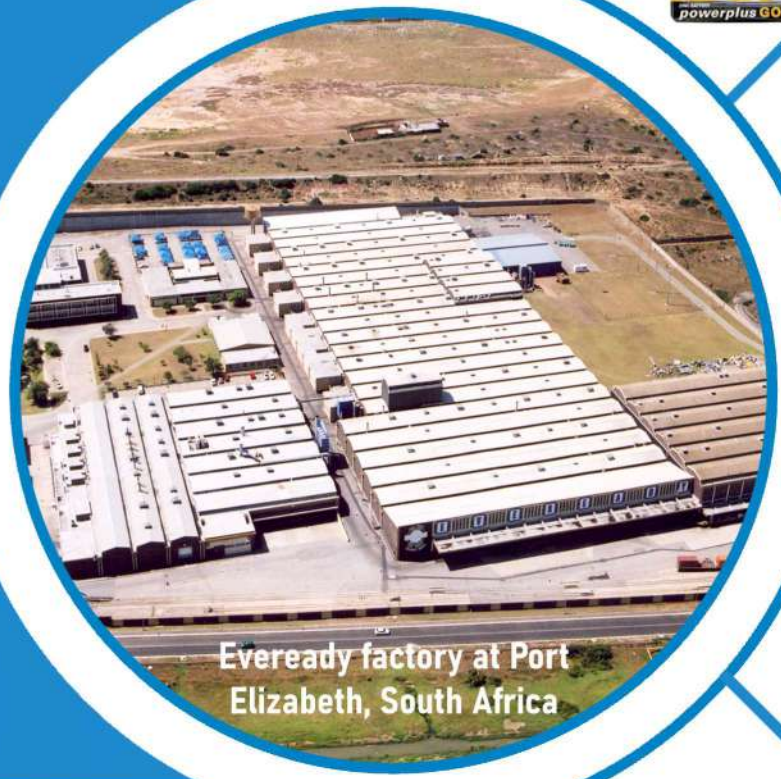
EVEREADY profile

Established in 1937, and an independent South African company since 2003, EVEREADY has embraced growth by offering high quality products as core objective. To date, this has lead to expansion of company from BATTERIES to a full range of LIGHTING products, KESTREL Brand of Small Wind Turbines and HOUSE OF YORK's household products.

Our diverse range of technologies are designed and manufactured at our ISO accredited world class factory in PORT ELIZABETH of SOUTH AFRICA.

EVEREADY of SOUTH AFRICA is an unique organization which is driven by constant innovation, passion for offering best in class products to our customers, environmental consciousness, strong business values and ethics and have been recognized several times among "Best companies to work for" in South Africa .



Eveready factory at Port Elizabeth, South Africa

Batteries

Energy Saving Lamps

KESTREL Small Wind Turbines

Eveready Diversified Products(Pty) Ltd.
Eveready Road, Struandale, Port Elizabeth;
South Africa
www.eveready.co.za; www.kestrelwind.co.za;
India contact: +91 7003716034
India email: dasar@eveready.co.za

