by Juan Alvarez Ltd. it was necessary to carry out a market study¹⁶ with the objective to determine if the factory has a demand that has not been fully satisfied. The study began, when surveying places where it was determinate the possibility of locating the product (electric shower), these were; hardware stores, 50 in their entirety, from different sectors of Piura, which were the downtown area and its settlements.

The methodology of questions used in the surveys were of brief response, because eight of the nine questions were closed. Likewise, open questions were asked, when it was necessary to know the competition and the reasons why they would or would not be willing to distribute an Ecuadorian electric shower. Finally, the market research reflected the following:

Graph 1 Top of mind of respondents regarding an electric shower brand

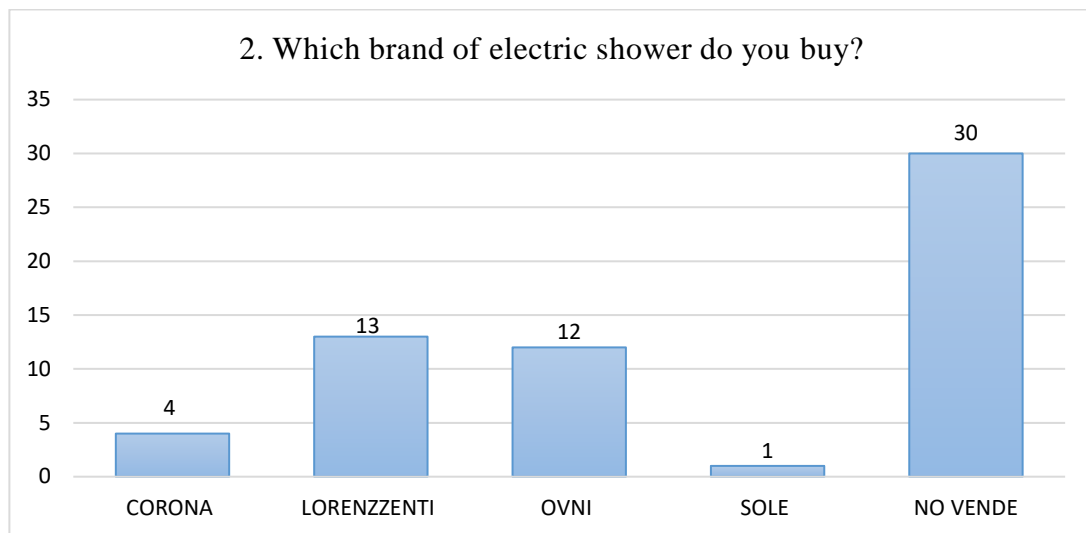


¹⁶ “Is the process of planning, collecting, analyzing and communicating relevant data about the size, purchasing power of consumers, availability of the distributors and consumer profiles, in order to help marketing managers to take decisions and to control marketing actions in a specific market situation” (Thompson, s.f.).

To determine in which position is the competition of Juan Alvarez Ltd. Company, it was considered to analyze which is the TOP of mind¹⁷ of the respondents with respect to an electric shower brand, with the aim to verify which are the brands demanded by the market and therefore they have major probability of purchase.

Of the 50 ironmongers surveyed, it was found that the electric showers of brands Lorenzetti and ONVI are well known in the Piura market. However, it was possible to observe that 38%, that is, 19 respondents does not know an electric shower or does not know a specific name, making it a disadvantage and advantage for the company.

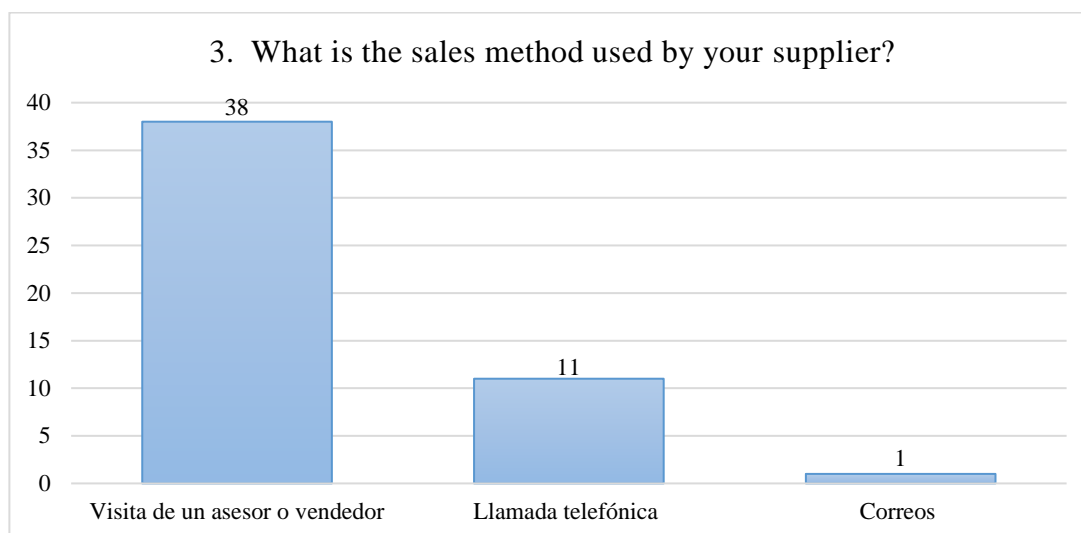
Graph 2 Competition of the TERMO PLASTIC electric shower



On the other hand, it was possible to observe that 50% of the respondents does not buy electric showers for sale, and 42% of them buys electric shower brand Lorenzetti and Ovni, becoming the direct competition of the company at national or international level.

¹⁷ That brand that occupies a privileged position in the memory of the public, being the first one that the individual interviewed remembers, in a spontaneous way when being interrogated about a certain category (Zorraquino, s.f.).

Graph 3 Sales method



Of the 50 ironmongers, 38 responded that the sales method used by their suppliers is the visit of an advisor or salesperson at least once a month, because the sellers by their presence reinforce or nullify the idea of a product. While 11 ironmongers answered the telephone call as a sales method, it is due to the long relationship between seller and costumer.

According to your criteria. When making a purchase, what is the importance that you give in the following aspects?

