



**DISTRIBUTED RENEWABLE ENERGY  
FOR COMMUNICATION TOWERS**

# DELIVERING COST-EFFECTIVE RENEWABLE ENERGY SOLUTIONS TO A GROWING COMMUNICATION TOWERS INDUSTRY

For the owners and tenants of remote communication towers, reliable, cost-effective, and clean energy solutions are essential to supporting critical network requirements and growing organizational goals to combat climate change. Around the world, wireless providers, government agencies, utilities, tower infrastructure owners, and third parties are approaching XZERES for wind energy solutions to reduce diesel genset usage and/or address unstable or costly grid scenarios.

In many cases, wind turbines are combined with solar PV systems, creating hybrid renewable energy solutions. Our proven wind turbine technology can integrate directly into or beside communication towers, powering critical telecom and broadcast equipment (antennas, transceivers/radios, lighting, etc.), without vibration or interference.

In most cases, typically off-grid or tied to poor-grids, XZERES turbines lower site operating expense (OPEX). In on-grid situations, XZERES turbines can also help tower owners to more easily secure land or zone new towers, thereby retaining or attracting new tenants.

 RELIABLE ENERGY SOLUTIONS THAT SUPPORT 24/7 COMMUNICATION REQUIREMENTS

 COMPLEMENTARY WITH SOLAR PV, DIESEL/GAS GENERATORS, AND/OR THE GRID FOR BALANCED POWER SUPPLY

 PROVEN TECHNOLOGY THAT REDUCES FUEL AND LIFE-CYCLE COST ASSOCIATED WITH STAND ALONE DIESEL/GAS GENERATORS

 COMPACT DISTRIBUTED DESIGN ALLOWS FOR MOUNTING ON COMMUNICATION TOWERS OR WITHIN LIMITED LAND AREAS

 FINANCIAL AND CONFIGURATION MODELING TO PREDICT ROI FOR SYSTEM OWNERS

 CLEAN AND RENEWABLE POWER THAT REDUCES CARBON FOOTPRINT OF COMMUNICATION SITES



## ON-GRID SITES

Lower tower OPEX by reducing dependence on high-cost utility power, or as a backup battery charging system in areas with unstable electric grids.



## OFF-GRID SITES

Minimize costly and polluting diesel consumption while complementing solar PV and other clean energy systems.

PREVAILING WIND →

6m (20 ft) RECOMMENDED

AVOID TURBULENCE FROM OBSTACLES

GROUND MOUNTED

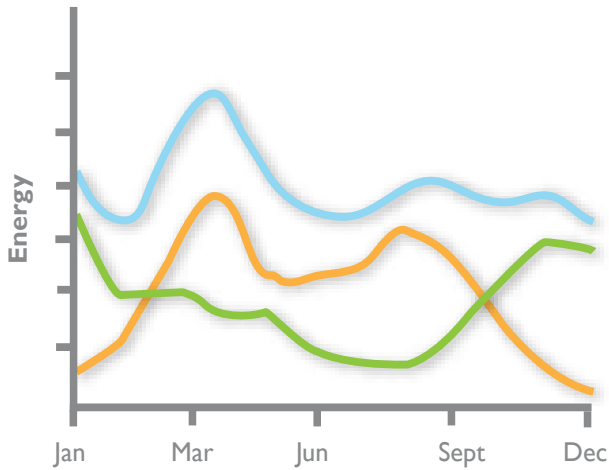
TOP MOUNTED

SHROUDED MOUNTED

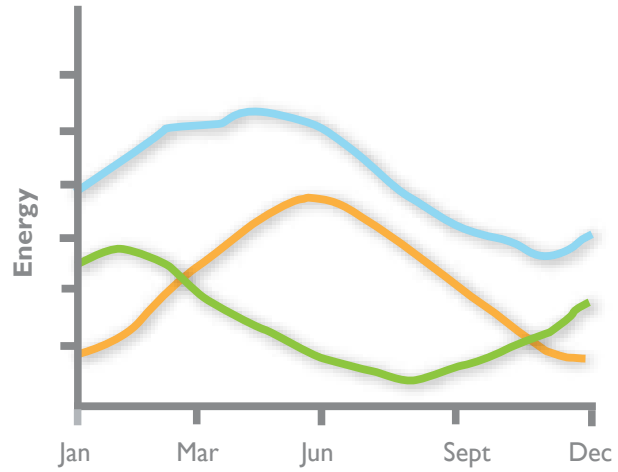
## WIND AND SOLAR ARE COMPLEMENTARY TECHNOLOGIES

XZERES possesses the capability to quickly qualify remote sites for renewable energy integration, and design the most appropriate configuration of wind, PV, storage, grid, and/or back-up generation. Analysis and system design are driven by specific customer site information, in conjunction with renewable resource data and best-in-class modeling. The result is a proposed energy solution and ROI estimate with which to base a go-forward decision.

