



Laawun Energy Solutions Australia

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**Exclusive Distributors & Manufacturers for the
Archimedes Wind Turbines
Australia & New Zealand**



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Laawun Energy Solutions Australia

Advancing Renewable Energy in WA

Company Overview

Established in 2024 Laawun Energy Solutions Australia is a Western Australian-based company specialising in sustainable renewable energy solutions. As a Supply Nation registered, Aboriginal-owned business, Laawun Energy integrates cultural principles to enhance outcomes.

Archimedes Wind Turbines: Innovation in Wind Energy

Laawun Energy is the exclusive retailer and emerging manufacturer of the Archimedes spiral rooftop wind turbine in Australia. These turbines are designed for efficient power generation, offering a versatile solution for homes, businesses, and commercial establishments.

Key Features of Archimedes Wind Turbines

- Noise Efficient – less than 43 decibels, ideal for urban and residential areas.
- Bat & Bird friendly designed for environmental sustainability.
- Innovative Spiral Design: Maximises wind capture for higher efficiency.
- Adaptability: Performs well in diverse Australian environments and weather conditions.
- Eco-Friendly: Supports sustainable energy with minimal environmental impact.

Key Benefits of Archimedes Wind Turbines

- Reduce strain on centralised power grid.
- Power direct to consumers.
- Long-term cost-effective solution.
- Reduce carbon emissions and reach net zero.
- Australian owned, allowing consumers to own their own power generation, unlike the billions of dollars spent on solar farms, wind farms and batteries which are owned by offshore companies profiting at the costs of Australian taxpayers.

Alternative to Coal & Petroleum Base Power Generation

Archimedes wind turbines provide a clean, renewable alternative to coal and petroleum-based power generation including diesel-powered generators, offering cost savings, environmental benefits, and energy independence.

Reduced Dependence on Diesel Generators

- Reliance on fossil fuels, leading to high operational costs and carbon emissions.
- Archimedes wind turbines generate electricity from wind, eliminating the need for fuel transportation and storage.
- Businesses and households can reduce reliance on diesel, especially in remote areas where fuel delivery is costly.



Laawun Energy Solutions Australia

Remote Off-Grid Hybrid Energy System

Project Overview

Laawun Energy, a renewable energy innovator based in Perth Western Australia, aims to deliver sustainable, off-grid power solutions using a hybrid system of wind turbines, solar panels, and battery storage. This outlines a model system designed for homes, businesses, remote communities, maritime, eco-tourism lodges, agricultural and mining operations seeking energy independence.

Benefits

Energy Independence: Fully off-grid operation with no reliance on aging infrastructure.

Sustainability: Zero-emission power generation using recyclable materials.

Resilience: Reliable power during blackouts, bushfires, or extreme weather.

Low Maintenance: Minimal moving parts and remote monitoring capabilities.

System Components

1. Wind Energy – Archimedes Spiral Turbines

Laawun Energy's signature turbines are compact, bird- and bat-friendly, and operate quietly (<43 dB). With a rated power of 2 kWh and a survival wind speed of 35 m/s, they're ideal for both rural and coastal locations.

2. Solar PV

The Archimedes wind turbines compliment and complete the transition power generation throughout the day and night-time conditions.

3. Battery Storage

10 – 100-kilowatt battery to store excess energy for nighttime or cloudy days. Systems are scalable and pre-wired for easy installation.

4. Hybrid Controller & Inverter

The wind and solar hybrid controller ensures seamless integration and efficient battery management.

An on-grid brake inverter allows optional grid tie-in for backup or feed-in tariffs.

Pilot Site: Off-grid system for Remote Minesite in WA

- **Location:** Cloud Break Mine FMG Site WA
- **Infrastructure:**
 - 1 x 40-foot container office block / 10 solar panels / wind turbine / battery
 - 1 x 40-foot container office block / 10 solar panels / wind turbine / battery
 - 1 x 20-foot ablution block (4 toilets) / 5 solar panels / battery
- **System:** 2 x 1500D turbines + 13 kw solar + 2 x 20 kw battery
- **Usage:** 3 x refrigerators, 4 x spilt system air conditioners, 3 x hot water services; computers, communications etc.
- **Outcome:** 100% off-grid, 24/7 power with 3-day autonomy
- **Savings:** Estimated \$50,000 per annum in diesel and grid costs
- **Environmental Impact:** 25 tonnes CO₂ offset annually





Laawun Energy Solutions Australia

Residential Off-Grid Hybrid Energy System

Benefits

Point of Difference: Archimedes Wind Turbine

Energy Independence: Power made by you for you.

Savings: Long term savings on energy costs.

Sustainability: Zero reliance on grid and zero-emissions.

Features

- **Noise Efficient:** Operates at less than 43 decibels, making it ideal for urban, commercial, and residential.
- **Bat & Bird Friendly:** Designed with environmental sustainability in mind, protecting local wildlife.
- **Innovative Spiral Design:** Maximises wind capture for higher efficiency and power generation.
- **Adaptability:** Performs optimally in diverse Australian environments and weather conditions.
- **Eco-Friendly:** Supports sustainable energy with minimal environmental impact.

System Components

1. Wind Energy – Archimedes Spiral Turbines

The Archimedes wind turbine is compact, bird- and bat-friendly, and operate quietly (<43 dB). With a rated power of 2 kWh and a survival wind speed of 35 m/s, ideal for both rural and coastal regions.

2. Solar PV

The Archimedes wind turbines compliment and complete the transition power generation throughout the day and night-time conditions.

3. Battery Storage

10 – 50-kilowatt batteries to store excess energy for night-time or cloudy days. Systems are scalable and pre-wired for easy installation.

4. Hybrid Controller & Inverter

The wind and solar hybrid controller ensures seamless integration and efficient battery management. An on-grid brake inverter allows optional grid tie-in for backup or feed-in tariffs.



Pilot Site: Off-grid system in Greenwood WA

Infrastructure: 4-bedroom house, swimming pool, heating blanket, standard fittings

- **Daily usage:** average 35 kilowatts per day
- **System:** 1 x 1500D turbines + 23.76 kw solar + 30 kw battery
- **Outcome:** 100% off-grid, 24/7 power with 3-day autonomy
- **Savings:** Estimated \$7,500 per annum on power bills
- **Environmental Impact:** zero emissions





Laawun Energy Solutions Australia

Australian Automation Robotic Precinct – Neerabup

Laawun Energy has been developing and testing the Archimedes wind turbine technology at the Australian Automation and Robotics Precinct (AARP) in Neerabup.

As Laawun Energy continues to test, iterate and validate its technology at the AARP, we are positioned to expand our manufacturing capabilities and distribution network across Australia, with particular focus on remote communities, minesites and urban residential and commercial applications.

The wider implications extend beyond energy generation to include First Nations economic empowerment, local manufacturing revitalisation, and the demonstration that Australia can achieve energy independence through domestic innovation rather than reliance on imported technologies and offshore-owned infrastructure.



Laawun Energy Solutions Australia is committed to revolutionising clean energy through the introduction of innovative technologies, including the Archimedes spiral rooftop wind turbine. As the exclusive retailer in Australia and an emerging manufacturer, we seek to establish local production facilities in Perth to support energy resilience, create jobs, and drive green economic growth.

Our Commitment:

Laawun Energy Solutions Australia is Indigenous-owned and committed to sustainable, inclusive economic development. Local manufacturing will reduce emissions, lower costs for WA households and businesses, and create long-term employment prospects.

We welcome the opportunity to work with you to bring this vision to life.