Aspects	Very important	Important	Regular	Less important	Nothing important
Quality	25	23	2	0	0
Price	22	24	4	0	0
Guarantee	22	23	3	2	0
Spare parts stock	20	19	9	2	0
Technical service	6	16	10	17	1
Design	14	22	11	3	0
Durability	21	27	2	0	0
Brand	8	19	8	13	2
Country of origin	1	12	15	13	9

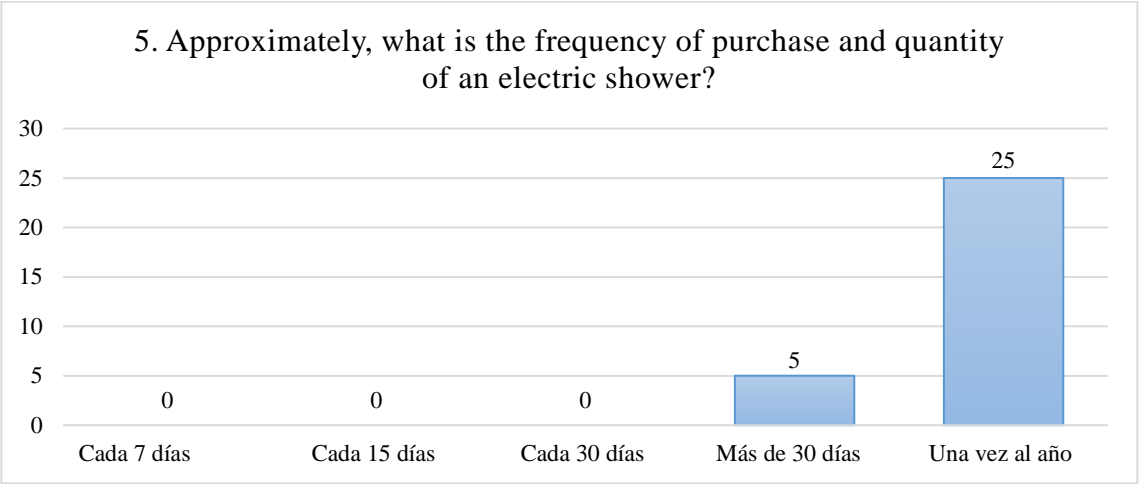
As can be seen in the preceding table, quality, price, guarantee and durability are important criteria when making the purchase of an electric shower. Criteria that the TERMO PLASTIC shower complies. Although the product is the most expensive in the national and even international market, the price was not a negative factor due to its quality and durability (10 years).

In the same way, although the guarantee is a determining factor when buying a product, the TERMO PLASTIC shower would be the only one in Piura’s market to give a guarantee, which has a duration of one year.

On the other hand, the brand of the product is also an important factor at the time of purchase, because a well-known brand tend to sold faster, therefore has greater turnover. The TERMO PLASTIC shower, being a new product in the market would have several challenges when entering the market.

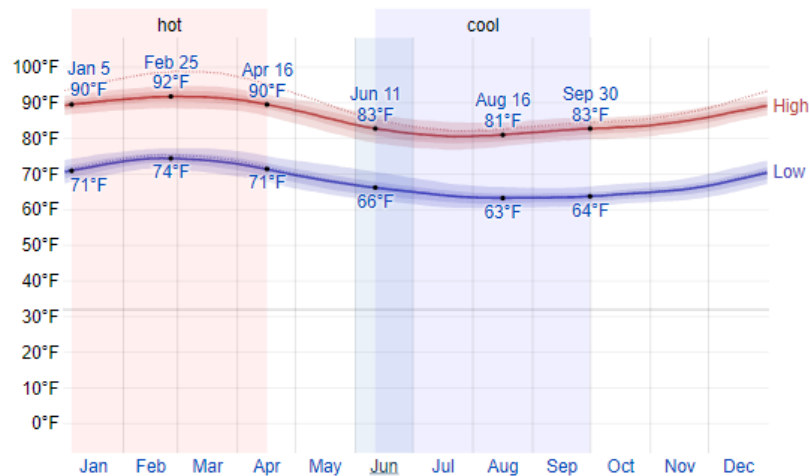
Finally, the country of origin is a criterion to take into account although it is not a negative factor for the Juan Alvarez Ltd. company because most traders consider that a product is not of quality because of its country of origin it is for the durability of the product. However, it could be determined that Brazil and China are the direct competitors of the Ecuadorian company.

Graph 4 Purchase frequency



It is imperative to mention that, according to the 30 ironmongers who sell a product such as the electric shower; their frequency of purchase is once a year. The lack of rotation of the product is due to a climatic factor.

Illustration 23 Average high and low temperature of Piura

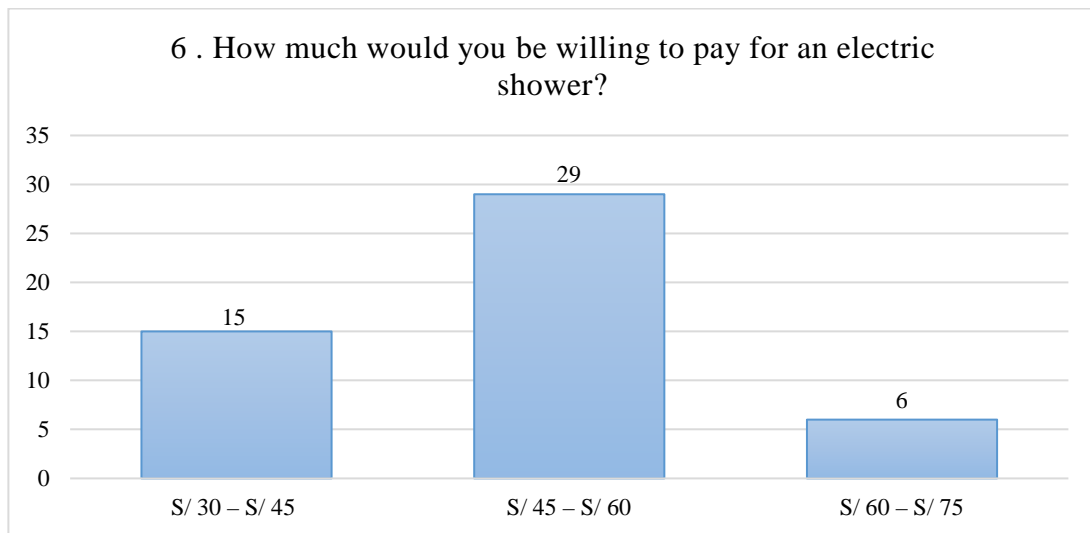


The daily average high (red line) and low (blue line) temperature, with 25th to 75th and 10th to 90th percentile bands. The thin dotted lines are the corresponding average perceived temperatures.

Source: (Weather Spark, s.f.)

As can be seen in image 23, Piura is a warm city. Therefore, there is no need for a product such as electric showers. However, between the months of June and September the rotation of an electric shower may be feasible, according to the ironmongers. Therefore, the average purchase amount according to the ironmongers per year is from 70 to 100 units and this can change according to its stock.