### Edmonton, AB Canada



### Tehachapi, CA USA

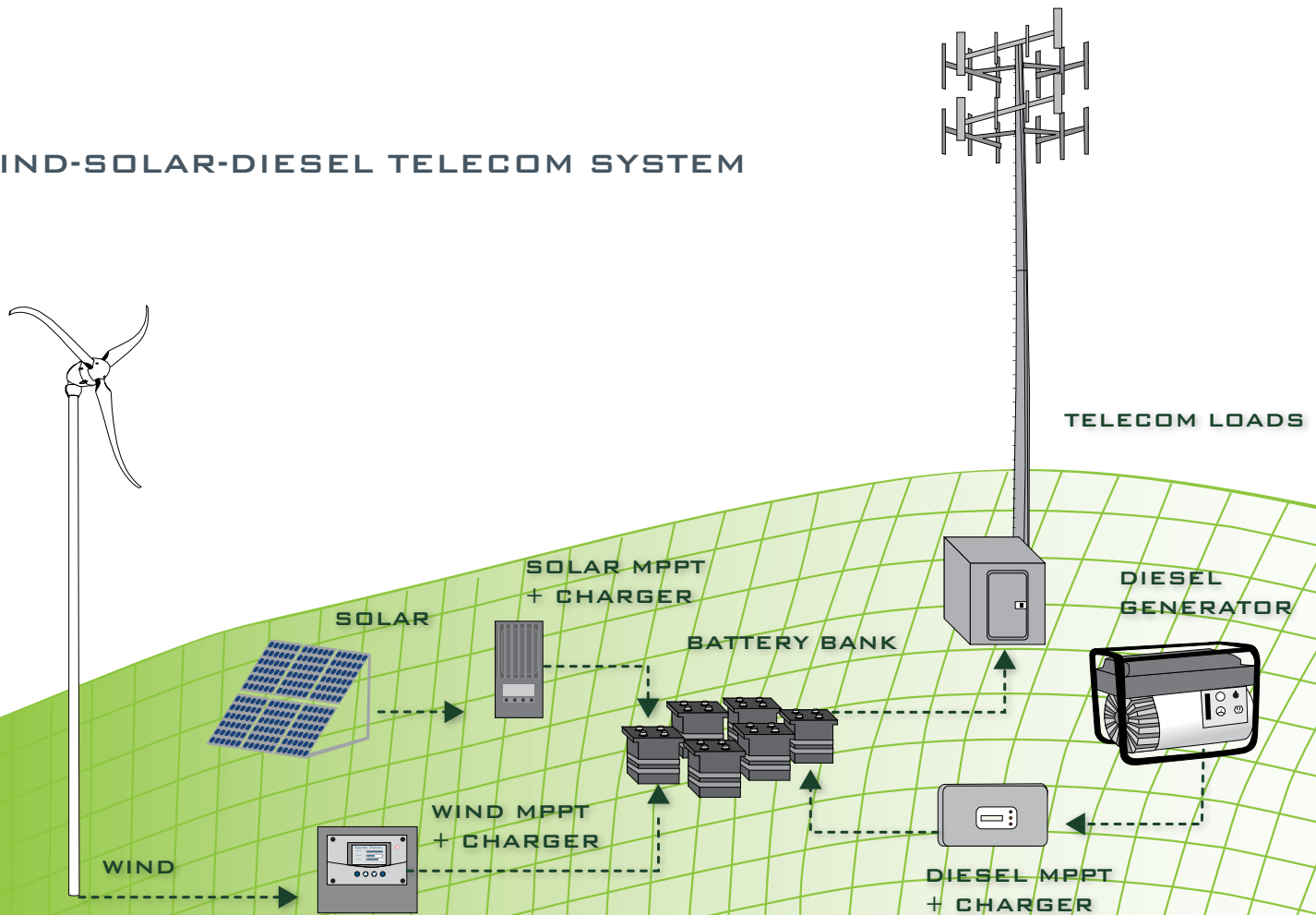


SOLAR POTENTIAL

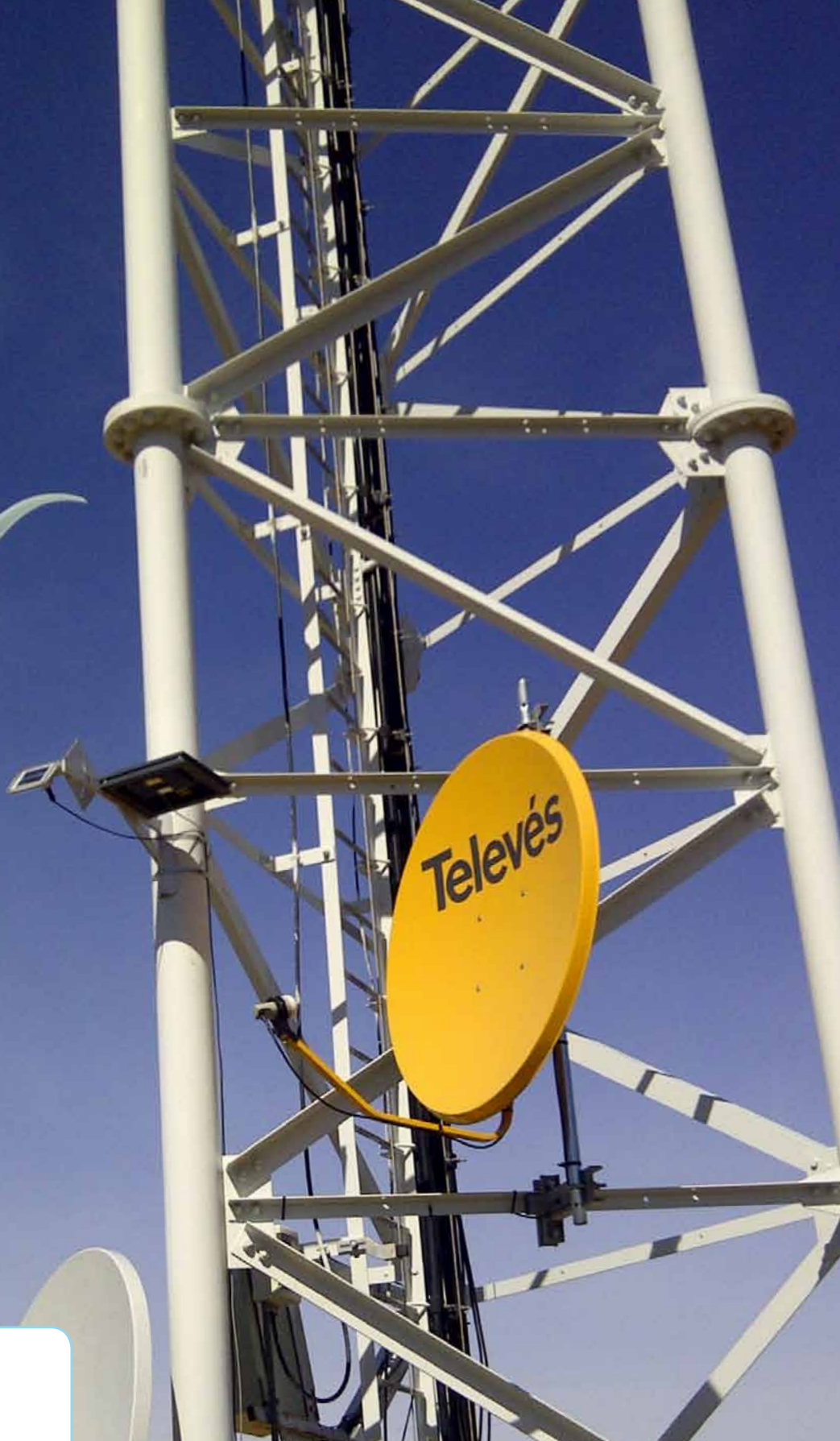
WIND POTENTIAL

TOTAL PRODUCTION

## WIND-SOLAR-DIESEL TELECOM SYSTEM







AUTHORIZED REPRESENTATIVE

North America Office  
**1-(877)-404-9438**  
**503-388-7350**  
**sales@xzeres.com**  
**www.xzeres.com**

Europe Office  
**+44 (0)121 764 7036**  
**sales@xzeres.co.uk**  
**www.xzeres.co.uk**