

# Competitors and comparison with our product

[Business](#)



This field has a lot of big companies putting research and development money down to create the newest technology. There are many other companies in this country that are trying to break into the market. This company can be found using the site Windustry (<http://www.windustry.org/companies>). This search engine can find hundreds of companies in this country. The top three world companies in this market are GE power, Vestes, and Enercon. This chart shows the areas in which Silent Air will be able to lead the market based on our current designs.

Silent Air leads in the categories of sound output because of the new design that we are using. Silent Air product is cheaper because of this smaller design it will cost less to manufacture and construct on site. The rest of the categories, especially efficiency, are a part of our development plans. The market is all very close with efficiency values; there is not a distinct leader. Because Vestes has the largest market share currently they are able to give their customers more efficiency because they have the most field-testing.

The maximum wind speed is also something we will keep in mind, and is also a very close field of competition. We are not interested in competing for the largest Swept area, as Enercon built an E-126 with a turbine diameter of 126 meters. This massive size has implications in maintenance cost as well as sound output. Trying to compete on this field would be taking Silent Air away from our core competency, and it would be difficult to succeed in this growing market.

As an upcoming wind turbine manufacturer we see a great opportunity to fit into a growing market. Of the top 10 wind turbine manufacturers, only 1 of them is based out of the United States; GE energy ranking in at #4. GE  
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energy is an energy company that focuses on many different sources of energy, and therefore cannot dedicate the time and resources to wind turbines that our company will be able to. As a strict wind turbine designer and supplier, we will be able to provide a quieter more efficient turbine to our customers and all at a better price.

Our plans are well beyond the market in the United States, and as a worldwide distributor there is still a very large void in the market. The current #1 supplier, Vestas, installed 35, 000 Mega Watts worth of power in 2009, while #2, Enercon, only installed 19, 000 Mega Watts. This shows that there is huge opportunity for a wind turbine dedicated company to make a huge impact on the market. Vestas is one of the major companies we will be competing with along with GE energy. Not only is it the current leader, but also in 2008 they expanded their United States headquarters.

Where this company and all of the others seem to lack is that they focus strictly on the quantity of wind turbines they sell, and don't pay enough attention to the noise pollution that their products create. Our company will put a large emphasis on reducing the noise pollution, thus making our product an easy sell, helping us to drive towards the top of the market rapidly. Though there are many companies that contribute to the wind turbine market, most of them are very small divisions of general energy companies.

So as a company focused strictly on wind turbines, and the research and development of them there is a great amount of business to market us towards. Another, competitor is Windustry which promotes progressive renewable energy solutions and empowers communities to develop and own

wind energy as an environmentally sustainable asset. Through member supported outreach, education and advocacy we work to remove the barriers to broad community ownership of wind energy. Regulations & Codes that affect our product We need to adhere to Federal Regulations

All regulations from the Federal Government must be followed prior to following the State of Maine Regulations. Hence, we need to adhere to the (1) Federal Energy Regulatory Commission (FERC) which requires our company to provide a (2) quantitative estimate of the impact of the project on sound levels at identified noise sensitive areas. Along with that the (3) Maine Department of Environmental Protection (MEDEP) needs us to establish a quantitative sound limit for our Silent Windmill projects in Maine. We would need to provide an (4) hourly sound level limit that applies to our new facility property boundaries and nearby locations.

(6) The operational Sound hourly must be equivalent to the sound levels resulting from facility operations, this we would need to limited to 75 dBA. (7) Under FERC the project managers must identify all noise sensitive areas such as schools, hospitals, or residences. Hence, before putting up any windmills we'd need to do a land survey. (8) FERC stipulates the use of the day-night sound level and limits attributable to a facility. So the day-night sound level can have 10 decibels added to sound levels occurring during nighttime hours between 10pm and 7am. We need to adhere to City of Calais, Maine Regulations

Our companies' windmills noise level generated will not be (1) objectionable due to volume, intermittence, beat, frequency, or shrillness. Existing (2) Noise Levels establish existing acoustic conditions near the terminal site;

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hence we need to perform a (3) sound monitoring station to satisfy MEDEP regulation. The station would (4) measure sound levels with meters the must meet type 1 performance requirement of the American National Standard Specification for Sound Level Meters. (5) Noise Monitoring Locations will be set up so our windmill location is six miles southeast of downtown Calais.

