

PRE-SEED INVESTMENT · 2026

GeoWind

The Climate Intelligence Network,
powered by geometry.

Patented geodesic vertical-axis wind turbine (VAWT)
that turns low urban wind into power — and data.

CES 2026 Innovation Award Honoree · iF Design Award 2026 Winner



Geowind

Power of Nature

THE ASK

\$1M Pre-Seed to reach mass production

\$1M

Pre-Seed Round (SAFE)

\$10M

Post-Money Valuation

18 mo

Runway to Revenue

USE OF FUNDS

50%

Mass Production Setup

Tooling · unit cost ₩2.5M → ₩800K

35%

AI Climate Data Platform

Subscription infrastructure build

15%

IP & Operations

8-country patent maintenance

18-MONTH MILESTONES

Q3 2026

Mass production line live

Q4 2026

First 50 units shipped

Q1 2027

Climate data platform beta

Q3 2027

Subscription revenue begins

Two global awards. Two risks retired.

CES 2026

Innovation Award Honoree

Sustainability & Energy Transition

RETIRES MARKET RISK

- Technical completeness validated
- Pilot-program readiness signaled
- Partnership doors opened

iF DESIGN 2026

Winner

Product Design

RETIRES INSTALLATION RISK

- Urban & public-space viability
- User acceptance confirmed
- Regulatory-compliance signal

Design awards aren't trophies — they're third-party validation that the riskiest parts of hardware adoption are already solved.

Cities need power and data they can't get

75%

Urban Energy Gap

Cities consume 75% of global energy but generate under 5% locally. No viable small-scale urban wind solution has existed.

60–80dB Conventional Wind Fails Cities

Traditional turbines need high steady wind, large land, and produce 60–80 dB noise — incompatible with dense urban environments.

\$50K+ Climate Data Blind Spots

Hyper-local weather data is missing. Existing monitoring stations cost \$50K+ each, leaving urban climate intelligence fragmented.

0

No Scalable Solution

From rooftop micro-generation to utility-grade wind, no single platform has bridged this gap. Until now.

One geometry. Power and data, anywhere.



Geometry into energy

Patented geodesic VAWT operates efficiently in low or turbulent wind — no wind-direction dependency.

Lightweight, quiet, modular

Under 40 dB. Deployable on rooftops, coasts, or remote areas with zero wiring or excavation.

Every turbine is a data node

Integrated sensors capture wind, humidity, temperature, and pressure — turning each unit into a climate intelligence point.

Why the icosahedron works

1

Icosahedral frame

Evenly distributes aerodynamic stress across 20 faces — self-balancing torque.

2

Low RPM / high torque

Continuous generation in variable wind, even below conventional cut-in speeds.

3

Integrated IoT sensors

Wind · humidity · temperature · pressure logged in real time.

4

Under 40 dB operation

Quiet enough for residential rooftops and public plazas.

INTERNATIONAL PATENT

PCT/KR2023/019844

Filed in 8 jurisdictions:

