Flower Turbines

The wind turbine you want to live and work next to. Goal to become a large global renewable energy company

Dr. Daniel Farb, CEO | dfarb@flowerturbines.com

Validation

Pepperdine University Business School picked Flower Turbines as one of the 10 Most Fundable Companies in America in 2020 out of 4500 companies examined.

Source

IMPEL +

Flower Turbines chosen as a 2021 Innovator by Livermore Labs in Berkeley and the US Department of Energy

Source

Solar Impulse Foundation picked Flower Turbines as one of their “1000 Efficient Solutions” for climate change.

Source

Award Winner

Winner of Dutch Sustainability Award Two Separate Years

Dutch Climate Minister at an Installation

Award Winner

A Winner of Yes San Francisco Cleantech Competition

SAN FRANCISCO
OFFICE OF ECONOMIC & WORKFORCE DEVELOPMENT

Mayor London N. Breed
Executive Director Sarah Dennis Phillips

December 20, 2023

Daniel Farb
CEO
Flower Turbines
dfarb@flowerturbines.com

Dear Mr. Farb,

I want to offer my warmest congratulations as being one of the innovators chosen to reimagine and transform San Francisco.

I am glad you are here to help bring sustainable and equitable growth to the City's economy. I look forward to helping you in accelerating your expansion from the startup phase, and hope to assist you in locating in our great City over the long term.

Congratulations again and look forward to connecting soon.

Happy holidays and best wishes for 2024.

Sincerely,

Small wind hasn't lived up to its potential as a distributed energy source — Why?

Low noise and efficiency don't mix.

Turbines close together interfere with each other

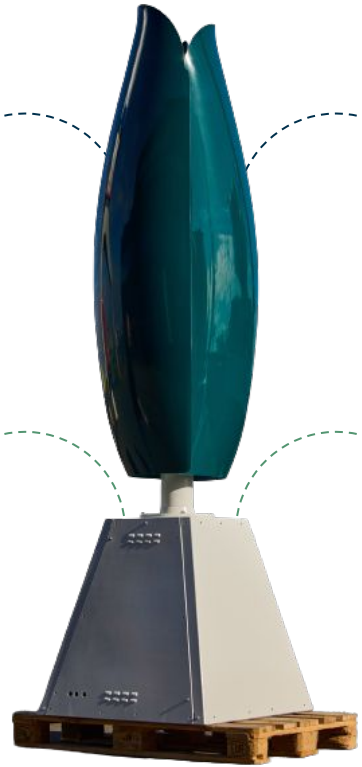
Controversial esthetics

Bird dangerous

Say Hello to Flower Turbines
It can provide a better solution than any other wind turbine

We patented how to make vertical axis turbines much more efficient. Third party report: noise less than wind

