

WIND HARVEST INTERNATIONAL, INC.

Executive Summary of Financing & Licensing Proposal Updated September 2024

THIS DOCUMENT IS INTENDED FOR DISTRIBUTION TO POTENTIAL QUALIFIED INVESTORS IN WIND HARVEST INTERNATIONAL, INC. AS AN INTRODUCTION TO COMPANY OPERATIONS, OBJECTIVES, AND STRATEGY AS WELL AS A SUMMARY OF PAST AND CURRENT CORPORATE FINANCE ACTIVITY. IT IS NOT MEANT TO PROVIDE FULL DUE DILIGENCE FOR POTENTIAL INVESTORS AND IS NOT AN OFFERING OF SECURITIES.

The Company

Wind Harvest International, Inc. ("Wind Harvest" or the "Company") was incorporated in Delaware in January 2006 as a successor to the Wind Harvest Company ("WHC") which was formed in 1976. The two companies are witness to the entire modern history of Vertical Axis Wind Turbine ("VAWT") technology development.

More recently, our Company has developed and demonstrated three generations of H-type VAWT models. These prototypes provided validating data for development of our proprietary aeroelastic computer models, seven new patent applications, and the development of our game changing fourth generation design. We believe that our fourth-generation designs are suitable for mass development in commercial, distributed and utility grade wind turbine markets.

Our *Wind Harvester*® 4.0 Series solves significant problems that have stopped the mass deployment of VAWT technology. In short, we believe we have solved performance, durability and cost issues which have prevented VAWTs from making use of turbulent wind found nearer the ground. In the process, we open new markets for wind energy production:

- Understory "Mid-Level Wind" Development in Existing and New Wind Farms (5-200+ megawatts of capacity per project): We define Mid-Level Wind as the region of turbulent airflow between 15 and 100 feet (4.5-30 meters) above ground where conventional utility scale Horizontal Axis Wind Turbines ("HAWT") don't operate.
- **Distributed Grid** (2.0-50 megawatts of combined wind and solar capacity typical): This market is defined by utilization of direct connection to local distribution lines (avoiding long distance transmission costs) by local utilities like municipal utilities and cooperatives.
- **Remote Location Development** (0.5-50 megawatts of capacity typical): Remote locations with isolated grids or microgrids without the infrastructure for traditional utility grade HAWT turbines—island communities, remote continental settings, and scientific and military applications.



Our *Wind Harvester* 4.0 50-75 kW series was designed to solve the following traditional problems with VAWT technology:

- **Performance:** The 4.0 Series meets IEC wind class II (Medium Wind) standards with capacity factors equal to HAWT turbines of the same class.
- **Durability:** Advanced engineering and field-validated aeroelastic modeling have been used to produce designs with an estimated 70-year design life.
- Cost: At both moderately low and high rates of manufacturing production, we believe that we can deliver energy at or below the price of competing sources of energy where wind resources are good.

Our current primary objective is to fully commercialize our 4.0 Series turbine. Our Company is now seeking equity funding to complete certification of our fourth-generation designs and launch our *Wind Harvester* brand into commercial sales.

Commercialization Milestones

The wind industry measures product development by achievement of Technology Readiness Level ("TRL") and Manufacturing Readiness Level ("MRL") classifications.

We believe our next major milestones that significantly increase the value of the Company include:

1. Technology Readiness Levels 8—Third-Party Certification

- 1.1. Certification of our 4.0 series turbines to International Electrotechnical Commission (IEC) and American Clean Power ("ACP") Small Wind Turbine standards during late 2024/early 2025: IEC/ACP Certification is the primary industry benchmark for wind turbine operational reliability in world markets and includes certification of power performance, loads, safety and function, and acoustics. We are currently ready to produce and deploy two units at the UL Advanced Wind Testing Facility at West Texas A&M University. These turbines will be installed near our Model 3.1 prototype turbines which have completed TRL 7, full scale prototype, testing in turbulent wind conditions.
- 1.2. Power performance and acoustics certification in a 50 Hz grid setting: This will involve installation of one or two test turbines in Barbados. Acoustics and power performance tests are required to sell turbines in many countries with 50 Hz transmission lines and can be achieved in a month or two after installation.
- 2. Technology Readiness Levels 9 and MLR 9—First Commercial Project, Wake Studies, Location Modeling, Wildlife Studies, and Manufacturing of Small Lot Production:
 - 2.1. Manufacturing and installation of three to four turbines in a commercial/institutional setting.