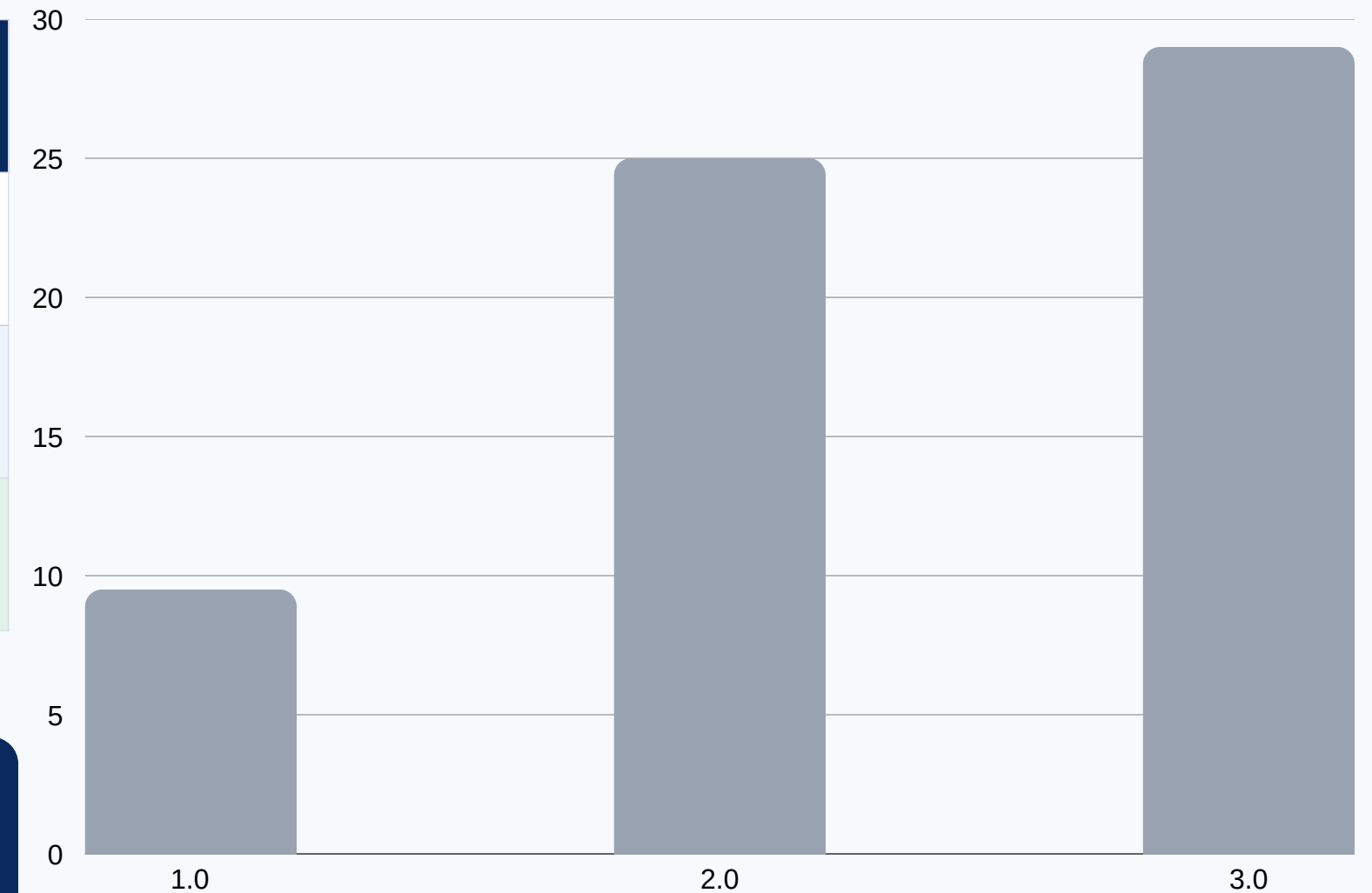
KR · US · CA · EU · CN · JP · IN · VN

KEY CLAIMS

- Self-balancing torque system
- Aerodynamic stability at high wind
- Modular assembly architecture

3× the voltage of TESUP — same generator

Blade (same generator, ~10 m/s)	RPM	Voltage	vs TESUP
TESUP Atlas Low-Wind	125	< 10 V	baseline
GeoWind GW500 Flat	125	24–26 V	+2.5×
GeoWind GW500 Curved	133	28–30 V	+3×