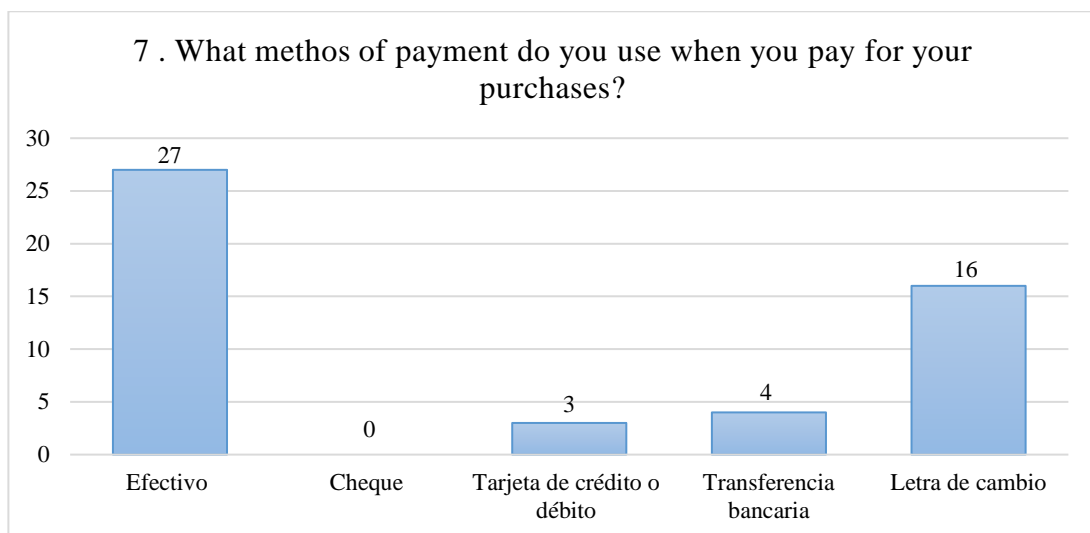
Graph 5 Perception of the price of the product



According to the 50 respondents, 30% of the ironmongers would pay for an electric shower between S/ 30 - S / 45 (USD 8.84 - 13.50). 58% are willing to pay between S/45 - S/60, that is, between 11.79 - 17.69 US Dollars and the remaining 12% would pay between S/ 60 - S/75 (USD 17.69 - 20.64).

This question is a reference for the Juan Alvarez Ltd. company to the moment to determine the price of its product.

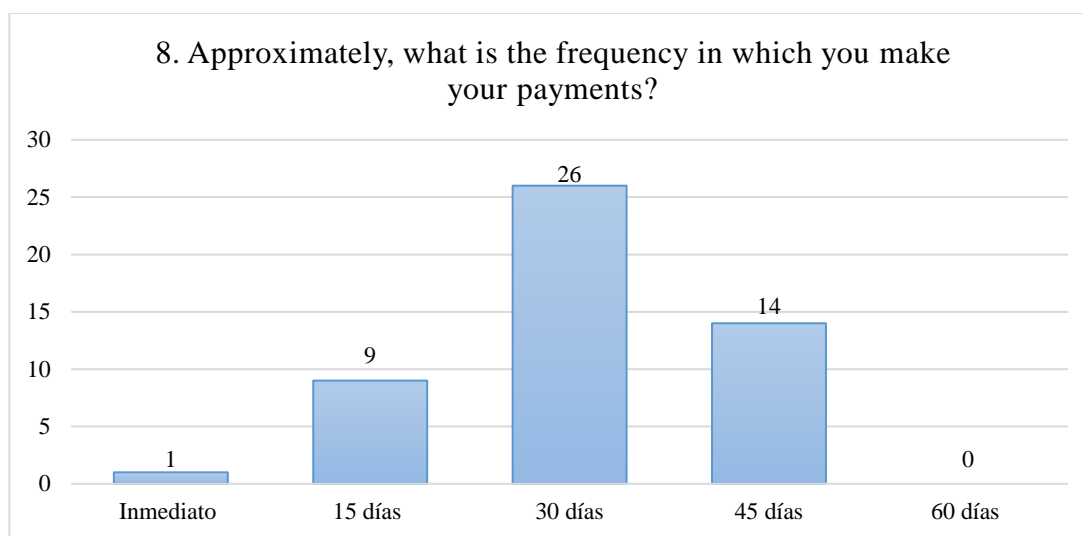
Graph 6 Payment methods to suppliers



According to surveys made to 50 ironmongers in the city of Piura. 54% of transactions are made with cash, becoming the most used payment. The bills of exchange¹⁸ suppose 32% of the payments, between bank transfers and the credit cards 14% and checks 0%.

Although bills of exchange occupy a prominent place as a payment method in Piura, its importance is not the same as in Ecuador.

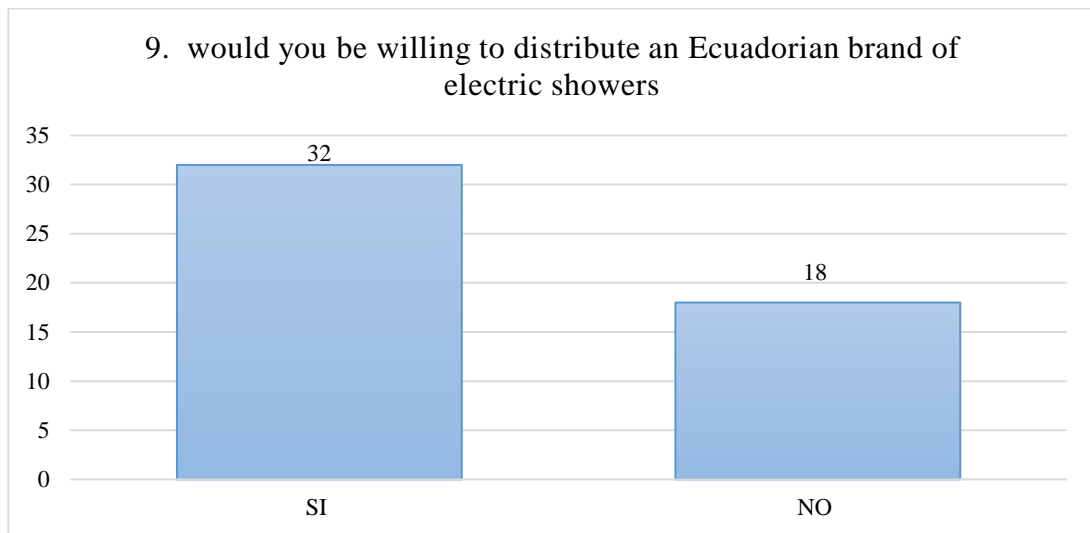
Graph 7 Frequency of Payment



This question indicates the number of days (on average) that it takes to pay the potential customers, depending on several factors such as, the time of the letters, the amount of the purchase, among others. This question gave us a brief idea of how shopping is handled in this city, and how we could do business with these people.

