



Welcome to RNB Renewable Solutions

The Futures **GREEN**

The futures **CLEAN**

We deliver renewable Energy Solutions

WELCOME

RNB Renewable Solutions



I'm delighted you're considering us as your renewable energy partner.

When I founded RNB in 2008, I recognised that moving to renewable energy represents far more than a technical upgrade, it's a strategic investment in your organisation's future resilience and environmental leadership.

Over the years, I've worked directly with businesses across diverse sectors, from data centres, quarries, roads, offices, car parks to manufacturing facilities. Each project reinforces my belief that renewable energy should deliver both immediate results and lasting value.

My personal commitment is simple: every RNB project will meet the highest standards of performance and integrity. We specialise in Hybrid Solar Lighting, Solar PV, Battery Storage and Vertical Axis Wind Turbines because they offer reliable, 24/7 power generation that complements your existing systems beautifully.

What sets us apart is our comprehensive approach. My team and I personally oversee every phase, from initial assessment through to long-term maintenance. We work closely with you to ensure a smooth, successful installation.

When you choose RNB, you're gaining a partner who genuinely shares your vision of smarter, cleaner energy solutions.

A handwritten signature in black ink that reads 'Paul Brown'. The signature is written in a cursive style with a clear, legible font.

Managing Director, RNB Renewable Solutions

Our mission

Proven track record since 2008.

We've been helping businesses eliminate carbon emissions for over seven years, with deep expertise in sustainable energy transitions.

Tailored solutions for every client.

We create bespoke strategies that address each business's unique energy needs and operational requirements.

Long-term partnership approach. We work alongside our clients throughout their entire journey from renewable energy adoption to achieving net zero emissions.

Cutting-edge technology leadership. We stay at the forefront of emerging innovations to deliver the most advanced and effective clean energy solutions available.



PEACE OF MIND

Equipment and warranties



Component	Warranty	Description
Wind turbines	10 – 20 years product warranty 25 years + performance	We only ever supply and install the highest spec turbines with industry leading 10-20 years product Warranty and 25 – 50 years performance
Inverter	As per warranty terms	The three-phase inverter combines sophisticated digital control technology with efficient power conversion architecture to achieve superior wind power harvesting and best-in-class reliability.
Lighting Solutions	7 -10 Years	All products are Marine Grade