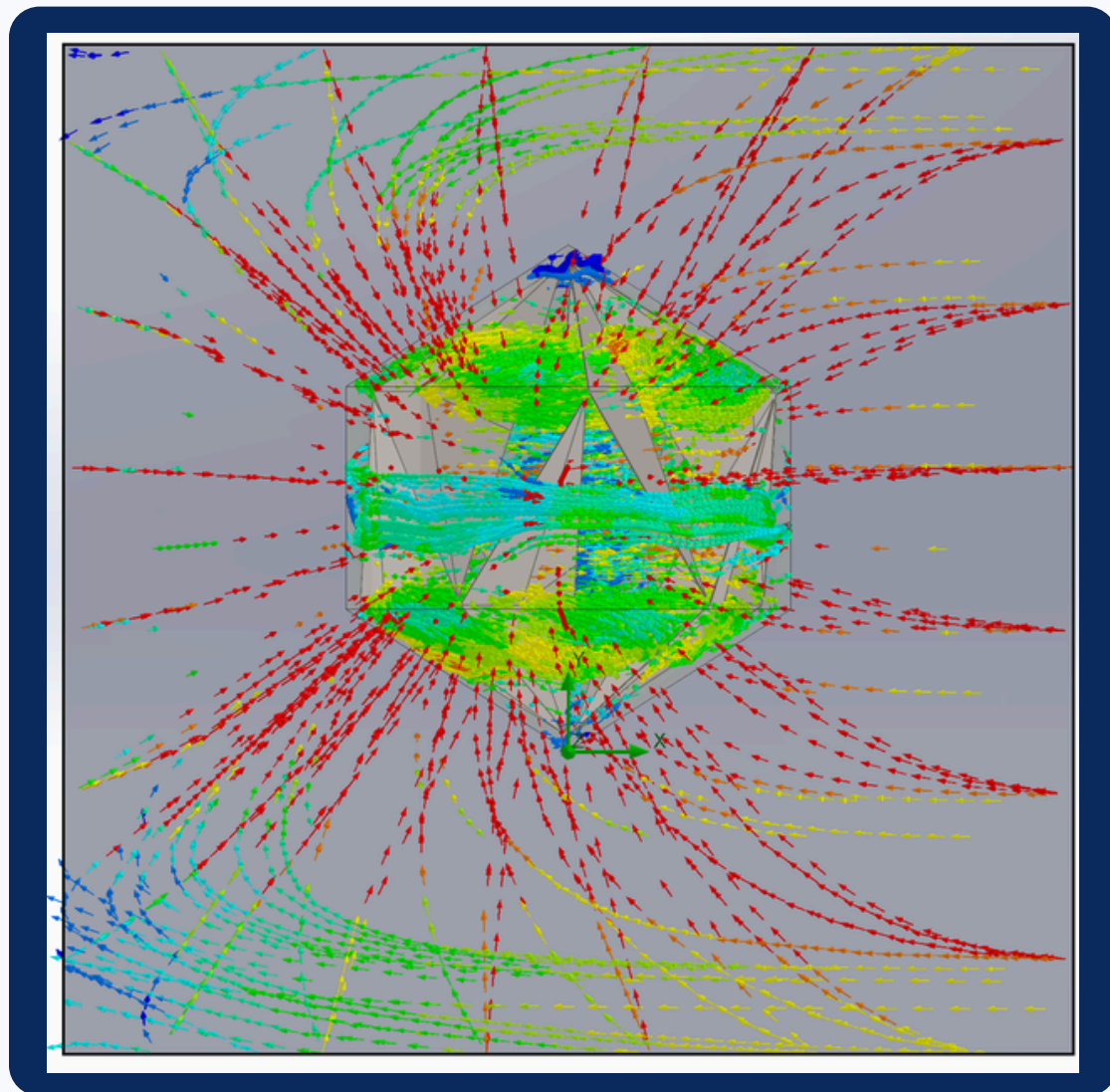
Identical TESUP generator. Identical wind. Only the blade changed.

The 3× advantage is purely geometric — the icosahedral blade extracts more torque per revolution.

Preliminary comparative test · Jujin Technology Lab · not regulatory certification · full power-curve (W) testing scheduled Q3 2026

Computational fluid dynamics confirms output at real-world wind speeds

STAR-CCM+ · Rotation: ± 10 rad/s (95.5 RPM) · Mesh: sliding mesh MRF · Solver: RANS $k-\omega$ SST



3D Velocity Field · GW80
(STAR-CCM+ CFD simulation)