- 2.2. Advanced Doppler LiDAR data collection on the wake from an array of Wind Harvesters at the UL Advanced Wind Turbine Test Facility and at other installation sites. Use the wake to validate modeling that predicts how wake from VAWTs interacts with HAWTs in wind farms.
- 2.3. Wildlife "Bird and Bat" behavior evaluation at the UL Advanced Wind Test Facility and at the Barbados project site. Evaluate the effectiveness of bird and bat motion detection and deterrence technologies.
- 2.4. Developing a redundant manufacturing chain of supply building from the base of our existing third-party vendors
- 3. Technology Readiness Level 9/Manufacturing Readiness Level 10 (System Proven in an Operational Environment/High-Rate Production in Place/Early Broad Market Sales):
 - 3.1.Banks have due diligence data from sufficient hours of *Wind Harvester 4.0* operational time to provide project loans with the turbines as collateral.
 - 3.2. Development of markets for direct sale of goods to independent generation project developers, as well as a market for the licensing of the Company's intellectual property in 2027-2028.
 - 3.3. Negotiating terms on initial project development deals including financing for these transactions.
 - 3.4. Placing orders for inventory suitable for construction of 50 4.0 series units.

Additional Research, Development and Certification Activities following Milestone 1.0:

Following certification of our *Wind Harvester 4.0* model and subsequent funding rounds we expect to pursue the following objectives in research, development and certification concurrent with pursuing Milestones 2.0 and 3.0:

- 1. Wind Harvester 4.0H. This turbine will have minor modifications needed to become a wind class I turbine that can survive Class 5 hurricanes and typhoons.
- 2. Wind Harvester 4.1 incorporates the refinement of production and installation methodology with a that reduces production and installation costs.
- 3. Wind Harvester 5.0 will reduce the cost harvesting energy from trade winds on islands, and other low but steady wind locations.
- 4. Wind Harvester 6.0 will be designed to maximize the extraction of wind energy from narrow ridgelines.
- 5. Wind Harvester 7.0 is a version that can be installed on barges along with batteries to supply electricity so villages and other places where the wind is much better a short distance offshore.



Revenue Streams

Going forward, the Company seeks revenues and profits from the following sources:

- 1. Sale of *Wind Harvester* turbines, support structures and control equipment. *Note:* Some customers will want to source their own towers, generators, and control equipment.
- 2. Royalty income from the licensing of Wind Harvest intellectual property. In 2024, the Company has been granted three patents that are expected to be critically needed for any VAWT to do well in the turbulent, mid-level wind resource. Six additional patents are pending.
- 3. Revenues from early "proof of concept" projects in which the Company will hold a debt or equity interest.
- 4. Project development services including turbine placement modeling, construction management services, commissioning and general contracting services.
- 5. Operational installed project support and maintenance: 24/7 fault monitoring, field inspection and maintenance contracting, part- and full-time operational support, and extended warranty plans.

Markets for Our Products

The competitive landscape for wind power generation, generally, is not just defined by competition from other wind energy projects. Our Company will compete against all forms of renewable and low carbon generation, and against the projected wholesale and retail cost of power from grid supplied power. In the end, the question, for any promoter of a particular breed of renewable energy product, is whether they can deliver energy at or below market cost over the life of the product.

The global market for renewable energy development was valued at between US\$475-564 Billion in 2022 with wind power making up roughly US\$81-90 Billion of this market based on a survey of multiple independent and government resources. It is common to see predictions of compounded annual growth rate ("CAGR") projections for the wind generation development of 6-11% per year through the 2030-2032 time based on a survey of multiple sources. Bloomberg in their November 2023 whitepaper, *Tripling Global Renewables by 2030 Hard, Fast and Achievable*, noted that based on their analysis of current pipeline projects and global policy that they projected a rough 2.1 increase in global wind generation capacity by 2030 and that, in order to meet "net zero" objectives under COP28 that there was a need to ramp up production and development rates to increase global wind capacity to 3.9 times 2022 installed capacity.

California is an example of a large market for VAWTs. Wind Harvest published <u>a report that estimates 15GW of turbines</u> (200,000 75kW VAWTs) can be installed in and around the state's existing wind farms. Like many countries (e.g. UK, Greece, Portugal), it is difficult to build new onshore wind farms because the good sites are already developed.

The important questions are not whether the industry is growing or whether demand exists for industry expansion. Instead, understanding how a new product meets customer needs at competitive rates will drive any assessment of whether it is worth investing in new technology development.



Wind Harvest has the first to market advantage with a huge untapped resource for project developers to finally be able to exploit.

Our Market Focus

Our focus is on the market segments where our designs can meet significant customer needs at competitive cost.