Wind Turbine Dimensions



2 kw



3 kw



4 kw

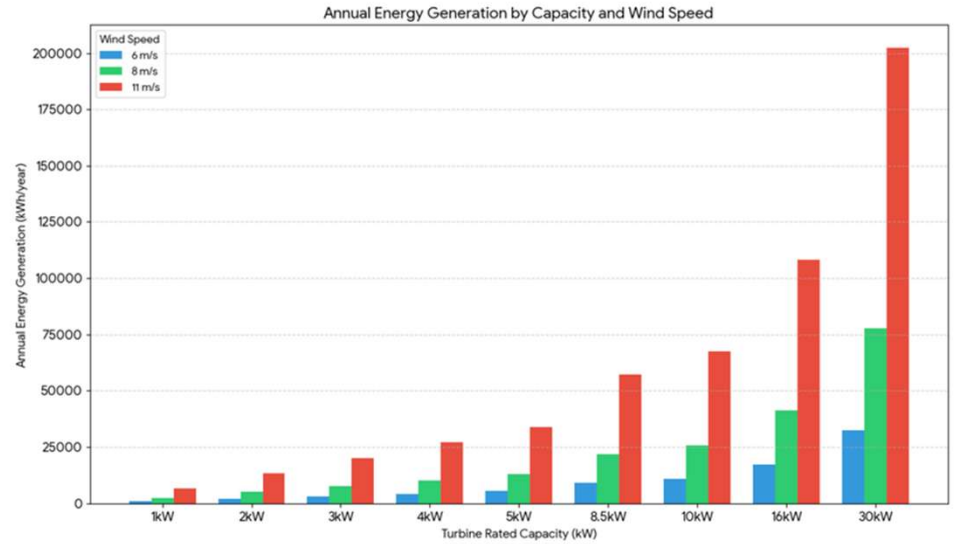
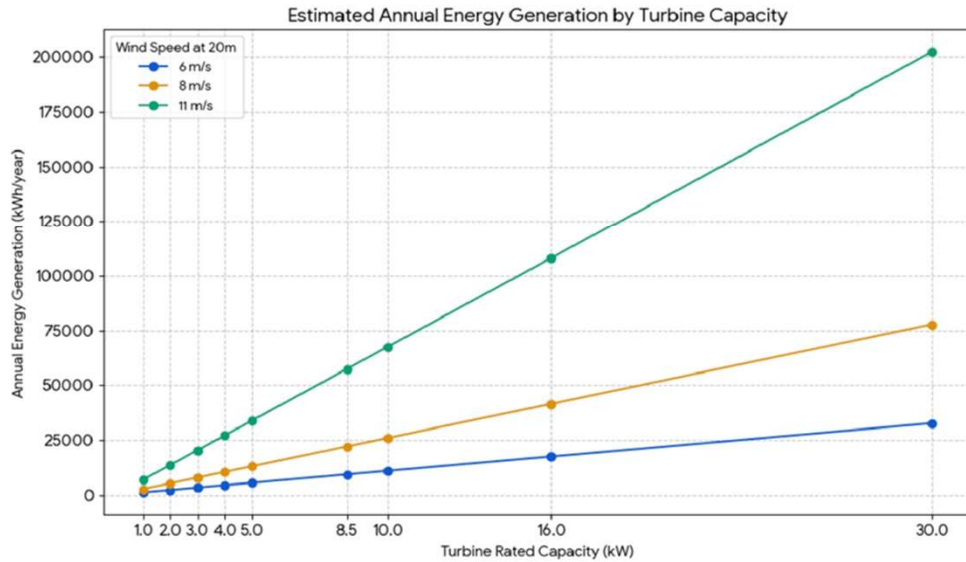


5 kw



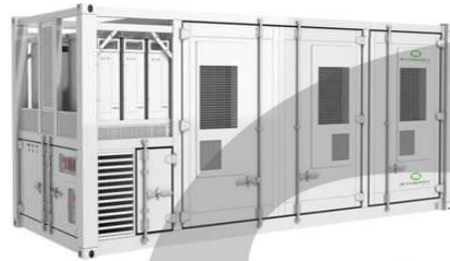
UK Average Power Generation

Turbine Rated Capacity	Daily 6m/s (kWh)	Monthly 6m/s (kWh)	Annual 6m/s (kWh)	Daily 8m/s (kWh)	Monthly 8m/s (kWh)	Annual 8m/s (kWh)	Daily 11m/s (kWh)	Monthly 11m/s (kWh)	Annual 11m/s (kWh)
1 kW	2.98	90.68	1087.33	7.09	215.95	2589.38	18.48	562.55	6745.42
2 kW	5.96	181.36	2174.65	14.19	431.9	5178.77	36.96	1125.1	13490.83
3 kW	8.94	272.04	3261.98	21.28	647.84	7768.15	55.44	1687.65	20236.25
4 kW	11.92	362.72	4349.31	28.38	863.79	10357.54	73.92	2250.2	26981.66
5 kW	14.89	453.4	5436.64	35.47	1079.74	12946.92	92.4	2812.75	33727.08
8.5 kW	25.32	770.78	9242.28	60.3	1835.55	22009.77	157.09	4781.67	57336.04
10 kW	29.79	906.8	10873.27	70.94	2159.48	25893.85	184.81	5625.49	67454.16
16 kW	47.66	1450.88	17397.24	113.51	3455.16	41430.16	295.69	9000.79	107926.66
30 kW	89.37	2720.4	32619.82	212.83	6478.43	77681.55	554.42	16876.48	202362.48



INTEGRATED RENEWABLE SOLUTIONS

RNB Products





WIND TURBINES



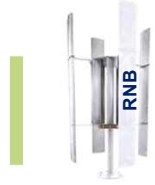
Marine Grade Engineering in our Turbines
Ideal for harsher environments: Farms, coastal & island locations, Sea farms & Rural locations.
Designed and tested with the strongest winds in the most challenging environments, the Chelsea Vertical Axis Wind Turbines, sizes from 2kw to 30kw.
These turbines feature the most advanced technology and power generation with an extended working lifetime of 25 years and more.