Hence a long term sound monitoring base must be established. (6) This is to prevent noise from Noise Sensitive Areas which we must control noise to between 50dBA and 60dBA (7) Noise Mitigation calculation must be predicated by Silent Air Co. to meet the maximum sound levels from facilities must comply with all FERD and MEDEP sound limits. Business Model The mission statement of our company is “ Creating efficient energy for a quiet future”. This mission describes the goal of our company briefly. We want to take noisy windmills and control the noise to a low level.

The Product/market scope of our company is to attract large energy producing companies on a state-by-state basis and state governments. We understand that we will not sell these things to everyday people. These turbines cost millions and the government actually seeks alternative energy sources nowadays. Our basis for differentiation from the other companies out there is the reduction of noise production by 10 dB (half the noise) while keeping high energy production/efficiency. This way we can compete with giants like GE or other manufactures.

Strategic Resources that makes us stand out is our Engineering knowledge of acoustics, mechanics, and electronics. Also a rising public desire for clean, efficient energy can get us into the market if people believe in our idea. Our target consumer is going to be State governments and large energy

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production companies. Lots of states like Maine, Massachusetts, and California are looking into green energy and us going in at this time is perfect. We'd like to have a sales representatives and advertisements in magazines about renewable energy.

Some magazines can include PopularScienceand IEEE Spectrum. We want to price the mode at a manufacturing price of \$1. 1 million and a sales price of \$3. 5 million. Our suppliers will be a U. S. A. based manufacturer. And our partner company would most likely be General Electric Licenses & Permits A lot of research has gone into the requirements to get Silent Air Co. started. We will be located in Maine, and have found all of the licenses and permits that will be required for our start-up. Title 13-C of the Maine Business Corporation Act, as well as Title 13, c.

22-A of the Maine Professional Service Corporation Act and Title 5, c. 6-A of the Model Registered Agents Act dictate the different permits and licenses we will have to obtain. All of the licenses and permits required are very basic permits for a typical start-up company. We will need to obtain a Business License, Federal License, and a Sales Tax License. Some of the permits required are a Fire Department Permit, an Air andWater PollutionControl Permit, a Sign Permit, as well as generallyHealthDepartment Permits and clearance for business zoning.

To ensure that nothing sneaks through on us, we will have a lawyer who specializes in Business Law to check everything over for us and be sure we are on the right track. We have been in contact with Joseph Cassidy Esq. and though we do not have a contract set with him yet, he has been very helpful in assuring us that we are on the right track so far, and he is dedicated to us

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staying on track. Having all required permits and licenses is very important and is not something that we will overlook. Licenses Businesses require lots of licenses and our company must adhere to lots of things.

Being that it needs to be manufactured, shipped, tested, and guaranteed to work properly we have lots of forms to fill out. All the forms above are related into opening a business in the state of Maine. Looking through these form we can see that lots of money is needed and forms to be completed. All these forms must be completed since it is under the Title 13-C of the Maine Business Corporation Act, Title 13, c. 22-A, Maine Professional Service Corporation Act, and Title 5, c. 6-A, Model Registered Agents Act. Permits

Permits are necessary for lots of things when starting a business. For example we need a fire department permit so we can be ensured during fire damages, an air and water permit, sign permit, county permit, state permits, and health permits. Most of these permits are placed to control certain variables a company might not have thought about. FinanceCritical Considerations Going into the wind turbine business there are a number of things that we will need to consider for ethical and environmental concerns to make sure we are a responsible, friendly, green company.

One of the main concerns of ours is keeping the noise level to a minimum with our product. Our product promises a windmill that is silent during normal operation hence replacing noisy windmill farms problem of noise. So what if something goes wrong and the windmills become noisy? Maine Department of Environmental Protection (MEDEP) – establishes the quantitative sound limits for new projects in Maine. Hourly sound level limits apply at the facility property boundaries and nearby locations.

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The operational Sound at hourly equivalent sound level resulting from facility operations is limited to 75 dBA. So we need to insure that our Silent Windmill never goes above that value. Many people will be affected by noise issues if they were to arrive, which is why it is so important we don't let that happen. Since this issue is on a much larger scale than one consumer being unhappy we need to keep the state of Maine happy along with nearby neighboring towns and cities. A noise issue that may arise not only bothers the windmill farm owner but residents that may be a mile away.

