

### **Network wind turbines**

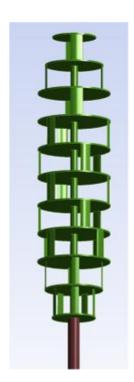
# The new quiet and discrete alternative to electricity mass production.

### **CORPORATE PROFILE**

Wind-Do is a Montreal-based industrial company focusing on the development, production and commercialization of network wind turbines. This new generation of green electricity production tools will have a high impact on the energy market. The advantages on current wind turbines are numerous:

- Our electricity production cost will be competitive with gas and coal generation, without subsidies.
- The flexibility of the network installation (from 10KW to 10 MW) favours both large wind farm and small self-production system.
- Our proximity model have enclosed moving-parts making them quiet and discrete, allowing them to be installed near the end users, reducing stress on the power grid.
- As installation cost per Kilowatt will be less than half the cost of giant wind turbines, it will reduce the average wind speed requirement for profitability, and multiply the potential zones for new installations.

Wind-Do's technology has been optimized by **CFD** (Computational Fluid Dynamics) research and has generated few pending patents. After the development of efficient wind farms and the optimization of our fabrication process, we will manage the international deployment of our products base on royalties and/or by a partnership with selected corporations.



### **MARKET OPPORTUNITY**

Global market for wind turbines installation is estimated at \$95B per year. The growth of this market is severely challenged by few factors:

- 1- The resistance of communities to allow new installations because of visual and noise disturbance. This pushes wind farms installations far away from living areas (even offshore), which increasing the installation and operation costs.
- 2- The need for subsidies (feed-in tariffs) to be profitable; those are continuously decreasing due to budget pressure on governments.
  - 3- The intermittent character of wind electricity production.

Wind-Do's products address directly those problems in order to gain market share:

1- Low noise generation due to the enclosing of all moving parts inside an apparatus. This makes the operation of Wind-do's turbines naturally quiet and acceptable as close as 100 meters of living

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areas (300 meters for our first model, the rural wind turbine). This means that good sites abandoned due to neighbourhood resistance will become available again, and that density of wind turbine installation can be increased.

2- Lower electricity production cost, from 2 to 8¢ per KWh (depending on average wind, model, financing and maintenance cost), compared to 7 to 12¢ per KWh for giant wind turbines (offshore wind energy costs twice this amount). On a good site suitable for wind farms, our production cost will vary from 3 to 5¢ per KWh, which is competitive with coal electricity generation. Note that where electricity retails 10¢ and more, a site with less wind will be able to produce electricity that is still cost competitive if directly used by the producer. This new market segment of energy autonomy for small and large corporations can become as large as the basic wind turbine market.

- 3- Wind-Do's products reduce the intermittence of wind turbines energy production:
  - a. A more widely spread production facilities will reduce the number of unproductive periods. Our products will favour a wider diffusion of wind farms.
  - b. The limitation of the maximum power output from 50% to 75% of the actual capacity of a wind farm, forcing the use of energy storage, such as geothermal heat or batteries. The possibility to split electricity production will be a built-in feature of our network wind turbines.

We believe our concept of network wind turbines will outclass the giant wind turbines in their \$95B market. As energy prices increase and subsidies phase out, Wind-Do's market should continue to grow strongly for a few decades. No other product available in the marketplace offers the advantages of our network wind turbines. Today, with the power of computer simulations (CFD), Wind-Do is able to validate, improve and optimize its wind turbines, and guarantee the efficiency of its configuration. For decades, the major of wind turbine manufacturers (GE, Vestas, Siemens...) have increased the size of wind turbine, always reaching for bigger. For simple structural questions, Wind-Do's wind turbine will not be able to reach that size ... and it is a good thing because we believe in smaller, more efficient and networkable turbines.

**Rural Wind Turbines** will be our first family of network wind turbines. They will fit in the ditches of cultivated land **without using a square meter of productive ground.** Rural wind turbines are comparable to the size of a tree (10 m. mast and 10 m. turbine). This human size apparatus can be delivered and installed with standard trucks and cranes. The masts will be hammered in the ground in series, each turbine installation will be completed within few hours. The size of the apparatus allows the purchase of small components that can be produced by thousands of corporations around the world. The size of the apparatus also allows the turbines to be produced in dye casting plastic (plastics are hydrophobic, which will enhance the Nordic capability of our turbines).

The rural wind turbine market will not have to face international competition from China for example. The apparatus is expected to be shipped in one piece ready to use at a cost of \$8,000. Importing overseas an assembled turbine may cost up to \$4,000 only in transportation, and an apparatus that must be assembled on site will not be a viable competition.

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### MARKETING STRATEGY

Our mid-term objective is to reach a sale price for a wind farm below \$1M per megawatt installed and connected. At that point, Wind-Do will be in a leading position in a market where the installed megawatt of wind electricity costs an average of \$2.5M.

- For the first year, Wind-Do will offer the rural wind turbine in very small networks, or even as a single unit. The sale price will be \$30,000 for a single installation, or \$100,000 for a network of 5 wind turbines. At this point, we will not be the cheaper, but relatively competitive. Our marketing strategy for this period can be summarized in the following points:
- Search for corporative customers ready to invest in a fair installation in order to enhance their public image.
- Search for governmental infrastructures that can be suitable for our turbines, since they have the mandate to favour green solutions. (We have a preliminary agreement with Technoparc Montreal.)
- Request demonstration subsidies to make those first installations profitable for users. (Hydro-Quebec, BEIE, MDEIE...)
  - Make sure our first installation will be well covered by specialized media.