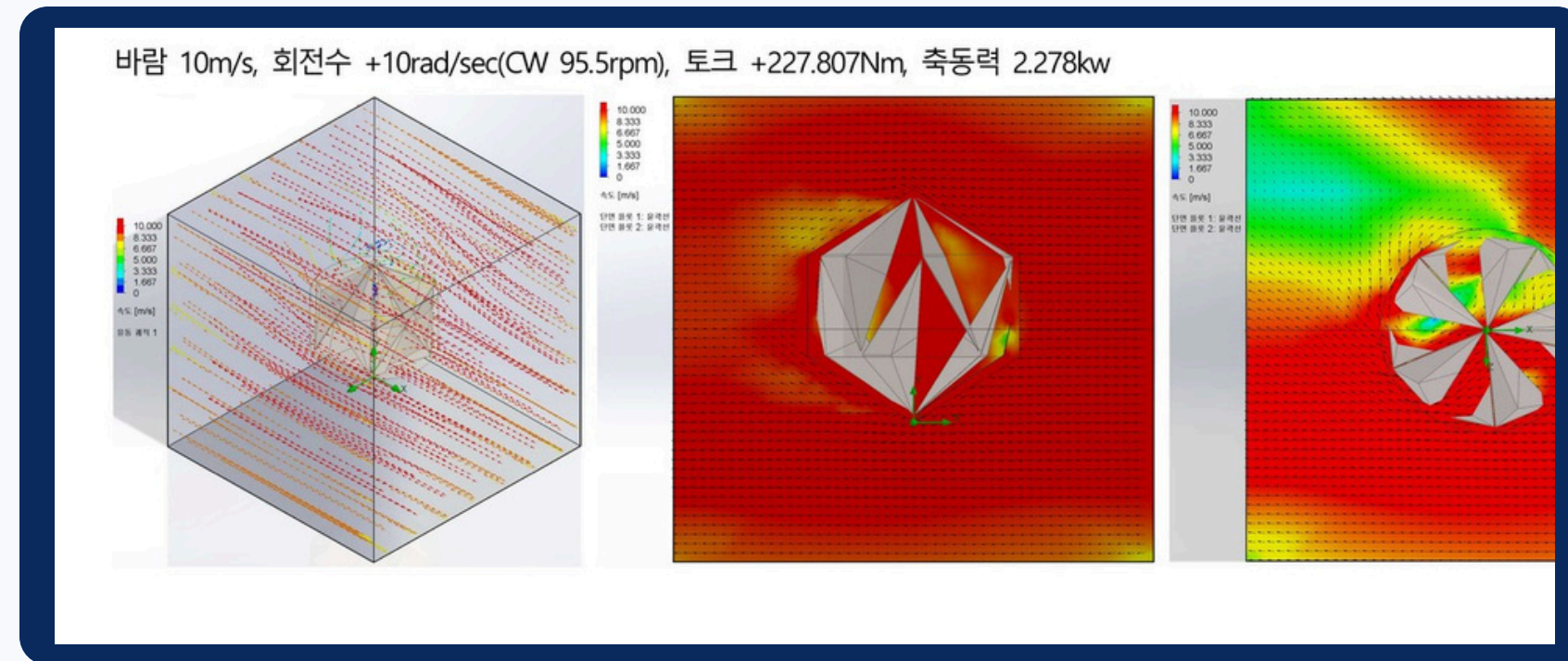
CFD RESULTS SUMMARY

Condition	Wind Speed	Rotation	Torque	Shaft Power
No Wind — Self-powered	0 m/s	CW · 95.5 RPM	+135.98 Nm	1.36 kW
No Wind — Counter	0 m/s	CCW · 95.5 RPM	-91.54 Nm	0.915 kW
Upcycled Wind speed	10 m/s	CW · 95.5 RPM	+227.807 Nm	2.278 kW

★ **2.278 kW confirmed at 10 m/s — exactly the speed of Upcycled Wind (exhaust airflow).**
Even at 0 m/s self-rotation generates 1.36 kW — validating low-wind energy density advantage.

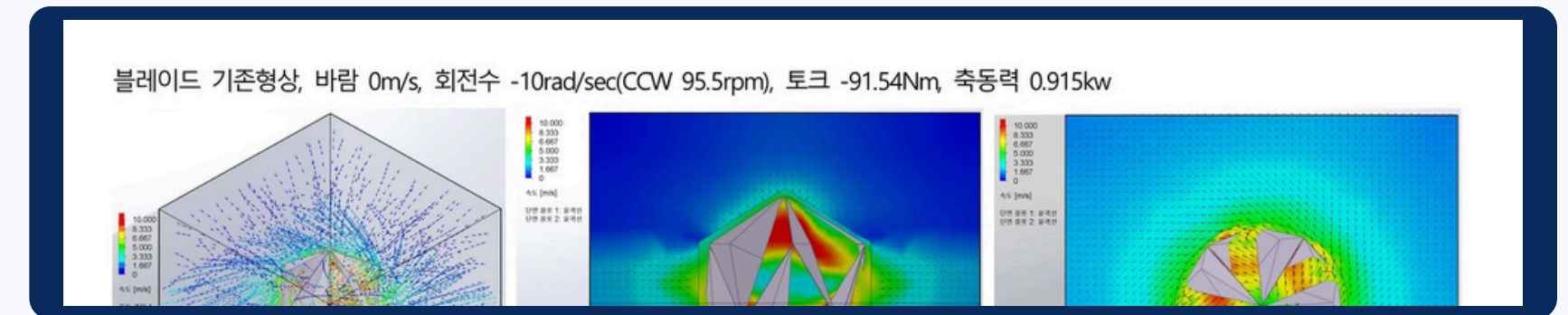
Upcycled Wind scenario & blade geometry optimisation