Beautiful yet efficient

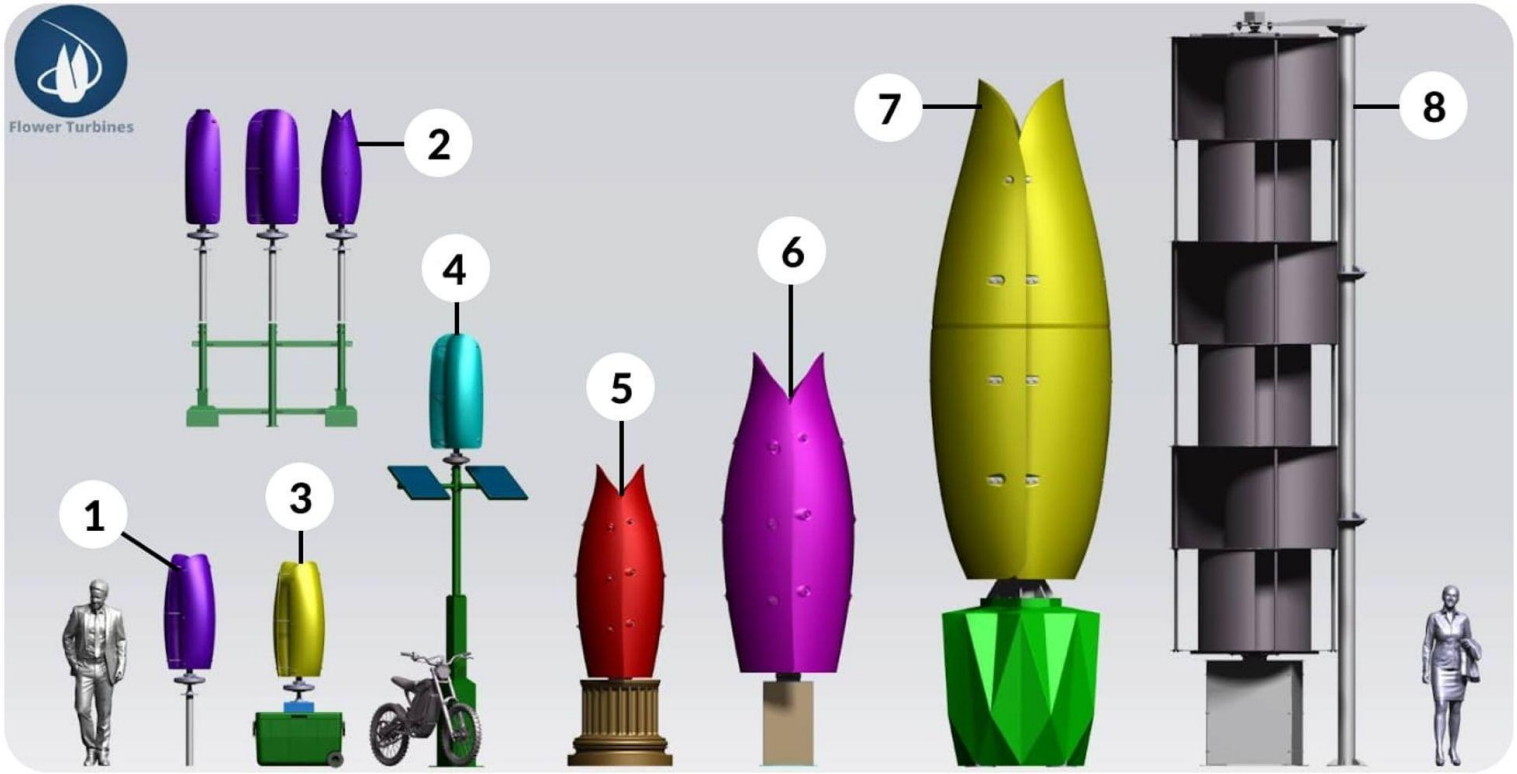


The turbines make their neighbors perform better.

Bird friendly

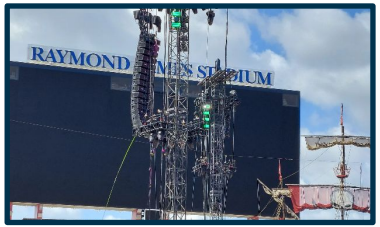
And they start at low speeds and survive high speeds.