¹⁸ Commercial document by which a person, creditor of the debt, issues to another person, debtor, the payment of a certain amount of money on a specific date or of maturity (iAbogado Servicios Jurídicos SLU, s.f.).

Graph 8 Possibility of distributing of an Ecuadorian brand



While 19 people did not know a product like an electric shower. To the moment to explain what it is and how the product works, the results in the final question changed. 64% of the ironmongers would be willing to buy an Ecuadorian electric shower, while 36% maintain their decision not to buy a product such as an electric shower.

Of the respondents who are willing to buy a product such as an electric shower, they had the following reasons:

- To have more variety of products
- Season (cold)
- Guarantee
- Accessible price
- Durability
- Innovation.

In addition, people were willing to buy the product after a time in the market and the company gives informative talks.

On the other hand, people who were not willing to buy an Ecuadorian electric shower, was due to certain reasons, which are:

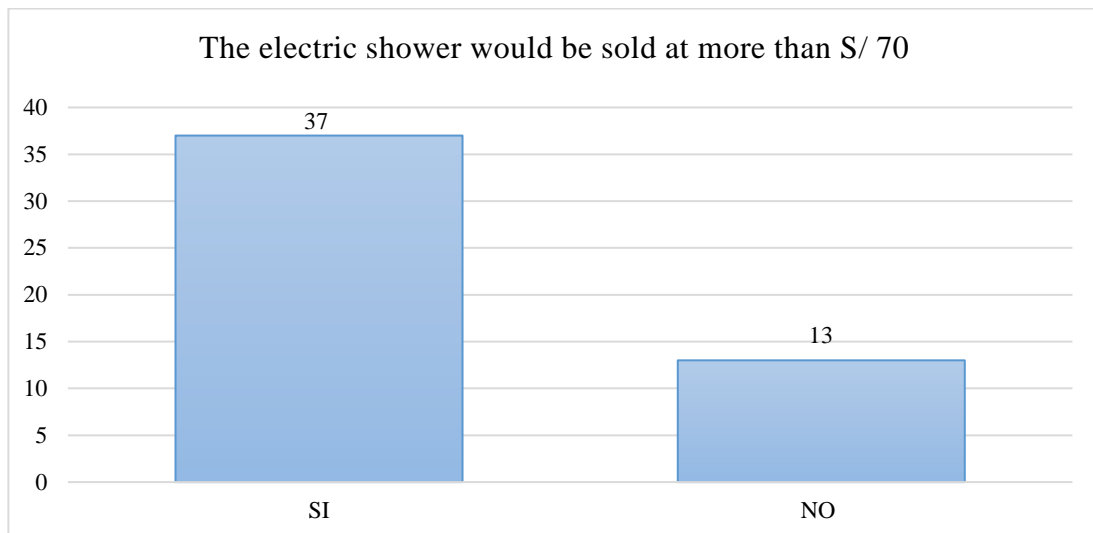
- There is no demand in the market
- It's new product
- Climate
- Custom
- Competition
- Does not sell / does not know the product.

After the survey, each hardware store had a TERMO PLASTIC electric shower Santorini model and according to their perception, each one gave a price with respect to what they see of the product (packaging, color, size, design). The results were the following:

Price in S /	Quantity
25	2
30	3
35	4
40	9
45	2
50	15
55	3
60	6
65	1
70	1
90	3
100	1
TOTAL	50
AVERAGE	50.2

According to the point of view of the ironmongers, the average price of the product is S/ 50.2, considering that it is price of sale to the public. Subsequently, Mr. Juan Alvarez explained and mentioned to each hardware store the characteristics of the product such as; the material, guarantee, quality control, spare parts, useful life, among others. In order to ask if the product could be sold to S/ 70. The results are:

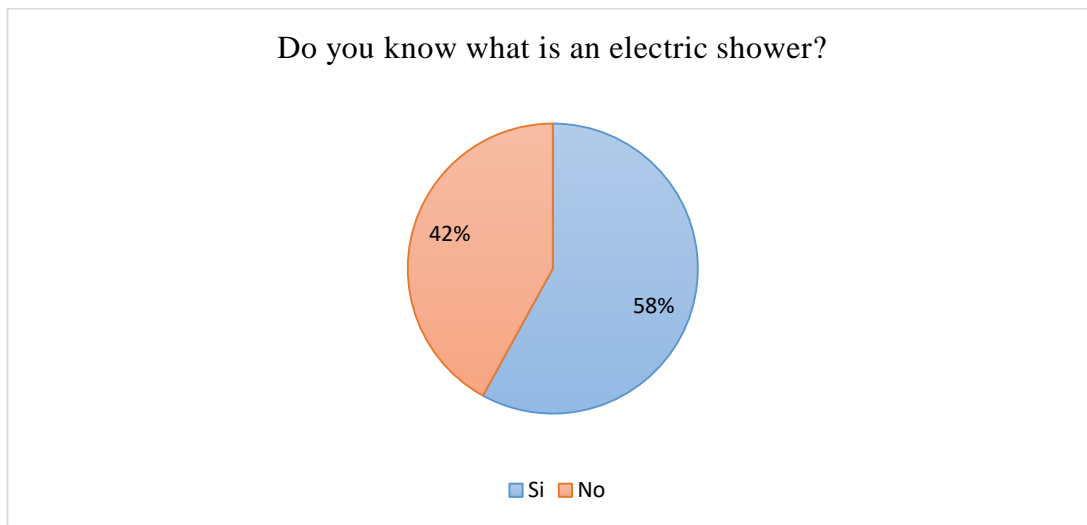
Graph 9 Possibility of sale of the TERMO PLASTIC shower to more than S/ 70



In terms of the price of an electric shower, 37 people out of the 50 surveyed, that is to say 74% of the people surveyed consider that the product TERMO PLASTIC brand could be sell at more of S/ 70. The remaining 26%, 13 people considered that the product could not be sell at the price mentioned above, because it is a new brand and the cost is high.