10 m/s · CW 95.5 RPM → 2.278 kW

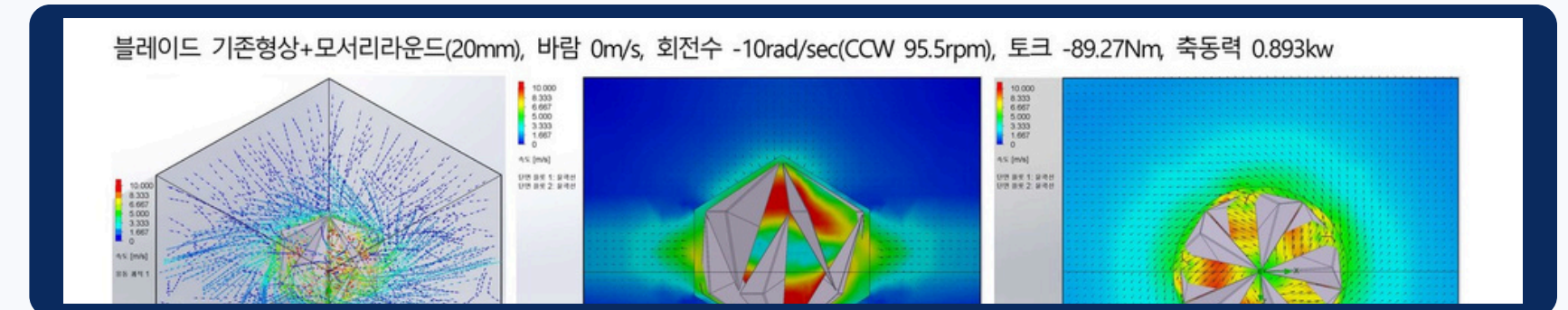


Wind 10 m/s · CW rotation · Torque +227.807 Nm · Shaft power 2.278 kW

BLADE GEOMETRY OPTIMISATION

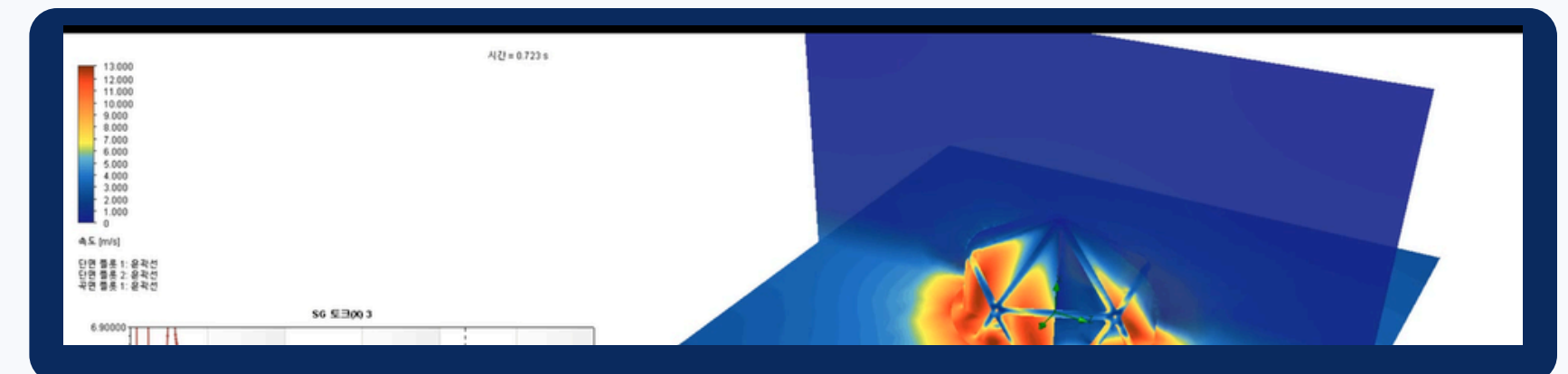


Base blade geometry · Torque -91.54 Nm · 0.915 kW



Edge rounding 20mm · Torque -89.27 Nm · 0.893 kW (noise / durability improved)

TORQUE CONVERGENCE — Stable operation confirmed



Torque converges to ~6.82 N·mm within 0.5 s — confirms stable steady-state operation

V³ Law in action: 10 m/s Upcycled Wind contains ~37× the energy of 3 m/s natural wind

CFD confirms 2.278 kW vs 3.25 W (Oido field test at 3 m/s) → consistent with V³ projection

Real power at 3 m/s — zero wiring

3 m/s

Natural wind speed

13 V

Output voltage (LED load)

3.25 W

Confirmed real power

24 RPM

Rotor speed under load

- ✓ Stable generation below conventional cut-in speed (3.5–4 m/s)
- ✓ Installed & running with zero grid connection — off-grid model proven



A \$200B market opening now

\$200B

TAM

Global decentralized renewable energy & urban microgrid market by 2030

\$18B

SAM

Urban small wind + climate data · 12M+ rooftop-eligible buildings across APAC, N. America, coastal