kestrel small wind turbines

EVEREADY™ BATTERIES

EVEREADY™ LIGHTING

HOUSE OF YORK SINCE 1961

SMALL WIND TURBINE - LARGE ELECTRICITY OUTPUT - VERSATILE APPLICATIONS

KESTREL SMALL WIND TURBINE - APPLICATIONS LIMITED BY IMAGINATION

Large Scale electricity generation

Reliable availability of electricity in locales of no grid or unreliable grid

Reducing electricity expense using two-way metering

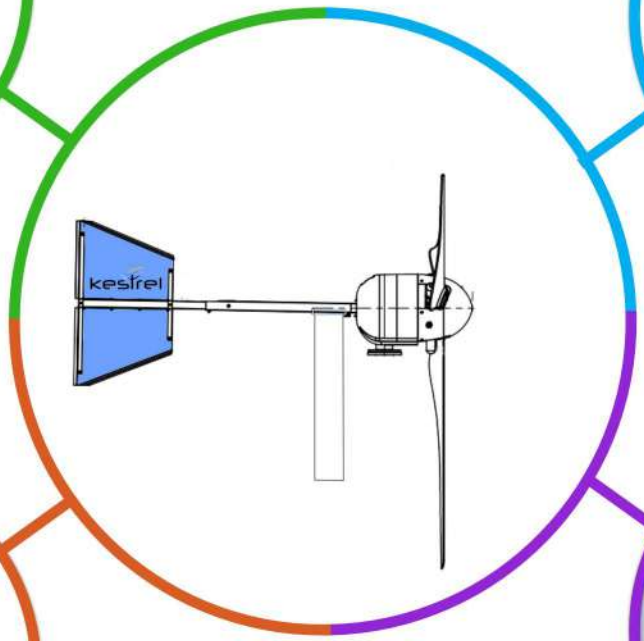
Telecom Tower application

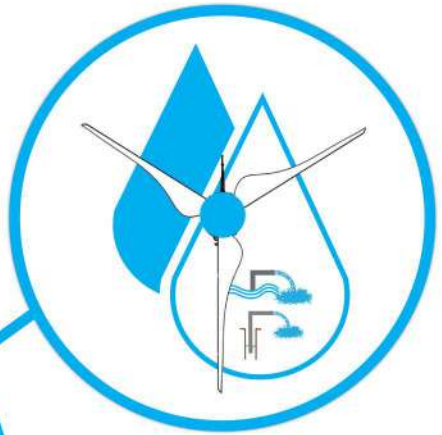
Powering ETP / STP / De-salination plants

Irrigation of farmlands

Community water availability

Large Scale Electricity Generation from Windy Hilly locations where Large Wind Turbines' installation and operation feasibility is challenging



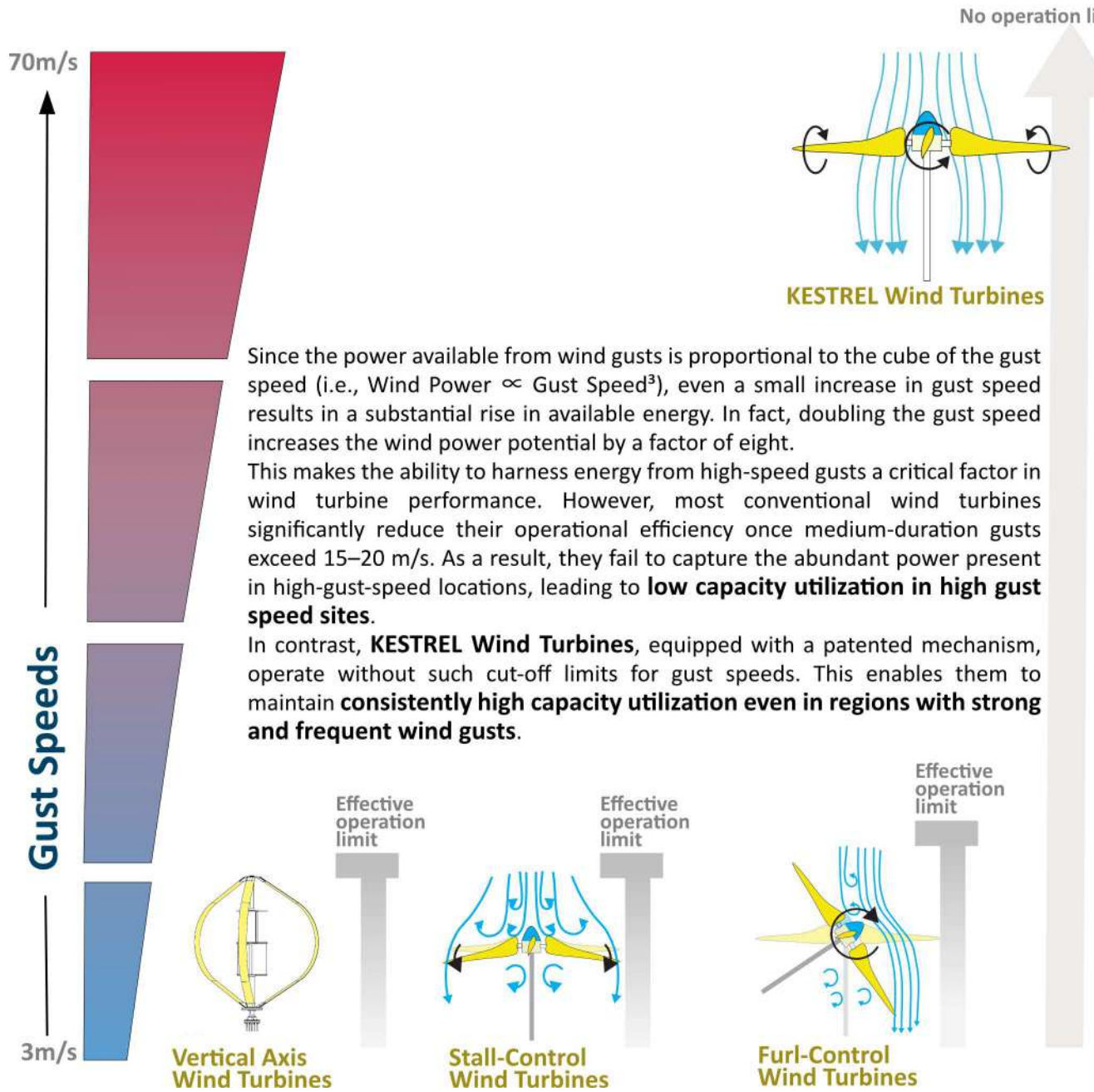


KESTREL WInd /Wind-Solar Hybrid water pumping solutions for farms, community water needs, rain-water harvesting and other small or large water pumping needs

Grid assisted or Grid Isolated Wind or Wind-Solar Hybrid Micro-grids for locales where Grid is unreliable or not available

Several other applications where renewable energy is used to power Telecom Towers, community STP Plants, desalination plants etc.