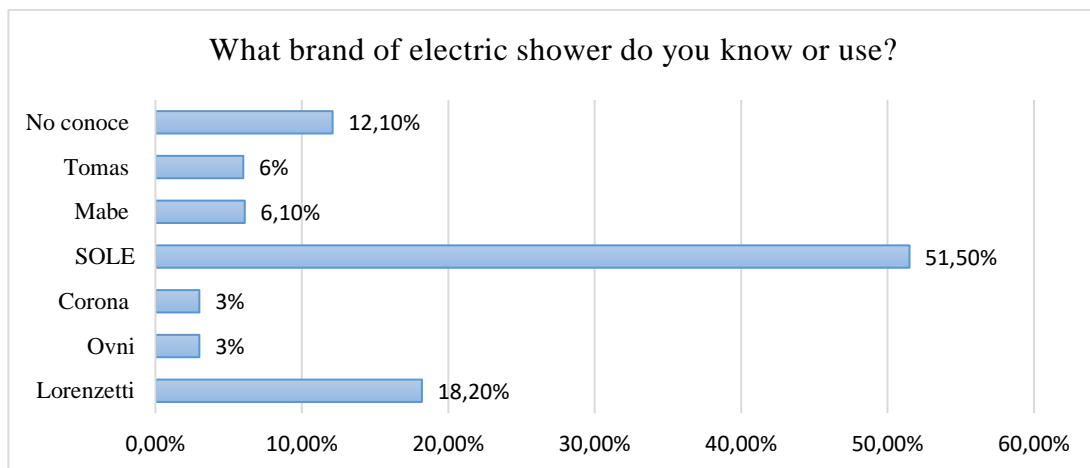
In addition to the survey carried out by the ironmongers, we decided to do a survey to a 50 people in the Real Plaza Piura Shopping Center. The purpose of this survey was to identify if people know about the product and if they were willing to buy it. The questionnaire consisted of four questions, which are listed below:

Graph 10 Product knowledge



This question allowed us to identify people's knowledge about the product to be introduced to Piura, Peru (electric showers). The result of this question was that 58% of the people do know the products, and 42% do not know them. The fact that most people do know about an electric shower is an advantage since it is not necessary to make a complete introduction of the product to the market.

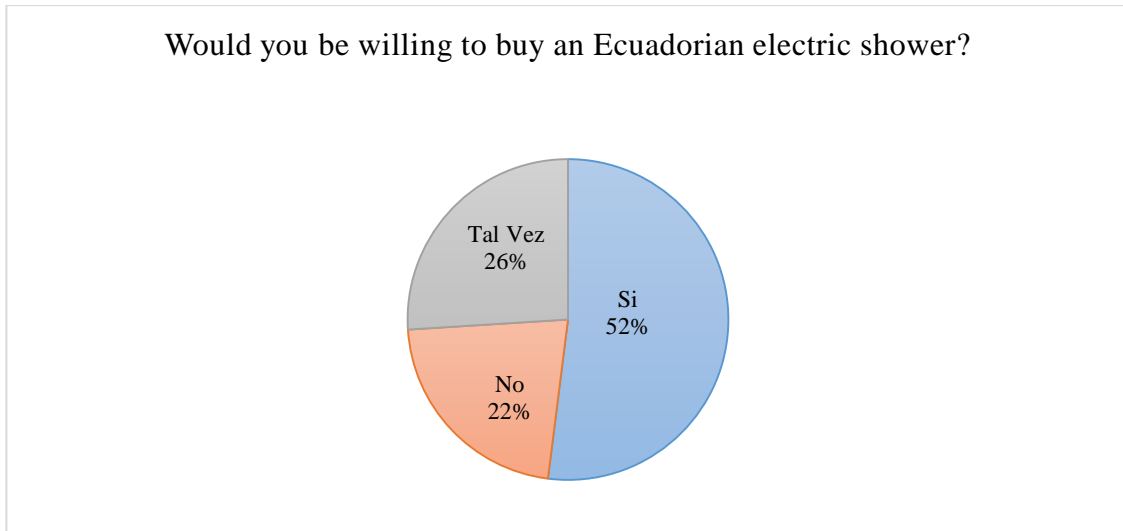
Graph 11 Some of the known brands



Only people who did know what an electric shower was answered this question. Easily it was possible to identify that most people, 51.5% know the SOLE brand, which has great

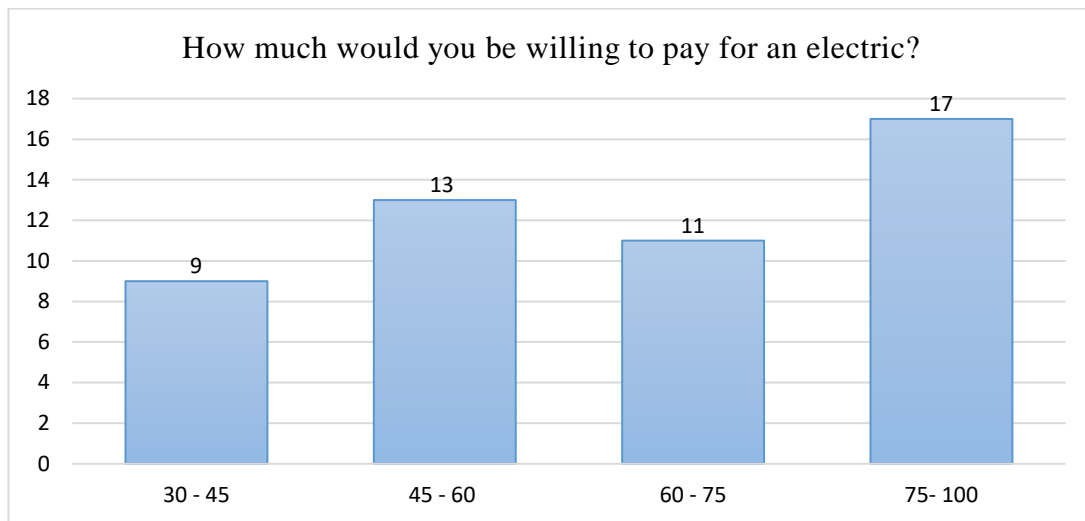
prestige in the Peruvian market. With this question, it was possible to identify that SOLE would become one of the main competitors of TERMO PLASTIC.

Graph 12 Purchase probability



After a brief explanation about what an electric shower is and how it works, we asked if they would buy an Ecuadorian electric shower. The result was that 52% of the respondents did, as among their opinions they emphasized that the country of origin is not important. The rest 22% answered no, because the climate of the city and its economic capacity and it is not a product that they need to have. Finally, 26% of respondents stated that they might buy an electric shower depending on several factors such as; cold season, price, quality, guarantee, among others.

Graph 13 Estimated purchase price



Finally, we asked how much people would be willing to pay for an electric shower and the biggest answer was S/ 75 to 100. With this price, it was possible to observe that our product if it might sell adequately since it is within that range price.

FINAL PRICE IN DESTINATION

After conducting the market study and knowing the prices of the competition, the company has structured the export prices of its product, electric shower. The company has considered the Incoterm DDU (*Delivered Duty Paid*), which means that the seller takes care of all the costs and risks of the goods until arriving at the place agreed with the distributor. In other words, the company is responsible of certain requirements, which are; internal and external transport, packaging, insurance, customs procedures (payment of tariffs), and expenses of entry and exit, therefore the seller has maximum obligations to the buyer.