\$150M

SOM

GeoWind 3-year obtainable · Korea + Vietnam + Canada → 1,000 units

466 inbound inquiries, 49+ countries, \$0 marketing 13 A+ leads incl. Temasek Foundation Top: India 87 · USA 20 · Mexico 15

• LIVE Growing weekly — verify in real time at inquiry.geowind.kr · Source: BloombergNEF · GeoWind inbound CRM

The pipeline awards built

● LIVE & GROWING

466

Inbound inquiries

49+

Countries

\$0

Marketing spend

12M+

Social content views

PILOT SITES & PARTNERS

Oido Museum (KR)

Field test done · permanent install in discussion

Vietnam / Canada

Pilot deployments in progress

SMTech Korea · DAC · Helinox

Manufacturing & distribution partners

13 A+ PRIORITY LEADS

- ★ Temasek Foundation (Singapore)
- ★ Taiwan manufacturing partner
- ★ UK / EU distribution inquiries
- ★ India — 87 inbound (largest market)

No incumbent solves urban wind

	Conventional HAWT	TESUP & small VAWT	GeoWind
Wind-direction dependency	High	Medium	None
Operating wind range	High only	Low–Med	Very Low–High
Noise level	60–80 dB	40–55 dB	< 40 dB
Urban / rooftop install	No	Limited	Yes
Maintenance cost	High	Medium	Low
Built-in climate data	None	None	IoT sensors
Verified output advantage	—	Baseline	3× (lab)

*"Zero viable urban-wind incumbent" — confirmed by the iF Design Award's urban-installation validation.
 Ryse Energy, SD Wind Energy, Aeromine Technologies, Flower Turbines*

One geometry. Infinite scale.



Model number = icosahedral edge length (mm). The same patented geometry scales from desktop ornament to utility-grade turbine — one design, one supply chain, infinite deployment.

From turbine sales to recurring data

HARDWARE

Direct Sales

Turbines & systems for cities, schools, resorts

IP

Licensing

Patented VAWT tech to manufacturers + national manufacturing rights

SAAS

Climate Data Platform

Other renewable providers join GeoWind Cloud; pay for AI analytics & ESG reports

RECURRING

Analytics Subscription

Real-time climate dashboards · carbon-credit generation

Hardware installs the network. The network sells data. Data revenue compounds.

Our product is already on shelves — globally

AIRO (formerly Changui & Nalgae) has been our co-development partner since day one. The education kit they manufacture ships across four global commerce channels — generating revenue, building brand familiarity, and seeding the next generation of GeoWind users.

CO-DEVELOPMENT PARTNER · SINCE DAY ONE

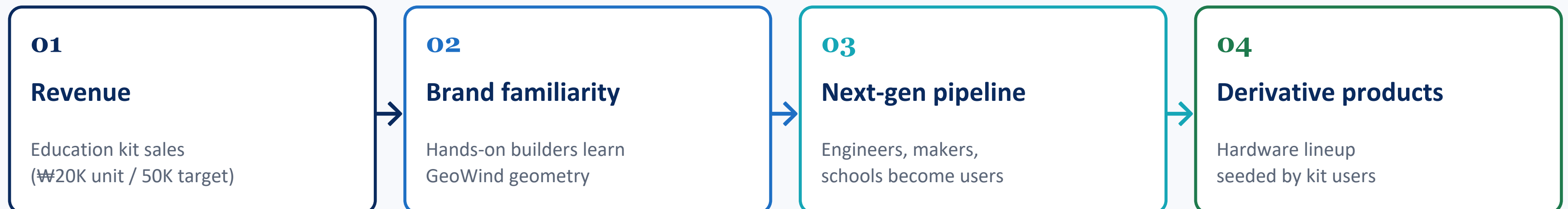
AIRO (formerly Changui & Nalgae)

NEW DIRECTION: AI + Robotics — strategic alignment with GeoWind's data platform & IoT roadmap.

LIVE COMMERCE CHANNELS

KOREA	Naver Smart Store	LIVE
KOREA	Coupang + others	LIVE
GLOBAL	Temu	LIVE
GLOBAL	AliExpress	LIVE
GLOBAL	Amazon	LISTING

EDUCATION KIT AS MARKETING FLYWHEEL



Revenue today, market tomorrow: the education kit funds itself, while each one sold trains a future GeoWind customer.

Upcycled Wind: we reclaim wasted wind

Fast, high-energy airflow escapes everywhere — vents, cooling towers, tunnels, data centers. We capture it and turn it into clean power and data.