In the second year, we will be ready to offer our first one-megawatt wind farms. Our objective is to build one farm in Quebec, one in Ontario and another one in New England. We will take advantage of the feed in tariffs to enhance our offer. However, if needed we will be able to propose electricity at 10 or 20% lower rate than the competition. We will seek to install these wind farms where there is a strong average wind, but also where local communities had already rejected giant wind turbines.

If we can secure the appropriate subsidies, we will also build a one-megawatt facility coupled with geothermal heat storage to offer the first ever wind farm with a 50% efficiency rate.

In the third year, we will start to battle for a significant share of the wind electricity market. Based on market evolution, we will use feed in tariffs to offer high profitability to our customers, or we will offer electricity at a cost 20 to 40% lower than actual rates. At this point, Wind-Do shareholders will most

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probably see purchasing interest from major players of the energy industry, or will plan the initial public offer.

### TECHNOLOGY AND INTELLECTUAL PROPERTY

Wind-Do state-of-the-art technology is subject to three provisional patents applications so far. We foresee other patent applications, as we will enhance our technology. The board of direction will have to define the intellectual property (IP) policy of Wind-Do. An integrated suite of patents may cost many hundred thousand dollars in the first few years, and as much to defend them. We may decide that these funds could be used more effectively in our marketing process, keeping in mind that Facebook© and Groupon© have been copied thousands of times and are still world leaders in the niche markets they created.

Our IP will protect us again abuses. However, our intention is to offer services that will be more valuable than the royalties cost for our licence partners.

### MANAGEMENT TEAM

**François Gagnon** Eng., is the founding partner of Wind-Do Inc. He has developed the product's concept, the business strategy, and had funded all current pending patents. As industrial engineer and entrepreneur, Frank had founded and operated several factories in the glass and lighting industries. He is also known as a product designer that always fills the needs of its markets.

**James A. Morin**, CEO of Hyland Capital Inc. has managed a diligent verification of Wind-Do numbers, and will support our funding effort.

**The advisor committee** count: Mr. *Alain Van Ranst*, CEO of CENURBE in Belgium, who has provided technical advices on power production and an introduction to European market. Mr *Stéphane Lessard*, CEO of CO2 Vortech & Mr. *Lamine Kalla* Phd has supported our CFD R&D.

The objective of Wind-Do is to develop a strong team of professionals that will be able to keep us ahead of our market. According to our budget, we will build expertise in aerodynamics, structure, and power transmission, but also in purchasing, technology watch, marketing and finances. This team will be the foundation of our international licensing strategy.





### **BUSINESS PLAN**

As the sales potential is vast, financial objectives for the first three years will depend on funding. The board of direction will have to optimize expenses for IP, Marketing, R&D, production facilities, and keep a reasonable cash flow. The corporation have the following objectives:

- 1- Generating annual sales revenues of \$500,000 for year 2013, (20 to 25 rural wind turbines, sales at \$25K per unit). The sales will reach \$5M for year 2014, (3 X 1 MW wind farm at an average of \$1.7M each). The sales of year three will exceed \$17M with the production of 12 wind farms at an average sale price of \$1,4M.
- 2- We expect to reach the breakeven point in the middle of the year 2013, and to be profitable at the beginning of 2014.
- 3- We will achieve first level of industrial production at the beginning of 2014, and start funding and planning of the first large-scale production factory in year 2015.

In order to achieve those objectives, Wind-Do's business strategy will involve:

- 1- The production of the demonstrator will be completed four months after a successful crowdfunding.
- 2- Complete the first funding round of \$250,000, and develop preliminary agreements for the second round. This could include loan, subsidies and private equity.
- 3- Seek to include in both rounds a CLD loan, an loan for R&D tax credit, some BEIE or MDEIE subsidies, LPPE bank loan for equipments, and private or corporative equity funding.
- 4- In order to be able to achieve a production of 2 to 5 rural wind turbines per working day, the first industrial factory will need a surface of 3000 sq.m. or more.

#### FINANCIAL HIGHLIGHT & INVESTMENT REQUIREMENTS

By law, a corporation cannot discuss finance and investment requirement with public.

**The crowdfunding** is there to help Wind-Do inc. produce the first demonstrator, which is mandatory before we can be funded by angel or venture capital firms.

The \$55,000 request will be used as follow:

Raw material for the apparatus \$25,000

Location of a small space for 3 months (with expenses) \$5,000

Location and purchase of small equipments \$5,000

On site installation & transportation cost \$5,000

Temporary manpower \$7,500

Miscellaneous \$3,500

Crowdfunding expenses \$4,000

Kindly be advised that with these funds, there will be <u>no salary paid to the founder of Wind-Do</u>. The funds will go exclusively to the building of our demonstrator. Should crowdfunding exceeded the objective of \$55,000, the founder may quit is part time job and work fulltime for Wind-Do Inc.

### **PLEASE:**

The second best thing you can do after pledging few dollars on our project is to take 10 minutes of your time to forward it our crowdfunding request to your friends, contacts, and everyone's who cares for the future of our planet.

#### MANY THANKS,

FRANK