In order to set the price of the product in accordance with the above-mentioned Incoterm, the company considered the following data and information:

First, it was consider the quantity of shower to export in a truck of 8 tons. Each box contains 20 units of electric shower and the total weight of each one is 11.20 kilograms.



The box has printed the brand of the product, the name of the company, its official logo and general features such as; addresses, e-mail, telephones. In the same way, there are spaces to put the product code, quantity, weight and general information of the client.

Table 11 Characteristics of an 8-ton truck

8-ton truck	
CUM.	WEIGHT (Kgs)
34.56	8,000.00

Source: Alvarez - Ruilova

Table 12 Box shipping capacity

UNIT DIMENSIONS					SHIPPING CAPACITY	
LONG	WIDTH	HIGH	WEIGHT	DIMENSION	8 –ton TRUCK	
cm	cm	cm	Kgs	M3	CUM.	WEIGHT
63.00	25.00	29.00	11.20	0.05	756.65	714.29

Source: Alvarez - Ruilova

As can be seen in the table 12, according to the weight of each box (11.20kgs), the quantity of boxes to be exported in an 8-ton truck is 714 units, therefore, the total quantity of electric showers to be exported is of 14 280 units.

On the other hand, with the tariff item 8516.10.00.00, we entered to the SUNAT (Superintendencia Nacional de Aduanas y de Administración Tributaria) or to the link <http://www.aduanet.gob.pe/itarancel/arancelS01Alias>, where a table appears, in which

are detailed all the taxes¹⁹ and customs duties²⁰ corresponding to the above-mention tariff heading.

Illustration 24 Tax measures for goods of the national subitem 8516.10.00.00 established for entry into Peru

MEDIDAS IMPOSITIVAS PARA LAS MERCANCIAS DE LA SUBPARTIDA NACIONAL [8516.10.00.00](#) ESTABLECIDAS PARA SU INGRESO AL PAIS

TIPO DE PRODUCTO:	
LEY 29666-IGV 20.02.11	
Gravámenes Vigentes	Valor
Ad / Valorem	6%
Impuesto Selectivo al Consumo	0%
Impuesto General a las Ventas	16%
Impuesto de Promoción Municipal	2%
Derecho Especificos	N.A.
Derecho Antidumping	N.A.
Seguro	1.75%
Sobretasa	0%
Unidad de Medida:	U

N.A.: No es aplicable para esta subpartida

Source: (SUNAT, 2018)

Considering all the tax measures established by the Peruvian country, the following table was realized. Taking into account that the AD-Valorem duty is 0%, thanks to the tariff preferences that exist between Ecuador and Peru for belonging to the Andean Community.

¹⁹ **Selective Consumption Tax - ISC:** it is an indirect tax on certain goods, such as alcoholic beverages, cigarettes and fuel. This tax seeks to discourage the consumption of products that generate problems in the individual, social and environmental order.

General Sales Tax - IGV: this tribute taxes the importation of all goods, except for the exceptions provided for in the regulations that regulate it. Tax rate: 16%

Municipal Promotion Tax - IPM: it is a national tax in favor of the municipalities. Tax rate 2% (SUNAT, 2016).

²⁰ **Valorem duties:** taxes established in the customs tariff/duty to the goods that enter to the territory. According to the national subitem, they qualify in four levels: 0%, 4%, 6% or 11%.

Specific duties: tax aimed at imports of agricultural products, such as, rice, yellow corn, milk, sugar. Its rate varies according to the product.

Anti-dumping duty: tax certain products whose dumping prices cause or may cause damage to Peruvian production (SUNAT, 2016).

Table 13 Taxes to pay for Juan Alvarez Ltd.

TRIBUTES

	Value	Electric shower
FOB		193,091.00
FREIGHT		750.00
INSURANCE	0.30%	581.52
CIP TOTAL		194,422.52
ADVALOREM	0%	-
MUNICIPAL PROMOTION TAX	2%	3,888.45
SAFEGUARD	0%	-
ICE	0%	-
GENERAL SALES TAX (IGV)	16%	31,729.76
TRIBUTES		35,618.21

Source: Alvarez - Ruilova

To make the following tables, cost of the product and summary of the price, it was considered prices that there quoted by the company Impoex. It is located at Catalina Aldaz N33-120 and Portugal streets. Building La Recoleta Floor 9 and office 96 in Quito - Ecuador.

Likewise, there was consider that the production cost of the electric shower is \$ 13.50.

Table 14 Cost of electric showers *TERMO PLASTIC*

COST IN ORIGIN	COST	VALUE
CUSTOMS PROCEDURES /		
ECUADOR CARGO AGENCY	220.00	
STOWAGE (HOUR MAN)	36.00	
INTERNAL		
TRANSPORTATION	-	
INTERNAL INSURANCE	-	
STORAGE AND HANDLING	25.00	
UNPRESENTED	30.00	
TOTAL	311.00	

COST IN DESTINATION			
INTERNATIONAL FREIGHT	750.00		
INTERNATIONAL			
INSURANCE	581.52	0.30%	CPT
DESTINATION CUSTOMS			
PROCEDURES	150.00		
HANDLING DESTINY	300.00		
DUTY ANS TAXES			
DESTINATION	35,618.21		
INTERNAL TRANSPORT			
DESTINATION	-		
TOTAL	37,399.73		

Source: Alvarez - Ruilova

Table 15 Price summary

PRODUCT NAME	UNIT VALUE	QUANTITY/ UNITS	UNITY	EXW	FOB	CFR	CIP	DDU	DDP
ELECTRIC SHOWERS	13.50	14,280.00	Kgs	192,780.00	193,091.00	193,841.00	194,422.52	194,872.52	230,490.73
TOTAL		14,280.00		192,780.00	193,091.00	193,841.00	194,422.52	194,872.52	230,490.73

Source: Alvarez - Ruilova

UNIT DDP 16.14
INCREASE 16.6%

Finally, once analyzed all the costs necessary for the export of the product, we can conclude that the tentative DDP price of the same one is \$16.14, that is, S/ 49.96.

Table 16 Price of the product at destination

PRICE OF THE PRODUCT

USD	NEW SOL	CLIENT
\$ 16.14	S / 49.96	DISTRIBUTOR
\$ 19.37	S / 63.92	HARDWARE STORE
\$ 23.24	S / 76.69	FINAL CONSUMER

Source: Alvarez-Ruilova

In order to consider all the prices of the distribution channels, we decide to do table # 16, where each distributor has a 20% profit, reaching the final price of \$ 23.24 or S / 76.69.

CONCLUSION

Within this chapter, the market study helped us to collect relevant data about the product to be exported and the terms of sale and negotiation in which one we can work, and based on the results obtained consider the best option for the Ecuadorian company, Juan Alvarez Ltd. This analysis defined the non-existence of a potential market for the electric showers in Piura, due to the following reasons:

Peru has 20 human settlements, sectors in which the people and the ironmongers did not know about the product to be exported, that is, the electric shower.