WHY UPCYCLED WIND WINS

Power scales with wind speed cubed (V^3)

3 m/s

Natural urban wind

baseline

10 m/s

Upcycled airflow

~37× the energy

WHERE UPCYCLED WIND LIVES

- › Cooling towers
- › Ventilation shafts
- › Data centers
- › Tunnels & subways
- › HVAC exhaust
- › Industrial vents

INDEPENDENT MANUFACTURING PARTNER

Jujin Technology

Co-developing & manufacturing GeoWind's Upcycled Wind generator on our patented geometry — independently, near commercialization.

DEVELOP → PRODUCE → COMMERCIALIZE

01



Develop

Joint R&D + test lab

02



Produce

Independent build

03



Commercialize

Near launch

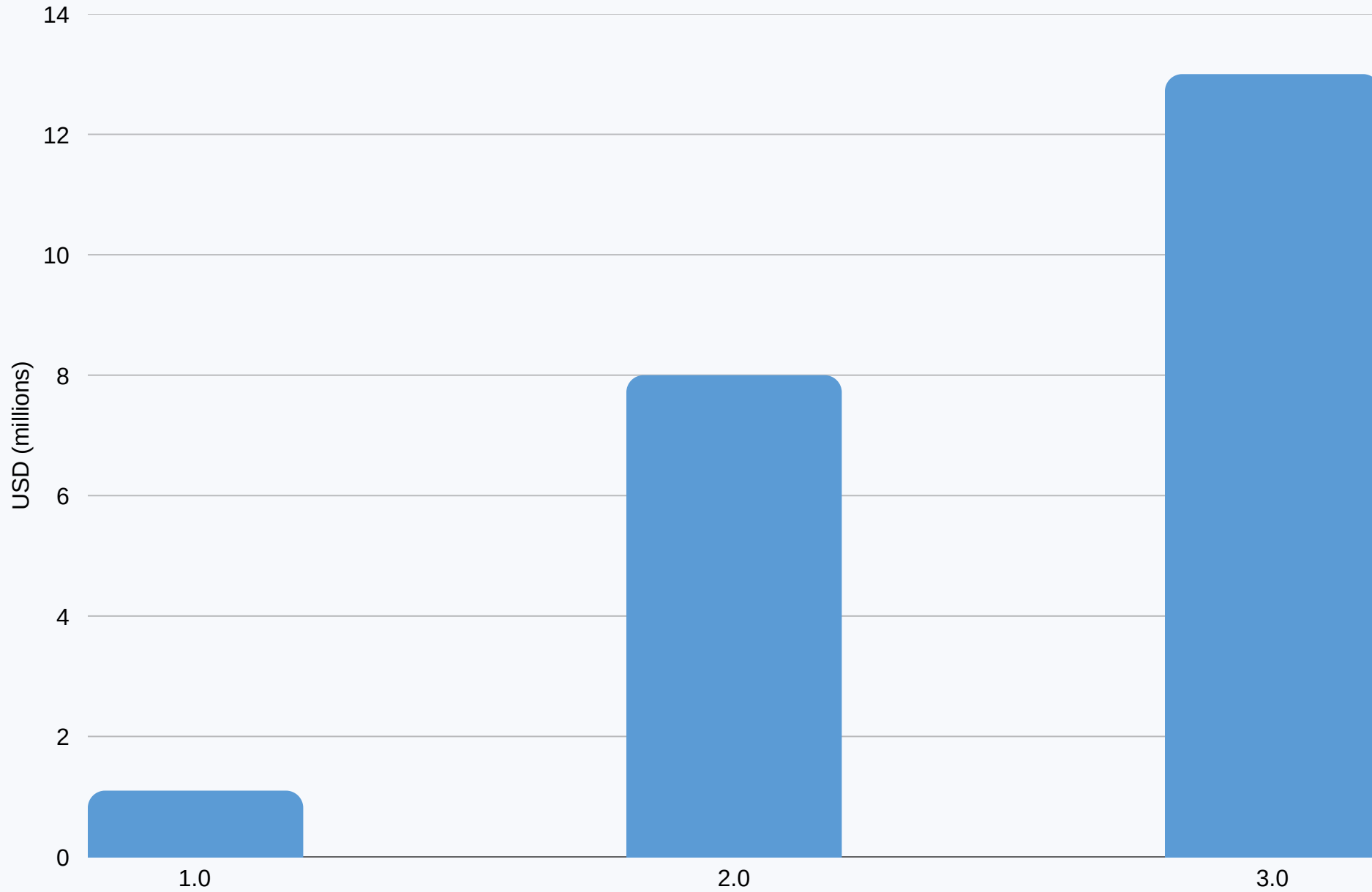
The same single geometry, upcycling wasted wind: an independent partner already builds it — high-energy airflow, captured 24/7, no redesign to scale.