As noted earlier, our *Wind Harvester* 4.0 turbine is designed to fill four perceived voids in the current wind generation industry:

- Understory "Mid-Level Wind" Development in Existing and New Wind Farms (5-200+ megawatts of capacity): We define Mid-Level Wind as the region of turbulent airflow between 15 and 100 feet (4.5-30 meters) above ground where conventional utility scale Horizontal Axis Wind Turbine ("HAWT") don't operate. Studies from CalTech and other universities predict that "understory" installation of Wind Harvester type turbines can increase existing and new wind farm energy production by 10—300%.
 - The least expensive type of "understory" project adds capacity to the land but doesn't increase the size of the total transmission capacity of an existing wind farm. That and all the other expensive infrastructure have already been paid for. These "capacity factor enhancement" (CFE) projects will increase the CF by 10 to 30% and produce low-cost electricity even in early production runs when the sale price of Wind Harvesters is higher than it will be in the future.
 - For new wind farm development, integrated use of both VAWT and HAWT technology using shared collection, conditioning, and transmission infrastructure may allow considerably higher power density 2-4 times traditional HAWT developments per area of land utilized, significantly diluting both real estate and balance of plant/infrastructure costs.
 - O AI and high energy using data centers can be collocated in existing wind farms with Wind Harvesters supplying much of the energy the facilities require. When the wind isn't blowing, the transmission line can bring electricity to the facility. The double use of land, transmission line, and other infrastructure can make such colocations the best option for the owners of these energy demanding companies to inexpensively supply them with renewable energy.
- Multi-Megawatt Distributed Commercial Installations (0.5-10+ megawatts of capacity):
 Our turbines are suitable for industrial, commercial, and institutional customers with multimegawatt loads operating behind substations where constrained land, tight roads and zoning
 issues prevent the use of megawatt sized HAWTs. Provided a suitable wind resource, we can
 match or beat the cost of grid supplied power. Our primary market advantage relative to cost
 of power in such developments is avoidance of transmission charges on grid supplied power.
 Such projects are also attractive investments for corporations seeking reduced carbon
 footprint due to "Net Zero" pledges or regulatory carbon footprint demands in markets where



renewable energy supply is limited, or the cost of renewable energy credits are very high due to high demand.

- Distributed Grid (2.0-15 megawatts of combined wind and solar capacity): There are places around the world where wind is good but tall turbines are not permitted. These places have 11-33kV distributed grid transmission lines following highways and roads and distributing energy to small towns and settlements. Wind, which often blows at night and on cloudy days, is a great complement to solar and batteries. There are many windy locations where distributed grid projects that use Wind Harvesters will be profitable and HAWTs cannot be installed. Chief among them will be telecommunications sites on windy ridgelines where HAWTs impact views, transmission quality or have problems with road access to the higher elevation where many telecom towers are located.
- Remote Location Development (0.5-50 megawatts of capacity): Remote locations with isolated grids or microgrids without the infrastructure for traditional utility grade HAWT turbines—island communities, remote continental settings, and scientific and military applications—Customers in these settings typically face high cost of power and lack the resources for installation of multi-megawatt generation development. Our designs can solve problems in these constrained environments where traditional turbines either cannot go or will provide all the energy needed. Examples include:
 - The Company has an agreement to proceed on a pilot project in St. Croix, U.S. Virgin Islands. The 16-turbine project will provide electricity to the micro-grid that runs the large oil refinery on the windy land on the south of the island. The wind energy will offset expensive diesel generated electricity. The island has the need and mid-level wind capacity to install 100+MWs of Wind Harvesters.

Our products will also be viable alternatives in smaller distributed power generation applications where tall turbine issues stop them from being permitted or affordable.

More generally we seek to supply solutions for a variety of current commercial and institutional concerns:

- Meeting corporate and institutional pledges to attain net zero emissions.
- Allowing investor owned and government owned utilities to meet renewable energy mandates in regions with strong wind resources but constrained resources for additional renewable generation development.

The Domestic Landscape

As a US based company, Wind Harvest expects to gain major traction in the United States where our domestic sourcing, 40% project tax credits, federal and state grants and other subsidies significantly increase the profitability of projects and support low-production run, higher cost wind turbines.

According to the US Department of Energy's *Land-Based Wind Market Report: 2023 Edition* the United States saw development of roughly 8.1 Gigawatts (GW) of onshore wind development in 2022 at a rough investment value of US\$12 Billion. The International Energy Agency ("IEA") put total installations at 8.2 GW as of their June 2023 market update. In June 2023 the IEA projected an increase in US installations to roughly 11 GW in 2023 and 10.1 GW in 2024. This variable output



reflects significant supply chain, permitting, and financing concerns coming out of the pandemic and financing issues related to high interest rates.