Due to the climatic factor, there is no demand nor need for this product, since the people prefer to take a shower in cold water to cool off. Therefore, the product offer by the ironmongers is very limited.

In the hardware store, the Lorenzetti electric showers are the most offered, given their trajectory, time in the market and price; becoming the direct competition of the company.

After the results obtained, it came near to the conclusion of which the TERMO PLASTIC electric shower is one of the most expensive in the Ecuadorian market; therefore, it will enter the Peruvian market with a high price. However, they can have a high competitiveness in that market, because their characteristics and guarantee.

CONCLUSIONS AND RECOMMENDATIONS

Once carried out the study of Juan Alvarez Ltd. and the possibility of this to internationalize its product, it is concluded that the company owns a plant with high technology; however, the company only uses 25% of the installed capacity for the distribution of its product at a nationwide. Therefore, the company can take better advantage of its production capacity to enter a new international market without any problem.

After having concluded the internationalization plan of the TERMO PLASTIC electric showers of Juan Alvarez Ltd., we can conclude that all export promotion mechanisms generated by the Ecuadorian government are very good and feasible for all MSMEs that have the production capacity to export.

At the time of analyzing the PRO ECUADOR route for the exporter and the Exporta Fácil tool to export our product, we realized that as a company, Juan Alvarez Ltda. can only use the PRO ECUADOR route. Since after an exhaustive analysis by PRO ECUADOR, we were informed that the company is in the Yellow phase, in which are the companies that are potential exporters because their product is already formed and ready to start promoting it in different international fairs.

On the other hand, the Exporta Fácil tool is intended for other types of products, this could be more useful for artisans and MSMEs that produce and market smaller products. Juan Alvarez Ltd. could not use this tool because it does not comply with the size and weight limits.

In the same way, it was concluded that when a company makes the decision to certify its products, it gets more value. Juan Alvarez Ltd. started in the month of September 2018 the process to obtain My First Certification, within which two visits were made by the officials of the INEN. After the final report, the company was notified that the certification has been obtained, waiting **for the next future** to obtain the Certificate of Compliance with the INEN Quality Seal.

As for the final part of the titling work, according to the data collected by the market study, it was concluded that Piura - Peru is not a suitable market for a continuous export of TERMO PLASTIC electric showers. That decision was for several reasons: The city of Piura has a large number of human settlements, where its inhabitants do not know what is an electric shower, nor its uses. The climate factor is also negative for the study, since most of the time the temperature of the city oscillates between 17 ° C to 35 ° C, so people prefer to shower in cold water. Finally, the market competition also influences, because there are brands of electric showers and water heaters that are already consolidated in the mentality of the Peruvians. For this reason, small amounts of product could be exported to Piura only in the cold season, which is 3 months per year.

On the other hand, among the recommendations that we can give to the company is to carry out similar studies in other important cities of the country such as: Lima or Cajamarca, where the need for hot water is a fact, due to the existing climate in the area.

Since Piura is a non-potential market for the company, there could be the possibility of exporting the product, electric shower to the country, generating through advertising and informative marketing a new habit in the city, which would consist that citizens feel the real pleasure of bathing with temperate water.

Likewise, it is recommended that the company continue with the process to obtain the INEN Quality Seal or Certificate of Conformity INEN, because these allow verifying that the company is distributing a quality product to the Ecuadorian market, thus benefiting the factory and the consumers.

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ANNEXES

Annex 1 Title of registration of the distinctive sign TERMO PLASTIC


INSTITUTO ECUATORIANO DE PROPIEDAD INTELECTUAL
IEPI
DIRECCION NACIONAL DE PROPIEDAD INDUSTRIAL

TITULO No. DNPI-1461-99-IEPI

LA DIRECCION NACIONAL DE LA PROPIEDAD INDUSTRIAL
Vista la solicitud de registro como Marca de Fábrica
Trámite No. 83692, del 12 de diciembre de 1997, habiendo
cumplido con todos los requisitos de ley, RESUELVA
REGISTRAR dicha marca por el tiempo de DIEZ AÑOS, contados
a partir de la presente fecha, de acuerdo con los datos
siguientes:

SIGNO DISTINTIVO : TERMO-PLASTIC

TITULAR : JUAN FERNANDO ALVAREZ ASTUDILLO

DOMICILIO : GRAN COLOMBIA
CUENCA-ECUADOR

NACIONALIDAD : Ecuatoriana

REPRESENTANTE LEGAL :

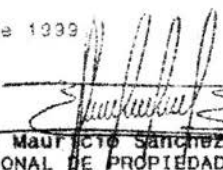
APODERADO :


FECHA DE VENCIMIENTO : 9 de agosto de 2009

PRODUCTOS : Duchas eléctricas y todos los
productos de la Clase Internacional Nº 11.

DESCRIPCION DE LA MARCA: Consiste en la denominación
TERMO-PLASTIC, escrita en letras mayúsculas de tipo sans-serif,
todas las reservas que sobre ella se hacen.

Quito, 9 de agosto de 1999


Dr. Mauricio Sánchez-Porco
DIRECTOR NACIONAL DE PROPIEDAD INDUSTRIAL (E)



RENOVACION (MP)

Denominación: TERMO-PLASTIC
Registro No. 1461, de 9 de agosto de 1999
Solicitud No. 67542, de 6 de mayo de 2009
Certificado No. 1454, de 21 de mayo de 2009
Fecha de vencimiento: 9 de agosto de 2019
GM

Annex 2 Certificate of management of micro, small. Medium-sized enterprises, organizations of popular, and solidarity economy

	SERVICIO ECUATORIANO DE NORMALIZACIÓN	Nº DVC-GMPME-2018-054
<h1>CERTIFICADO</h1> <p>DE LA GESTIÓN DE MICRO, PEQUEÑAS, MEDIANAS EMPRESAS Y ORGANIZACIONES DE ECONOMÍA POPULAR Y SOLIDARIA</p>		
OTORGADO A:		
<h2>JUAN ÁLVAREZ CÍA. LTDA.</h2>		
Por haber cumplido los requisitos establecidos en la RESOLUCIÓN INEN Nº 2018 - 007 "CERTIFICACIÓN DE LA GESTIÓN DE MICRO, PEQUEÑAS, MEDIANAS EMPRESAS Y ORGANIZACIONES DE ECONOMÍA POPULAR Y SOLIDARIA.		
Fecha de emisión: 2018-10-05 Fecha de vencimiento: 2021-01-05		
 Ing. Elizabeth Guerra. DIRECTORA EJECUTIVA (E) SERVICIO ECUATORIANO DE NORMALIZACIÓN INEN		 INEN MIPYMES Certificado de Gestión
Esta certificación esta sujeta a que la empresa cumpla con los requisitos de la resolución INEN Nº 2018 - 007, tiene validez de 3 años desde la fecha de emisión.		
Quito, Baquerizo Moreno E8-29 y Diego de Almagro Teléfono: (593 - 2) 382 5960 / 382 5999 www.normalizacion.gob.ec		