10 channels, two phases

01 R&D & Education kits	₩1.0B	45%	06 Advertising platform	₩5.0B	49%
02 Patent licensing (5%)	₩1.5B	70%	07 Climate data platform	₩50B	70%
03 National manufacturing rights	₩4.0B	70%	08 AI analytics (ESG/RE100)	₩1.0B	70%
04 Turbine manufacturing & sales	₩40B	56%	09 Carbon credits	₩7.3M	70%
05 Connected products (lighting, CCTV)	₩50B	42%	10 Global appropriate-tech platform	₩3.0B	70%

Total annual revenue potential **₩155.5B+** Operating profit **₩87.9B+** Avg margin **~30%**

Unit-driven path to \$13M



Year	Revenue	Units	Milestone
2026	\$1.1M	30–50	Pilots & partnerships
2027	\$8M	200–300	Mass production & licensing
2028	\$13M	1,000	Data subscription scale

KEY ASSUMPTIONS

- Avg unit price: \$15,000
- Unit cost: ~~W~~2.5M → ~~W~~800K at scale
- Profitability within 30 months post-seed
- Data revenue compounds from 2028

Inbound-led, partner-scaled

2026–2027

Pilot & ESG

- Oido Museum, Ganghwa Island displays
- Vietnam & Canada pilots
- CAC: \$0 — 100% inbound

2027–2028

Mass Production

- Unit cost ₩2.5M → ₩800K
- Partners: SemoNemo, Tree-Back (Gimpo)
- Royalty income begins

2028–2030

Grassroots Climate Grid

- Data subscription launch
- 10+ country distributor network
- 1,000 units · external providers join Cloud

Channels: inbound digital (466 leads) · showroom network · direct-ship · royalty licensing

Measured in lives, not just kilowatt-hours

SDG 7

Affordable Clean Energy

SDG 11

Sustainable Cities

SDG 13

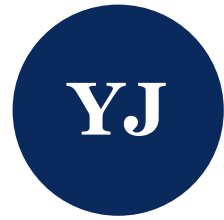
Climate Action

- Clean, affordable energy for underserved & off-grid communities
- Real-time microclimate data for disaster resilience planning
- Hyper-local early warning — the Harbin case: 20–30 min of advance notice
- Reduces noise & visual pollution; doubles as public sustainability art

Hyper-local climate data cannot be measured in kilowatt-hours. It is measured in lives.

TEAM

Builders, operators, and a path to capital



YoungJune Jeon

Founder & CEO

Mechanical designer & patent holder. Leads R&D and the CES / iF award initiatives. Founded GeoWind in 2024.



Jeong Bo Lee

COO

Serial entrepreneur in exhibition & installation. Secured the Oido Museum project.



Moo Hwan Bae

CFO

Former Lotte Group Corporate Planning. Leads VC relations & government funding.

ADVISORS

Young Ju Kim

Executive Advisor

Former CTO & R&D Director. Tech innovation, product development, corporate strategy.

Sang Wook Han

Strategy Advisor

Corporate strategy & business development across industrial sectors.

Chang Sun Pyun

Finance Advisor

Capital markets & investment structuring for growth-stage ventures.

Building the Grassroots Climate Grid

THE LONG GAME

The first open renewable data infrastructure

Every turbine is a node. Every node shares climate intelligence. Wind, solar, and hybrid systems all connect to GeoWind Cloud — turning distributed hardware into a single planetary sensor network.

GeoWind = Geometry + Intelligence + Resilience

EXIT PATHS

Strategic M&A

Wind majors expanding into urban/distributed: Vestas, Siemens Gamesa, GE Vernova

Climate-tech platform acquisition

Data & ESG players acquiring the sensor network & subscription base

IPO (KOSDAQ / dual-track)

At utility-scale deployment + recurring data revenue maturity

Join us in turning wind into power, data, and global resilience.

GeoWind = Geometry + Intelligence + Resilience

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Seoul, Korea

CES 2026 Innovation Award · iF Design Award 2026 · PCT/KR2023/019844

\$1M

Pre-Seed (SAFE)

3×

Output vs TESUP (lab)

466

Inbound · 49+ countries · growing

\$200B

TAM by 2030