

# **Bringing Frigidaire To Spain**



## **Tiger Consulting**

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## **EXECUTIVE SUMMARY**

Our company, Tiger Consulting, proposes that Frigidaire Airconditioning should expand its offerings to Spain. Spain is a very low risk country with a strong and growing economy and a prominent manufacturing sector and our client could greatly benefit from entering the market. Spain is a valuable market for its unrestricted access to the European, Latin American, Middle Eastern and North African markets. Our market analysis predicts a high demand and future increase in the demand for Air Conditioning units in Spain considering the lack of AC now combined with the high and rising temperatures facing Europe. There is excellent infrastructure that supports FDI in Spain and the country has plans set to further support foreign business in the future as well as to improve the business climate in the country in general. They have essential resources that go into making AC units and a strong labor force. Though there are other AC companies already in Spain, they sell large HVAC units to mostly companies and apartment units and not small household units so the demand for simple portable, or in-window AC units is severely undermet. We believe that the best course of action for Frigidaire to enter the Spanish market is through an alliance with an established manufacturer in Spain to maximize the return on investment and take advantage of the many resources available, lower shipping costs and export tariffs, and benefit from working with a local company to get a feel for the new business environment.

## MARKET ANALYSIS

Spain is part of the Iberian Peninsula located in the South West part of Europe, bordering the Mediterranean Sea and North Atlantic Ocean. They have a parliamentary monarchy consisting of 3 tiers of government: central, regional and local, which makes it one of the most decentralized countries in Europe (Allianz, 2022). With a free market economy, it is the fifth largest economy in the European Union. They are a very attractive market for our client for many reasons.

Spain's manufacturing industry as well as their bustling tourism, are the main drivers of their economy. With a GDP of \$1.2 trillion, Spain's economy is ranked 14th in the world. They are actually ranked 13th in the world for receiving the most foreign investments, have 14,600 foreign firms operating in their country, and have 70 out of 100 of the top companies in Forbes Global 2000 operating there (Invest in Spain, 2022). Furthermore, the OECD FDI Regulatory Restrictiveness Index ranked it as the 10<sup>th</sup> least restrictive country when it comes to international investment regulation (Invest in Spain, 2022).

Spain's economy is rapidly growing, and The World Bank reports that Spain's GDP increased by 1.1 percent between May and June of 2022, more than doubling the expected rate of 0.4 percent, and up from 0.2 percent expansion in the previous period (The World Bank, 2020). The GDP Growth Rate was 5.1% in 2021 and projected to rise by about 0.60 percent in 2023 and 0.50 percent in 2024. Their GNI in 2021 was \$1,432,586.05 compared to \$23,393,116.83 in the US, and adjusted with PPP was \$1,729,087.93 in 2020 compared to \$20,250,635.20 in the US (The World Bank, 2020).

Spain is a valuable market for its unrestricted access to the European union market and is considered a doorway to Latin American markets for the rest of the world. It is also an attractive place to bring foreign business because of the country's strong and growing economy, which proved to be very resilient in periods of financial instability. A recent study by the Spanish Association of Franchisors (AEF - Asociación Española de Franquiciadores) said 249 of their 1,381 franchises are foreign companies and of those 249, 46 are from the US and have been highly successful in adapting to Spanish consumer tastes.

Spain is known for their advances in renewable energy and their government has a focus on environmental initiatives to become a greener country. In terms of human rights, the country is very free and is a member of the EU, WTO, OECD, OSCE, the Council of Europe, has attended the European Convention on Human Rights and signed the UN Universal Declaration of Human Rights. They also enforce non-discrimination on the basis of gender or sexual orientation, the rights of persons with disabilities, and business and human rights (GOV UK, 2022). Bribery is illegal and punishable by law and intellectual property rights are protected but foreign countries must be granted or registered for foreign businesses (GOV UK, 2022).

## **POLITICAL, LEGAL AND ECONOMIC RISKS**

According to Allianz's risk report, overall Spain is a low risk country, especially low in political risk, though it has slightly higher economic risk due to debt issues but it is still considered very low. Some economic and political risks would be that Spain has very high private and public debt, more than 97.4% of their GDP, but the debt-to-GDP ratio has started to decrease (globalEDGE, 2022). They also face high structural unemployment of 14.5% and tension in politics due to sovereignty issues with Catalonia. GlobalEdge states that despite Spain's high private and public debt, they rate them as high in efficient debt collection, with

strong institutions and good B2B interactions as well as having sufficient and reliable available corporate financial information (globalEDGE, 2022).

For legal risks with respect to our company, bringing portable air conditioners, on August 9 the Spanish government passed a regulation making it illegal in public places like airports, bars, shopping centers, etc. to set the air-conditioning below 80 F until November 2023 (Gualtieri & Soto, 2022). Though the law doesn't apply to households, it could foreshadow further regulations. This law came about from an effort by the EU to meet their commitment to reduce energy consumption by seven percent, limit emissions, and lower the country's dependency on fossil fuels and Russian oil and gas.