Annex 3 Interview to the Chamber of Commerce and Production of Piura

Interview to: B.S. Jorge García Feria, Head of Foreign Trade

1. To be a member of the Chamber of Commerce, what are the requirements?

To be members of the Chamber of Commerce and Production of Piura there are no requirements, but people must follow a process, which are:

1. Fill out an application for registration
2. Send the request to the Public Relations Department, this can be in person, by fax or by email
3. Wait for a formal response to the request; which is issued after an evaluation of the Evaluating Committee
4. Cancel the first monthly payment assigned according to the category that has been fixed to the company

2. What are the services offered by the Chamber of Commerce to its partners?

The services offered by this institution are several, among them we can find:

1. Advisory
2. Training
3. Information
4. Sale and Visa of Certificates of Origin
5. Virtual Office of Certificates of Origin
- 6. Register of Protests and Moors**
7. Online Protests
8. Infocorp Reports
9. National and International Conciliation and Arbitration Center
10. Use of Facilities (various environments)

3. What is the relationship between the Chamber of Commerce of Piura and the Chamber of Commerce of Cuenca?

On two or three occasions, there have been visits by representatives of the Chamber of Cuenca, but there is no close link, nor are agreements made for international support between Cuenca and Piura companies.

4. How do you contact direct investors through the Chamber?

We do not have a directory of hardware stores. There is a directory of 500 companies. However, very few hardware stores have affiliated with the Chamber of Commerce of Piura.

5. Do you consider feasible the exportation of electric showers from Ecuador to Piura?

Yes, it is possible. You must create the need, and analyze how feasible it is. Because of the electric shower characteristics, it is a product with a representative cost, but its usefulness warrants it, since comparing with other products does not offer the same as the Ecuadorian showers.

6. How is the Chamber of Commerce's support for international products that will enter Peruvian territory?

The support offered by the Chamber of Commerce, is to make know the different products of members to others through computer workshops, through business email are sent information chains of different products, also they can hold meetings with partners to launch a new product to the market, and finally on a monthly basis, each member is sent an envelope with brochures and company information.

Annex 4 Interview with the Regional Directorate of Foreign Trade and Tourism

Interview to: Consuelo Ugarte, Director of Foreign Trade and Ricardo Curisca, Specialist in Foreign Trade.

1. When entering the market of Piura, Juan Alvarez Ltd. can access a list of investors to consider potential clients, through the Regional Directorate of Foreign Trade and Tourism.

I think so, but more than with us it will be with the Chamber of Commerce and Production, because the company is not a factory that belongs to our public. At this moment, we are working with cooperatives and successions, which are the banana producers or mango producers, all of which are of agriculture that are our potential, but that does not take away to the company. Through them we can promote your product. To say, tomorrow we have an internship; 30 banana plantations from an area of high Piura meet. We can take advantage of certain areas of the meeting so that you can promote your products.

When you speak of an investor, it is who will be in charge of distributing the product, that is easier with the Chamber, and there are not many. Also, what I recommend is to participate in the binational trade fairs between Peru - Ecuador, for example, this year the Business round was held in June here in Piura and in September in Loja, and these negotiations are held every year.

What I recommend is to visit the Ministry of Energy and Mines, to see the legislation and regulations that the product needs to import it.

2. There is some kind of support from DIRCETUR for international producers?

Yes, but no from the DIRECTUR, it supports is form the State through its commercial fairs, missions, etc. With DIRCETUR **there is a lot of articulation with the Chamber of Commerce, with private sector.**

3. There is some kind of cooperation between DIRCETUR and the Ministry of Foreign Trade of Ecuador?

As a Regional Directorate no, since it is solely responsible for internal affairs. The Ministries are responsible for solving international problems, and there is closer cooperation between them.

4. In terms of investment, how are the relations between the two countries?

There is no Ecuadorian investment in Piura; the strongest investments are from Chile and the United States in the agriculture and fishing sector. As for the commercial sector, Ecuadorians usually look for tourist, gastronomic services and in some cases medical services.

5. Do you consider feasible the exportation of electric showers from Ecuador to Piura?

I think so, but we would have to see if it complies with the technical energy regulations. However, due to climatic and habit conditions, the electric shower is not considered to have a very high movement. Nevertheless, with the new regulation of Travel and Tourism Agencies DS 004-2016-MINCETUR the need of the product is growing.

SURVEY

Survey on the feasibility of export of TERMO PLASTIC electric showers of Juan Alvarez Ltd. from Cuenca- Ecuador to Piura - Peru

The Ecuadorian company, Juan Alvarez Ltd. is responsible for providing solutions for the heating water with different products such as: electric showers, hot water tanks and solar panels, in order to satisfy all the needs of home, business and general industry nationwide. This survey is carried out with the purpose of determining if the company can introduce its product (TERMO PLASTIC shower) to the Peruvian market, With the information obtained from this survey, it will be determined if Piura is a potential market for the company.

1. What is the first brand that comes to your mind when listening electric shower?

2. What electric shower brands do you buy? (Select one option).

- Corona
- Lorenzetti
- OVNI
- SOLE
- Other _____

3. What is method of sale used by your supplier?

- Visit of a consultant or seller
- Telephone call
- Post Office

- 4. Mark with an X in each box, according to your criteria. When making a purchase, what is the importance that you give to the following aspects?**

Aspects	Very important	Important	Regular	Less important	Nothing important
Price					
Design / packaging					
Quality					
Guaranty					
Durability					
Brand					
Cost effectiveness					
Stock of spare parts					
Technical service					
Country of origin					

- 5. Approximately, what is the frequency of purchase and quantity of an electric shower?**

- Every 7 days
 - Each 15 days
 - Every 30 days
 - More than 30 days
- Quantity -----**

- 6. How much would you be willing to pay for an electric shower?**

- S / 30 - S / 45
- S / 45 - S / 60
- S / 60 - S / 75

- 7. What payment method do you use when you make your purchases?**

- Cash
- Check
- Credit or debit card
- Bank transfer

8. Approximately, what is the frequency in which you make your payments?

- 15 days
- 30 days
- 45 days
- 60 days

9. Would you be willing to distribute an Ecuadorian brand of electric showers?

YES _____

NO _____

Why?

Annex 6 Photos in Piura