Hence, we need to consider the towns, cities, and the state of Maine, along with the federal government when it comes to noise operations. The restrictions can be even tougher to meet in different areas, and we are committed to meeting any challenges that we are faced with in this regard. Under FERC the project managers must identify all noise sensitive areas such as schools, hospitals, or residences. A limit of 55dBA requirement during the daytime hours, the existing noise levels established from existing acoustic conditions near the terminal site, perform sound monitoring to satisfy MEDEP regulation.

Hence we will build a Noise Monitoring Location our windmills are location six miles southeast of downtown Calais. Hence a long-term sound-monitoring base must be established. Noise Sensitive Areas we must control them to satisfy a noise to between 50dBA and 60dBA. Looking at alternatives and consequences of a noise issue our company decided that we will monitor our windmills from a noise monitoring location six miles away to ensure all noise is in accordance with regulations and actually silent.



This station will be unmanned but equipped with a monitoring system capable to collect data and send the results to our company. All noise issues will be then dealt from our central monitoring station within our company headquarters. This will ensure we have a minimal effect on noise pollution in our area. Another concern we will take into serious consideration in our business plan is being sure we are friendly to local wildlife, both with our headquarters and with the product we sell.

A common concern regarding the environment is the protection and safety of the local wild life, and in particular, local birds. If a bird were to fly in to one of the blades of the turbine, it could be detrimental for the bird, which is a dilemma we aim to eliminate. Because we cannot control where our customers put up the wind turbines after we have sold them, we will offer animal protection education, as well as incentives for customers who excel in the safety of their local wildlife.

We plan to educate our customers via pamphlets and brochures about the local wildlife as well as the impact that their participation with our wildlife protection efforts can make. Some of the incentives we are prepared to offer to our deserving customers is a % discount on our products. To show that we are dedicated to the protection of the wildlife, we are also going to donate a portion of our profits to local wildlife protection agencies, so that this money can be used for habitats and other things that the agencies see fit for the protection of the animals.

These measures will ensure that we keep the wildlife fresh in our customers mind, thus minimizing the danger to the wildlife. The final main concern we will keep in mind through this process is the pricing and affordability of our

product. Wind turbines are big ticket items, there is no getting around that, but there are a number of things we can do to ensure we remain a viable option to our customers. We need to be competitive so that we don't lose business to our competitors, but we need to make enough revenue to have an attractive payback period and rate to our investors.

Since we are placing our corporation in the state of Maine we could start with talking to the state's official offices along and let them know that the windmill farms would end up paying for themselves after a short amount of time since they could then start cutting back the prices of energy in the state. With the state of Maine and the federal government we can consider where they think would be the best place to place have the wind farms in order to produce the best output for quality of energy.

An alternative that we can make or change is the materials of which each mill is made out of, and to use cheaper parts to build with. But with that option it brings into account the fact that they may not last as long and they won't be as effective as they would be if we used the original material. They might be cheaper but another issue is that they may fall down or get damaged in stronger storms and then we would have to rebuild which costs more money. As a company we are dedicated to keeping all options open to remain fair and competitive.

We understand that the market is constantly changing, and we will need to be able to adjust with it. All options will remain open, and our dedicated Research and Development teams will be able to keep up with the growing and evolving market. Conclusion With the passage of time and the advent of globalization, there is increasing research and development put into <https://assignbuster.com/competitors-comparison-with-our-product/>

information technology enabling better production and provision of more sophisticated products.

The use of technology is constantly evolving and companies are expected to be agile in order to create and maintain a competitive advantage over its rivals. Silent Air co. aims to benefit its consumers with the latest advancement in technology. As suggested by the mission statement of company, "efficient energy for a quiet future" Silent Air co. plans to provide the optimal solution when it comes to the provision of wind turbines which would benefit, not only the consumers but also the society as a whole by eliminating noise pollution while performing efficiently as an energy producing agent.

We would like to conclude this report with a notion that this is not the most comprehensive analysis report but it surely covers what had seemed important to us without any disrespect to any other issues or concerns that were probably missed due to shortage of time or lack of resources. The major aspects of the business, its legal constraints and financials were elaborated in the report giving a gist of what this company is offering to its customers and how. In order to present this report the following components have been addressed,

Executive Summary 2 Introduction 3 Company Name Product Organization Chart Drawing Project Planning 7 Competition Regulation & Codes Business Model Licenses & Permits Finance 9 Estimated Cost Capital Critical Considerations 11 Conclusion 12 Appendix 13 We hope that this attempt comes up to the expectations of the competent authority and certainly wish

that if not whole then some areas covered in this report give a true picture of the comprehensive structure and composition of this business. Appendix