Though this seems like a setback to our business, we predict a growing demand for air conditioning following the two heat waves that hit Spain in July with temperatures in the 100s, and the predicted rise in average temperature for Europe with future summer temperatures projected to rise above 122 degrees Fahrenheit (Cunningham, 2022). Most households and businesses do not have air conditioning because the older homes are unsuitable for installing HVAC units or central air and they are usually expensive and not environmentally friendly. However with temperatures that hot, summers will be unbearable without some sort of air conditioning solution.

## **DEMAND ESTIMATE**

To estimate the demand of our clients AC units, we based the size of the potential market for our air conditioning units on the number of households in Spain, using data on the average number of people in each household and the average number of rooms per person to extrapolate an approximate number of the number of rooms are available to install an AC unit. We assume

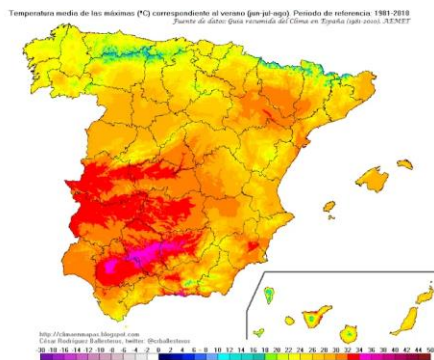
only middle to upper class households would have expendable income and purchasing power to buy a luxury such as air conditioning, so we will subtract the number of low income households (found by the percentage of low income people in Spain multiplied by the household data) from the total calculated above. The overall population of people above the age of 18 in Spain (those with the purchasing power to buy an AC unit) was 39,474,346 in 2021 (World Population Review, 2022). We calculated that there are 5,382,004 middle to upper class households and 120,564,519 rooms for available units approximated by averages (see Appendix A for calculations).

Of course, this will be a high estimate, considering that some households may only want one AC unit for their living rooms, or have people sharing the same room requiring less units, along with other variability having to do with the calculation of the portion of low income households (homeless populations were not deducted). Overall there is still a large market within this middle to upper class segment. Statistics of the populations of regions with higher temperatures (who would have a higher and more inelastic demand for ACs) and statistics on how many households already have central air conditioning systems can be used to narrow in on the target market.

When measuring demand in terms of cultural values, the Spanish feel very strongly about improving the environment, with 81% in favor of stricter government measures to impose changes on people's behavior regarding the environment, which may narrow the market for AC's depending on their perception of its negative impact (Eib, 2021). However, one Washington Post article quotes that AC's were once "dismissed as an unnecessary luxury and a planet-destroying menace" by Europe, but that is now changing with the increasing temperatures facing the region. As the unbearable temperatures persist, people will be more apt to overlook the environmental

issues of AC and the added costs to their electricity bills and embrace AC in order to stay cool. The article states that sales of portable AC units in Europe rose by 2,420 percent in the week of the publishing date, July 20, 2022 when the population was experiencing a heat wave (Taylor, 2022). Taylor cites a 2018 report where the International Energy estimated that “the number of air-conditioning units in the European Union would more than double from 110 million in 2019 to 275 million in 2050” as an “essential life saving tool during heat waves.”

Preferences of different regions of Spain will differ depending on temperature. Córdoba has the highest maximum average temperature in Spain, with Seville, Badajoz, Murcia, and Granada close behind. Spain's interior is also very hot, including Madrid, Zaragoza, Toledo and Ciudad Real (The Local, 2022). The target regions can be seen on this map from The Local in red or pink, as they experience the highest average temperatures.



Furthermore, about 46% of rental homes available on the rental market have AC but only 31% of for sale properties have them (Foreign Buyers Watch, 2019). When competing in the property market, not having AC would deter potential buyers (See Appendix B for more information). This gives our company a foot up as sellers and landlords add ACs to add marketing value to their properties.

## COMPETITION ANALYSIS

In this next section we will introduce an analysis of the market and the existing competition that our company is faced with, including our specific competitors, the demand for our product in the new market, and the strengths and weaknesses of our competitors:

Fujitsu and LG are the largest AC providers in Spain. They have a unique advantage as they have already cemented contracts with large residential AC installation companies such as ACAIR (ACAIR, 1970) and AC Control (City Guilds, 2022), as well as many others. As previously stated, we are primarily focusing on the residential market and not the commercial market. The commercial market has already been saturated with many competitors, creating high barriers to entry for us. With that being said, these companies focus on selling in-home HVAC systems, which provides us with a strategic advantage in the market.