Harness wind power, silently.

- | Aerospace-engineered design. Self-aligning turbines with wind acceleration for maximum efficiency.
- | Ultra-quiet with minimal maintenance. Whisper-silent operation backed by industry-leading warranty. Extreme weather resilience.
- | Handles 50+m/s gusts while starting at 1.2m/s wind.
- | 100% British made. Premium quality designed for Rural power needs.





WIND TURBINES



Fiscal Challenges Facing the UK Commercial sectors Due to Rising Energy Costs

- **Direct Financial Pressure and Cost Increases:**
Soaring Bills: Since 2021, the average electricity price saw a sharp rise, peaking in 2023. they are still significantly elevated. The average small business energy bill is estimated to be around 70% higher than in 2021-22
- **Erosion of Profitability:** Higher energy costs directly eat into profit margins. Over 75% of companies expect high energy prices to negatively impact profits, especially in sectors with tight margins like hospitality, retail, and manufacturing.
- **The Cost of Inaction:** The UK economy has faced an estimated £65 billion in extra energy costs for businesses and industry over the last four years due to the fossil fuel crisis, highlighting the vast scale of the financial drain.
- **Higher energy costs are just one part of a wider inflationary environment, the cumulative effect is a major financial headache for all industries.**



RNB Renewable Solutions

Energy System Upgrades:

- **Wind Power:** Investing in VAWT's (Vertical Axis Wind Turbines) to generate significant on-site electricity, reducing reliance on the volatile energy market, offering significant long-term savings.
- **Solar Power:** Investing in solar panels (PV) to generate on-site electricity as a Hybrid system With VAWT's, further reducing reliance on the volatile energy market.
- **Energy-Efficient Technology:** Switching to Hybrid Solar lighting (External), which use up to 98% less energy than mains lighting.
- **Energy-Efficient Technology:** Switching to LED lighting (Internal), which use up to 75% less energy than traditional lights.
- **Ease of Upgrades:** full comprehensive turnkey solutions from one source, RNB Renewable Solutions.



WIND TURBINES



Vertical Axis Wind Turbine

Vertical Axis Wind Turbines (VAWTs) are an excellent fit for UK commercial sites, particularly when integrated as part of a comprehensive Microgrid solution. This suitability is driven by the unique operational, environmental, and aesthetic requirements of different industries.



Key RNB: VAWT's & Commercial sites

Performance in Urban/Rural Wind Conditions

- VAWT's are omnidirectional, meaning they can capture wind from any direction, Their design also performs better in the turbulent, gusty wind Conditions often found in built environments.
- Industrial/Commercial Fit: Different sectors have varying complex environments, large buildings, trees, and other structures that create wind Turbulence and variable wind direction. Since VAWTs don't need consistent, unidirectional wind, they can be effectively sited on rooftops or in lower-level open spaces, they also operate effectively at a lower starting wind speed.
- Financial Fit: Lower maintenance costs on VAWT's are crucial for a company's operational budget, helping to secure a better Return on Investment (ROI).





WIND TURBINES



Vertical Axis Wind Turbine

Vertical Axis Wind Turbines (VAWTs) are an excellent fit for UK private schools, particularly when integrated as part of a comprehensive solution from providers like RNB Renewable Solutions. This suitability is driven by the unique operational, environmental, and aesthetic requirements of school campuses.



Key RNB: VAWT's & Private Schools

Performance in Urban/Campus Wind Conditions 🌍

- School Fit: School campuses are complex environments with large buildings, trees, and other structures that create wind turbulence and variable wind direction. Since VAWTs don't need consistent, unidirectional wind, they can be effectively sited on rooftops or in lower-level open spaces, they also operate effectively at a lower starting wind speed.
- School Fit: Lower maintenance costs on VAWT's are crucial for a school's operational budget, helping to secure a better Return on Investment (ROI). their ground-level components offer a direct, safe, and visible educational opportunity for students to study renewable energy in action, linking the installation directly to the curriculum and the school's 'green' credentials.



Together, we
light the way to
UK's net-zero
future