KESTREL SMALL WIND TURBINE - HIGH CAPACITY UTILIZATION IN HIGH SPEED GUST SITES
(BENEFIT OF KESTREL's PATENTED MECHANISM)



Since the power available from wind gusts is proportional to the cube of the gust speed (i.e., Wind Power $\propto$ Gust Speed^3), even a small increase in gust speed results in a substantial rise in available energy. In fact, doubling the gust speed increases the wind power potential by a factor of eight.

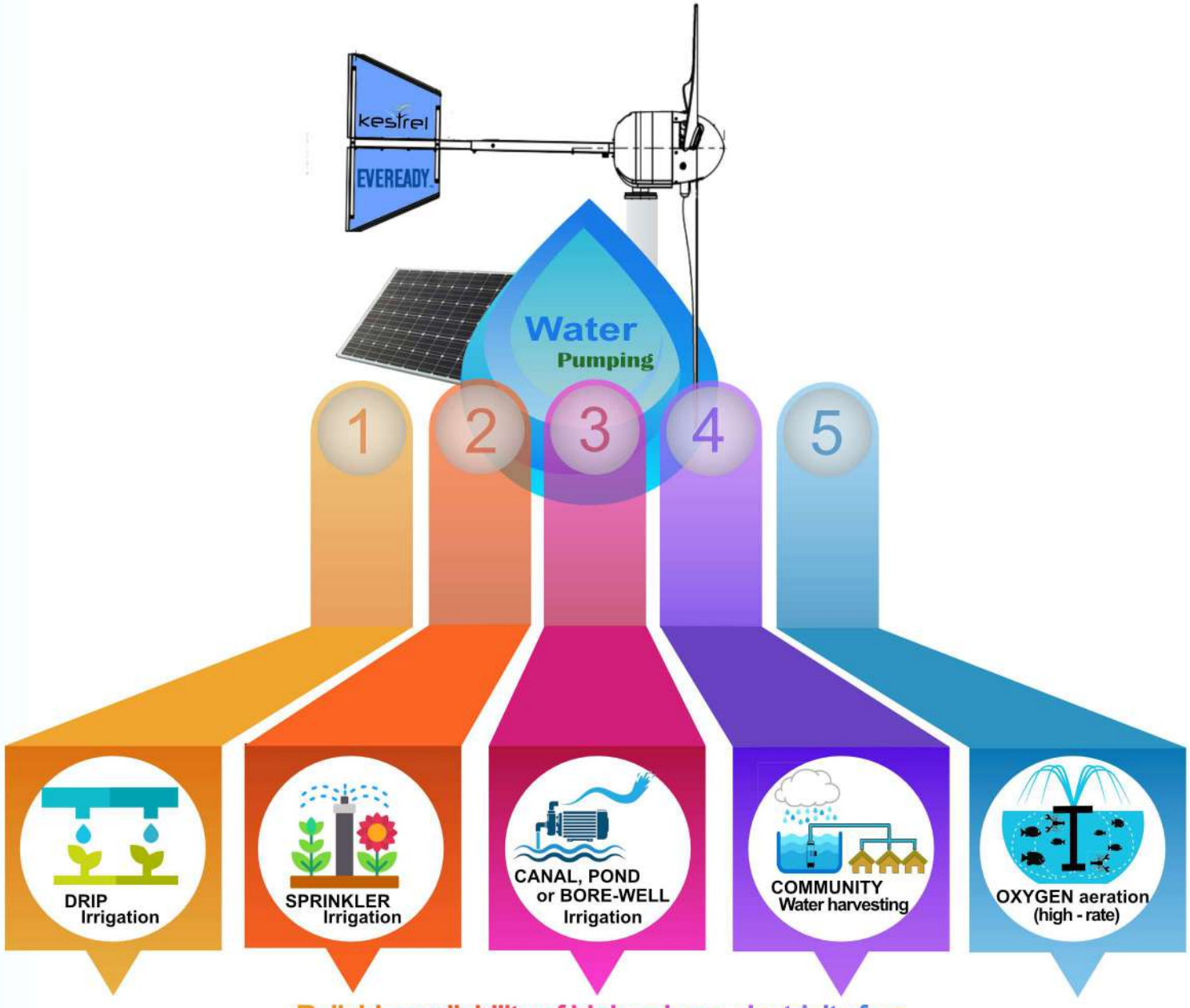
This makes the ability to harness energy from high-speed gusts a critical factor in wind turbine performance. However, most conventional wind turbines significantly reduce their operational efficiency once medium-duration gusts exceed 15–20 m/s. As a result, they fail to capture the abundant power present in high-gust-speed locations, leading to **low capacity utilization in high gust speed sites**.