Regardless of what many perceive as stalled growth in the domestic wind market due to those concerns, the capacity of wind development projects in the US interconnection queue hit over 300 GW at the end of 2022.

Those numbers sit against the backdrop of slow growth in domestic production capacity limited by both a rough 15 GW limitation of domestic primary production capacity and continuing raw material supply issues.

DOE reported in the above noted *Land-Based Market Report* that retail direct purchase of wind generation outstripped utility-based purchases for the first time in 2022 picking up at least 44% of new purchase contracts for new generation entering the marketplace.

Capital and Financing Requirements

Our Company currently estimates a potential need for \$18+ million in new equity investments to complete TRL 8 (certification) and TRL 9 (bank financing). The range depends on how much of the Company's equity is needed to finance the first projects that buy *Wind Harvesters*.

Currently our Company is seeking up to \$3.75 million the sale of either common or preferred stock for the primary purpose of attaining first milestone goals. The Company is open to combining the funding for TRL and TRL 9 into a single deal.

We sold 13,041,307 shares of common stock of 66,000,000 shares authorized for this funding goal via a crowdfunding offering that ended on April 29, 2024.

- Price per share: \$0.06/Share prior to bonus period ending
- Price per share \$0.07/share after bonus period ends on July 15.

The remaining \$3,750,000 in authorized common shares will be used to raise capital.

Financing History

When our Company was formed in 2006, it became the owner of 100% of the original company's assets including patents and prototypes. At that time, \$6.139 million had been recorded as paid in capital or debt financing into WHC since its founding. Our Company issued notes payable to WHC in the amount of \$125,000 and issued 4,545,569 shares of common stock to founding investors.

Since forming, Wind Harvest International has completed multiple rounds of Preferred Stock issues, sale of warrants, debt conversions, issuance of convertible and non-convertible debt securities.



This history is summarized in *Table 1: Wind Harvest International Financing Summary* on the following page. Please note the following:

- 1. All preferred shares issued by the Company to date are convertible to common shares at a 1:1 conversion rate per the terms of the shareholder agreements under which they were issued.
- 2. Pre and Post money valuations are calculated in Table 1.
- 3. Debt convertible to Preferred Shares or Common Shares as well as accrued interest on such debt issues is convertible at par value as described indicated on Table 2. Convertibility may be limited by total availability of authorized shares and/or date limitations.

Financials and Financial Projections

Note that this material is undergoing review for an audit and will be available soon. Please request

Valuation Calculations

Fully Diluted Post-Money Valuation after \$3.75M Common Share Raise

Share Price	Valuation	Туре	
0.07	\$ 3,753,775	Common Shares Remaining	
0.06	782,478	Common Shares Sold	
0.06	2,633,436	Common Warrants/Options Vested	
0.09	21,401,363	Preferred Shares Outstanding	
0.09	5,317,792	Preferred - Survivor's Turst	
0.04	668,000	Preferred Share Warrants	
	\$34,556,844	TOTAL	

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Capital Table Summary with Common Share Offering and Series B

Assumptions: Series B share price - \$0.21

Post \$15M Series B Valuation – \$122 million

		1		
PREFERRED SHARES	end of 2022	end of 2023	to date 2024	Total
Series A	100,739,757	100,739,757	100,739,757	100,739,757
Series A-1	109,985,503	109,985,503	109,985,503	109,985,503
Series A-2	13,347,356	13,347,356	13,347,356	13,347,356
Series A-3	11,467,847	11,467,847	11,467,847	11,467,847
Series A-4	1,922,221	2,111,110	2,252,457	2,252,457
Series B				71,428,571
Total Preferred	237,462,684	237,651,573	237,792,920	309,221,491
COMMON				
Original Issue	18,560,000	18,560,000	18,560,000	18,560,000
Reg CF and 506c (.06)			13,041,307	66,666,666
	18,560,000	18,560,000	31,601,307	85,226,666
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TOTAL Outstanding	256,022,684	256,211,573	269,394,227	394,448,157
Preferred - Warrants	16,700,000	16,700,000	16,700,000	16,700,000
Common - Warrants	14,057,930	16,405,286	17,215,594	17,215,594
Common Options - Vested		26,587,500	26,675,000	26,675,000
TOTAL	30,757,930	59,692,786	60,590,594	60,590,594
GRANT TOTAL			329,984,821	455,038,751
Shares Authorized			464,114,693	
506c Common Share W	8,284,406			
Common Stock EIP Opti	58,237,500			
Survivor's Trust Princip	59,086,575			
Total				125,608,481
Shares Post Series B - I	580,647,232			