The Product Line



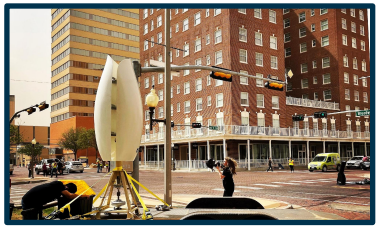
US and EU Sales and Manufacturing

Rooftop cluster for a project in Amsterdam



Helping to power a Coldplay concert

Hilton Hotel in Israel



Earth Day in Lubbock, Texas

City of Rotterdam; combined wind/solar e-bike charging

Z-Pole Switzerland

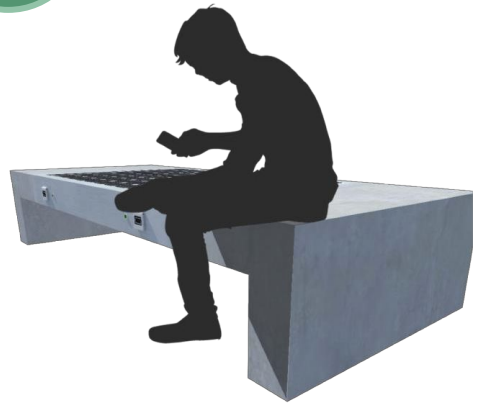
Single Color Turbine

Dutch Military: Proven Compatible with Radar

We power you

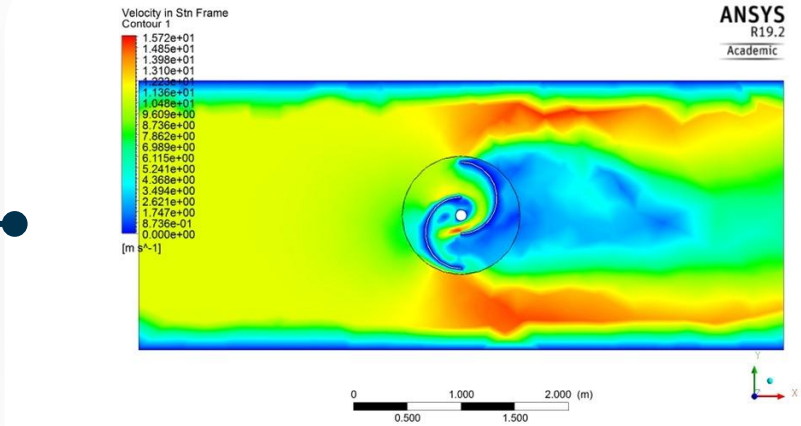
Charging stations for e-bikes, scooters, and mobility scooters, on and off grid

Charging banks for all types of devices



The patented design decreases turbulence, increases efficiency, and allows turbines to work together.

Wind from left, red highest velocity, yellow is outside wind speed, horizontal slice through the turbine's two blades, shaft in center.



Higher speed red area inside the turbine to hit the second blade and the turbine creates higher speed areas on the side.

Flower Turbines IP Categories—First Class Portfolio

We solved the 3 sources of turbulence and have moved on:

1. Within the turbine aerodynamics
2. Turbine to turbine aerodynamics
3. Building to turbine aerodynamics
4. Manufacturing: Greater strength and lower cost
5. Installation – Open markets
6. Electronics
7. Design Patents and Copyrights

We have patents and know-how addressing each. We also have copyrights and trademarks. Strong IP of over 30 patents, each often filed in several countries. Our two sets of disruptive innovations are aerodynamics and wind turbine electronics.

Elements of Our Patent Strategy—Multiple Innovations so No Other Wind Company Can Come Close

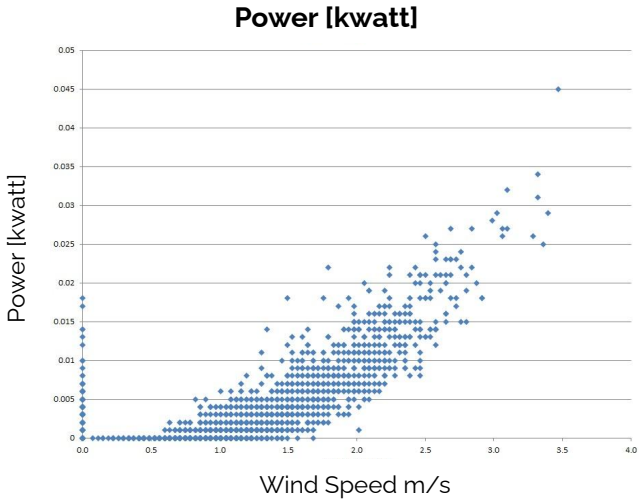
Portfolio Approach—Numerous Steps and Technology Areas to Overcome

New patents: Omnibus patents US Fast Track Leading to Patent Prosecution Highway

Establishing Long Term Value

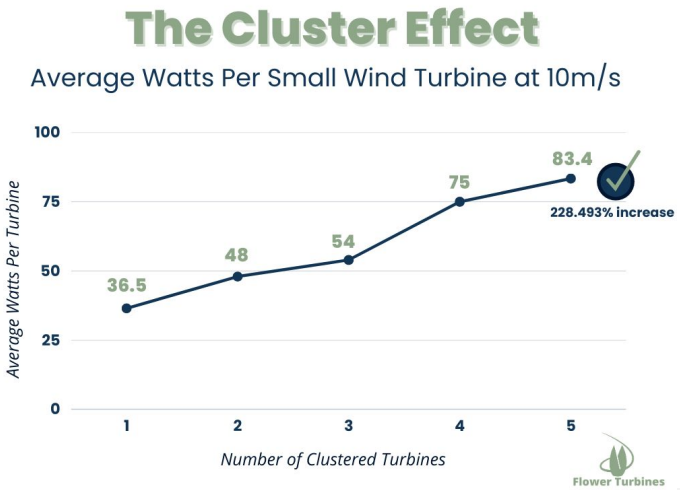
Utility patents supplemented with copyrights and design patents

Efficiency Even at Low Speeds; Actual Data on Earlier Version



Other turbines start turning here, but the Wind Tulips are already producing

Synergistic Clustering



Each turbine produces more and more power the more turbines are in a line in the correct configuration relative to wind direction. 5 turbines correctly placed produce 228% more power than 5 separate turbines.

