

<b><u>Wind Energy Index (WNX) Component</u></b>	<b><u>Theme</u></b>	<b><u>Sector</u></b>	<b><u>Activity</u></b>
5E Advanced Materials	Boron, can be used in wind blades, motors.	WM	USA
Abb Ltd.	Wind turbines, generators and converters.	WM	SWITZERLAND
Acciona	Sustainability infrastructure, engineering.	SG	SPAIN
Aker Horizons	Sustainable energy includes wind, hydrogen.	WI	NORWAY
Alfen NV	Smart power grid, energy storage systems.	SG	NETHERLANDS
Arcadis NV	Engineering, EPC, develops wind projects.	WI	NETHERLANDS
Boralex Inc	Development and operation of wind farms.	WF	CANADA
Brookfield Renewable Corp.	Pure plays renewables wind, hydro, solar.	WF	USA
Bumhan Fuel Cell	Offshore cable systems, grid. S. Korea.	WM	S. KOREA
Cadeler A/S	Offshore wind installations, big jackup vessels.	WI	DENMARK
China Datang Corp Renewable Power	Among largest listed wind operators in China.	WF	CHINA
China High Speed Transmission	Wind turbine gearboxes, heavy duty.	WM	CHINA
Corporacion Acciona Energias Ren.	Wind, global energy exclusively renewables.	WI	SPAIN
CS Bearing	Bearings, slewing rings used in wind turbines.	WM	S. KOREA
CS Wind	Wind power, both onshore, and also offshore.	WF	S. KOREA
Dae Myoung Energy	Wind and green H2, solar, energy storage.	WI	S. KOREA
Dongkuk Structures	Wind tower steel structures.	WM	S. KOREA
EDP Renovaveis SA	Wind, among the world's largest generators.	WI	PORTUGAL
Elia Group SA	High voltage power transmission, Europe/UK.	SG	BELGIUM
Encavis AG	Wind energy plants across Europe, solar too.	WF	GERMANY
Energiekontor AG	Wind Farm Developer, and group ownership.	WF	GERMANY
Energix Renewable	Wind, solar, independent power producer.	WF	ISRAEL
Energy Vault	Energy storage, re-purposing old wind blades.	WI	USA
Enlight Renewable Energy Ltd	Builds and operates wind, also solar sites.	WF	ISRAEL
FREYR	Wind used for new green battery manufacture.	SG	NORWAY
Fugro NV	Marine geoconsulting, subsea offshore wind.	WI	NETHERLANDS
Greenvolt Energias	Wind, residual biomass & urban demo waste.	WF	PORTUGAL
Grenergy Renovables SA	Wind projects in Chile, Peru, elsewhere.	WF	SPAIN
Hubbell	Electrical gear, modernizes grid, utilities.	SG	USA
Hydro One	Electricity transmission, distribution, Ontario.	SG	CANADA
Innergex Renewable Energy Inc	Independent renewable producer, wind.	WF	CANADA
Navitas Semiconductor	Inverters, power efficiency, newer GaN vs SiC.	SG	USA

Neoen SA	Wind, a lead French independent producer.	WF	FRANCE
Nexans SA	Subsea cables for offshore wind farms.	SG	FRANCE
NKT A/S	High voltage DC offshore wind, cables.	SG	DENMARK
Nordex SE	One of world's largest wind turbine makers.	WI	GERMANY
Orsted A/S	Renewable energy - transitioned from fossils.	WI	DENMARK
OX2 AB	Wind power generation, Europe.	WF	SWEDEN
PNE AG	Wind in Power to X, including direct green H2.	WI	GERMANY
Prysmian SpA	Cables for new offshore wind and grid.	SG	ITALY
Renew Energy Global	Utility scale wind farms, India.	WF	INDIA
Renova Inc	Independent renewable power producer.	WF	JAPAN
SBM Offshore NV	Offshore wind energy installations, wave too.	WF	NETHERLANDS
Schneider Electric	Advanced grid, wind energy management.	SG	FRANCE
SGL Carbon SE	Composite and graphite materials in wind.	WM	GERMANY
SKF AB	Wind gear rolling bearings, seals, mechatronics	WM	SWEDEN
SMA Solar Technology	Wind power conversion; green H2 from wind.	SG	GERMANY
Spie SA	Energy infrastructure sustainability, Europe.	SG	FRANCE
Stem	Software, optimizes wind + battery + grid.	SG	USA
Subsea 7 SA	Offshore wind installations, also Seaway 7.	WI	UK
TECO Electric & Machinery	Turbines for wind energy, and EV motors.	WM	TAIWAN
Terna Rete	Europe's largest independent grid operator.	SG	ITALY
Toray Industries	Carbon fiber for wind turbine blades.	WI	JAPAN
TPI Composites Inc	Wind blade manufacturer, assemblies.	WM	USA
Vestas Wind Systems A/S	One of first, largest, wind turbine makers.	WI	DENMARK
Wolfspeed	Silicon Carbide SiC in wind, better efficiency.	WI	USA

#### **WilderHill Wind Energy Index (WNX) for Latter Q4 2022: 56 components**

3 Deletes: JL Mag, Unison, Xinjiang Goldwind

8 Additions: Alfen, Cadeler, Dae Myoung, Energix, Hubbell, Hydro-One, Spie, Wolfspeed

#### **4 WilderHill Wind Index Sectors**

**SMARTER GRID (SG)**

**#**

15

**WIND FARMS (WF)**

16

WIND INNOVATION (WI)	15
<u>WIND MATERIALS (WM)</u>	<u>10</u>
Total =	56

56 components =  $100/56 = 1.78571428\%$  Weight each