In contrast, **KESTREL Wind Turbines**, equipped with a patented mechanism, operate without such cut-off limits for gust speeds. This enables them to maintain **consistently high capacity utilization even in regions with strong and frequent wind gusts**.

Typical Generation vs Wind Speed Graph for KESTREL e400n

Advantage of KESTREL's wind-solar hybrid water pumping for rural community

- High pressure (higher head) water pumping compared to only solar
- Day & Night operation - reliable water delivery
- Class-I design wind turbines - High operational availability
- High volume water delivery compared to only Solar



Reliable availability of high volume electricity for :

High water efficiency with fertilizer dozing for agriculture and horticulture

Large scale water availability with grid interactivity

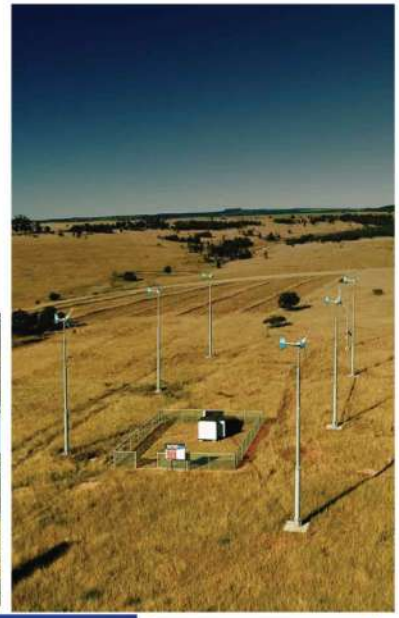
Rain water harvesting

Fish pond aeration

A QUICK LOOK AT OTHER ADVANTAGES OF KESTREL SMALL WIND TURBINES

- **Very Low Foot Space** — KESTREL installations do not disturb existing land usage. Can also be easily installed in between Solar panels, thus increasing the capacity utilization factor of RE projects significantly.
- **Low Weight** — Can be easily carried manually to any difficult location for installation.
  Easy Roof-Top installations.
  Easy ground installation without any terrain modifications.
- **Monopole - No Guy Wire** — Do not need any guy-wire for supporting the wind turbine poles. This makes it most suitable for installation in hills and constrained spaces.
- **Quick project execution** — A trained team of 1 electrician and 10 workmen can manually install 2 wind turbines in a day without any cranes
- **Easy Project scale up** — Projects can be scaled up as per the demand growth of electricity. This prevents the risk of forecasting and avoids future mismatch of demand and generation capacity.
- **No risk of blade breakage** — KESTREL's unique patented mechanism ensures that wind induced stresses on the wind turbine system is controlled. This is a most beneficial aspect in terms of ensuring that client's investment on wind turbines are protected.
- **Class-I Design** — KESTREL's Operation availability is extremely high and operation time fraction is 100% as tested under BS EN61400-2: 2006 Part 2 . It is therefore most ideal for installations in remote locations where regular human supervision may be challenging.
- **Very Low Maintenance** — This unique feature of KESTREL ensures long life of permanent of the generator as well as avoids RF emissions
- **DC Generation** — KESTREL is successfully operating in the extreme hot atmosphere of Kalahari Desert, saline sea coast winds and extreme cold of Iceland
- **All Weather Solution** — KESTREL e400n is approved by SWCC, USA as well as NIWE for Grid connect as well as Battery Charging
- **Grid Connect Approved** — Does not need any cranes or heavy-machinery. Simple hand tools and hydraulic jack is sufficient for installation.
- **Easy Installation**







Thank You for kind attention

KESTREL
Small Wind Turbines
but
Large Electricity Generation

"EVEREADY HAS A STRONG PROBLEM SOLVING APPROACH AND WOULD BE MOST HAPPY TO WORK WITH POTENTIAL CLIENTS FOR CREATING SUCCESSFUL WIND ENERGY BASED ELECTRICITY GENERATION, WATER PUMPING OR ANY CREATIVE WIND ENERGY APPLICATION SYSTEM"