Leverage exclusive cluster effect to enable projects in large numbers—estimate in real estate

10M large buildings in the US

X

30% in windy areas

X

10 turbines each of (conservative)

X

$20,000 per unit on ground and $5000 on roof

=

$750B

$600B (ground) and $150B (on roof)

Example 1: Rooftops on large commercial buildings

Example 2: Parking lots of malls, other large real estate (Corporate and Government):

Flower Turbines (Large Size) Compares Favorably to Solar in Windy Areas: Economic significance of the cluster effect

	Solar	Flower Turbines
Number of kilowatts capacity and kilowatt hours per year	20 and 27,381	20 and 50,000
Space in square meters (example: 10 story apt. building)	148.7	36
Cost of system with 30% Federal tax subsidy	$48,980	$70,000
Value of electricity per year	$4381	$8000
Payback period (years)	11.24	8.75
Revenue per square meter	$29	**$222** **Higher 770%**

This shows the marketing strategy: Use the cluster effect to make small wind farms, not one at a time sales.

* Zip Code 02532 on Cape Cod Using $0.16 per kilowatt hour

Competition

Turbine	Little direct competition because no other company solved the problems.
Charging	Our niche is reasonably priced, high quality, and is doing well in EU.

Turbine indirect competition is from other energy sources:

Low grid prices

Solution is on providing secondary value

Low solar prices

However, solar is also a good combination with our turbines, because the cost of only solar plus a lot of batteries is higher than solar plus wind plus fewer batteries. Solar installers are looking to balance their grids and have something unique

Low large wind prices

The low price is the price for the utility, but the price is higher after delivery to the customer. We compete with the price at the point of sale.

Selection of Some Top People in the Company

Dr. Daniel Farb

CEO and Founder, IP Manager

Startup experience in software, clean energy, medical. Won recognition in forums from US Congress to Israeli tech (top 45 in Israel's history) to CBS TV. Degrees in humanities, business, science.
Has over 80 patents.

Hani Gera

Business Development

Executive MBA, 15 years of corporate experience

Warren Stoll

COO

Lawyer by training. In addition to other work in operations and investing, exited four startups, one to Microsoft.

Ali Grattan

Marketing Director

Graduate of Texas Tech, Electronic Media and Communication, Content Creator

Ika Baitish

Mechanical Engineer

Graduate of Technion, expert in engineering software for complex shapes, engineered startup products for manufacturing for high-level clients

Turbines	Margin currently around 20%. Will improve with increased volume
Charging	Margin 20-40% in Europe.

Recurring Revenue Plans:

- Selling Electricity in Projects
- Advertising from Turbine and Network of Charging Stations
- Licensing Electronics Patents to Large Wind Companies

Fund Raise - $17M

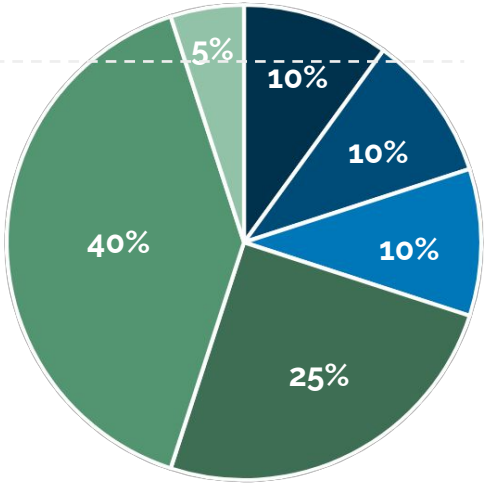
- Start: $2.5 M from founder, friends, family, and angels

Round	Amount	Share Price	Closed?
1	$1.07M	$10	Closed with waiting list 12/19
2	$1.03M	$30	Closed with waiting list 12/20
3	$9M	$70	12/30/21
4	$4.5	$12 (1:10 split)	Closed 2/17/24
5	$1.7M	$12	Closed 5/31/24
6	Asking $3-10M	$14	-In progress at https://www.startengine.com/offering/flowerturbines and https://www.frontfundr.com/flowerturbines in Canada

Non-Dilutive Funding

- Multiple small R&D grants in the NL
- Putting together plans for EU R&D grants
- Multiple small State University of New York research grants in association with Stony Brook University

Use of Proceeds



Public Relations	**10%**
Patents and IP	**10%**
Certifications	**10%**
Engineering, R&D, Manufacturing	**25%**
Working Capital, facilities	**40%**
marketing	**5%**

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Join us to change the world!

Dr. Daniel Farb, CEO | dfarb@flowerturbines.com