The demand for simple portable, or in-window AC units is severely undermet. The logic behind this is the fact that many hardware stores, and AC companies do not sell products such as these, and if they are sold, are generic (unnamed) products, which are incredibly expensive. An example of this is the hardware store Espada who carry two options for unnamed, generic AC units which cost €483, and €536 (Espada, 2022). This is compared to the US name brand counterparts, which cost around \$350-\$400 (Walmart, 2022). We believe this price difference is due to unmet demand in Spain.

Primary strengths of our competition stem from the fact that they provide many households and businesses with HVAC Systems. This is a benefit to them as they already have the infrastructure and personnel in place to make doing business in our market easier. When we enter the market, and start to take advantage of the fact that there is unmet demand for personal AC, it will be far easier for them to transition into this sector of the market than it is for us. The



specifics of this include already established distributor relations, brand awareness in the area, and confirmed distribution channels.

Our competition's weaknesses lie in the fact that they will be late movers to this sector of the market. This will allow us to establish ourselves, market our products, and generally grow our brand awareness before they have a chance to shift their focus onto our niche sector. Another weakness which could possibly be exploited is the fact that our competitors have charged outrageously high prices for their products since they entered the Spanish market. This could be a leading reason why many homes do not have AC, as it's hard to justify purchasing such a product at such a high price point. By providing the Spanish market with lower priced personal options, we would be able to steal market share from the residential HVAC market.

## **KEY RESOURCES**

Spain has an abundance of resources we can use to our advantage when bringing our client company to the market. Their manufacturing sector is highly productive and export oriented, and the government is devoted to improving their already sound infrastructure to be more pro-business and efficient. For key resources, we are going to direct our focus to labor and raw materials. First off, let's take a look at Spain's ability to produce copper and zinc, both of which provide key elements of the production process of air conditioning units.

In the Southwest region of Spain, "the so-called peripheral belt" provides a significant amount of the world's sheet metal supply (MAPFRE Global Risks, 2022). Along with this, the more conductive metals such as copper and zinc are turned into wiring and solder- both crucial to Frigidire's production process. Outside of the electrical components, most of Frigidaire's products use a steel-based alloy as the casing, which is then treated with a weather-resistant

coating or paint. Unsurprisingly, Spain is also a primary steel exporter, ranking 15th as of 2017 (International Trade Administration, 2017).

With the production of raw materials within the country of choice, this could pose a strategic advantage for Frigidaire to enter both the Spanish and greater European market by producing its products in Spain. The ways in which Frigidaire would benefit from utilizing this strategy vary greatly, but to name a few: decreased raw materials cost, decreased shipping costs, decreased tax and tariff costs, and increased raw material turnovers compared to its US production.

In terms of labor, Spain has a decent workforce overall. Most workers expect a 40 hour work week, with nominal pay. This would alleviate a lot of marginal costs Frigidaire currently has by producing in the US, with far higher wages. That being said, Spain has a less than ideal unemployment, which currently sits at 10.1% (European Union, 2022). This isn't necessarily terrible, but it could pose threats of an unfilled workforce in our production line, which if were to be the case, would mitigate the benefits of using the country.

## **INFRASTRUCTURE**

In terms of infrastructure, Spain is an ideal country to move into due to its government's devotion to improving transportation infrastructure and facilitating free and efficient trade between its different regions and the rest of the world. In fact, the government has implemented the Infrastructure, Transport and Housing Plan (PITVI) which outlines a plan and allocates funds to improve infrastructure with the objectives of “(i) enhancing the efficiency and competitiveness of the global transport system, optimizing the existing capacity; (ii) contributing to balanced economic development; (iii) promoting sustainable mobility, combining its

economic and social effects with respect for the environment; (iv) reinforcing territorial cohesion and accessibility to all State territories through the transport system; and (v) improving the functional integration of the transport system as a whole by taking an intermodal approach” according to the Guide to Business in Spain 2022 (ICEX, 2022).

Specifically, they have taken action to improve the motorway and dual carriageway network and high capacity roads enhance efficiency, making it the leader in European motorway and dual carriageway networks. For railway transport, they have focused on high-speed networks, with the capital of Madrid having high-speed train connections to 33 Spanish cities and counting (ICEX, 2022). Spain is the leading country in Europe in terms of kilometers of high-speed railroad lines and is transitioning into privatization of the freight sector with subsidies to encourage rail transport over road transport. For air transport, Spain has 46 airports connecting to all major cities worldwide and is crucial in connecting the Americas and Africa to Europe. According to airlines, Spain is known for its excellence when it comes to existing infrastructure (ICEX, 2022). All is relevant to our company when considering transportation options and costs.

## **STRATEGIC IMPORTANCE**

Frigidaire is owned by parent company Electrolux, and has manufacturing plants in various places in the United States. However, Electrolux has many facilities in Europe, and is headquartered in Stockholm, Sweden. We can use these European facilities for parts that are more cost effective to import than they would be if manufactured by our Spanish facilities. Spain’s efficient sea freight, air freight, and rail freight infrastructure can efficiently import and export inputs and final products to and from the different locations. The efficient roads and high speed freights will be essential to getting our goods to final consumers all over Spain. All in all,

Spain is a great location with many resources and great infrastructure that will be advantageous in bringing Frigidaire to their market.

Spain is of great strategic importance for our client due to its vital strategic location, trade partnerships, and consistent growth in the foreign trade sector. Spain is known for being a significant point of access for European, Middle Eastern, and North African markets. It is also seen as the doorway to Latin America for the rest of the world.

With Spain being a member of the European Union, our client would have access to the world's largest common market and be able to take advantage of Spain's double taxation treaties with almost 100 countries, including 17 agreements in Central and South America and 21 bilateral agreements throughout the EMEA. Furthermore, The Canary Islands provide easy access to northwestern Africa, making them strategic for businesses looking to enter African markets (CT Corporation Staff, 2020). As a part of the WTO and the GATT, Spain is part of multiple Free Trade Agreements further increasing its attractiveness as a market (Talenom, 2022). Another benefit of entering Spain is access to Latin American markets without having to invest or expand there.

Spain is also seeing a trend towards exponential economic growth. With a volatile pattern, Spain has seemed to steady out between 3-5.5% growth each year in the past 5 years, aside from a drop during COVID-19 (Talenom, 2022). How is this important? As the country grows, more businesses will begin to invest, making Frigidaire's decision to be an early mover incredibly lucrative. This decision will allow Frigidaire not only to solidify a foothold in the market, but will also allow their physical assets such as land to increase in value.

In conclusion, choosing to stay out of the Southwestern European market allows Frigidaire to limit their risk of being a first mover. That being said, the current Southwestern

European market is very undervalued for their business and they would benefit greatly from transitioning into it. The decision to base their business in Spain would allow them to benefit from strong trade relationships within the EU, give them a promising region of economic growth, and provide incredible upside potential for their company.

## **RECOMMENDATION**

Our recommendation is that Frigidaire should form an alliance and partnership with a preexisting air conditioning company in Spain. We believe it is the best way to get adapted to the new market environment and overcome the “liability of being foreign.” Partnering with a local company allows our client to adapt to the local business and social culture, learn about the local market, and get valuable new contacts. Furthermore, since the Southwest region of Spain processes a large part of the world’s sheet metal supply and conductive metals such as copper and zinc that are crucial to Frigidire’s production process, it makes sense to manufacture where our client can source the materials for cheap and to avoid shipping costs. Having a partner manufacturing in Spain can give Frigidaire a strategic advantage for both the Spanish and greater European market. As we mentioned in the Key Resource analysis, manufacturing in Spain will allow for decreased shipping costs, decreased tax and tariff costs, and increased raw material turnovers compared to producing in the US.

Our primary criteria for finding such a partner would be as follows: First, the company needs to be small. A smaller company would be easier to create a mutually beneficial relationship with- on one hand, they gain from having a major brand like Frigidaire behind them, and on the other, we benefit from having a Spanish partner. It’s harder for a large company to justify our clients benefits as they have most of the same resources that Frigidaire does. Second, the company needs to manufacture their products in Spain. This is beneficial for a few reasons,

our client will get tax breaks, political preference, and social presence as a provider of jobs for the country. Lastly, the company needs to have a solid track record for employee treatment. This is important because it will benefit our social image and better allow Frigidaire to become a household name.

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### **Appendix A: Households and Rooms Available for AC units**

The overall population of people above the age of 18 in Spain (those with the purchasing power to buy an AC unit) was 39,474,346 in 2021 (World Population Review, 2022). The average number of households in Spain is 18,625,700, with the average household size being 2.50 people (INE, 2020). 35.7% of Spain's population is considered to be low-income, so we can multiply the 39,474,346 total households by this number to get about 14,092,341 low income households which we will then subtract from the total to get 25,382,004 middle to upper class households. In addition, the average home in Spain contains 1.9 rooms per person, and the average household has 2.5 people, so we can use this to calculate the number of AC units per household on average, assuming that almost every room will want their own unit (OECD, 2019). By multiplying the 2.5 people by the 1.9 rooms per person, we get an average number of rooms in a household of about 4.75. We will multiply this by the 25,382,004 to get about 120,564,519 rooms for available units approximated by averages, which should even out the disparity between very small houses/apartments that have few rooms and those large expensive houses/apartments with many rooms.

### **Appendix B: AC in Properties With and Without AC**

The table below shows properties with AC, rental properties with AC, and properties for sale with AC (Foreign Buyers Watch, 2019)..

<b>País</b>	<b>% viviendas con A.A.</b>	<b>% viviendas en alquiler con A.A.</b>	<b>% viviendas en venta con A.A.</b>
España	32,8%	45,9%	31,3%