



## **Alerian Global Alternative Energy Indexes Methodology**

- Alerian Global Alternative Energy Composite Index AGIGL
- Alerian Global Alternative Energy Extra-Liquid Index AGIXL
- Alerian North America Alternative Energy Index AGINA
- Alerian North America Alternative Energy Extra-Liquid Index AGINAXL
- Alerian EMEA Alternative Energy Index AGIEM
- Alerian EMEA Alternative Energy Extra-Liquid Index AGIEMXL
- Alerian Global Solar Energy Index SOLRX

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## Introduction

### Index Objective

The Alerian Global Index Family is a capitalization weighted, float adjusted family of equity indexes designed to serve as equity benchmarks for globally traded stocks which are principally engaged in the field of alternative energy technologies, including renewable energy, alternative fuels and related enabling technologies.

### Index Family & Highlights

Alerian Global Alternative Energy Composite Index (AGIGL) – Broadest based index in the family that consists of companies in five business segments: Alternative Energy Resources, Distributed Generation, Energy Efficiency, Enabling Technologies, and Environmental Technologies.

Alerian Global Alternative Energy Extra-Liquid Index (AGIXL) - Sub-Index of AGIGL containing the most liquid stocks of the Global Energy Composite Index constituents. -

Alerian North America Alternative Energy Index (AGINA) and Alerian EMEA Alternative Energy Index (AGIEM) – Regional subindexes of AGIGL.

Alerian North America Alternative Energy Extra-Liquid Index (AGINAXL) and Alerian EMEA Alternative Energy Extra-Liquid Index (AGIEMXL) – Extra liquid versions of the regional sub-indexes.

Alerian Global Solar Energy Index (SOLRX) – Companies in the Solar Power portion of the Alternative Energy Resources business segment.

### Dates

Reference Dates: Last Business Date of month prior to Rebalance/Reconstitution Month.

Reconstitution Dates: Indexes reconstituted quarterly on the third Friday of the last month of each calendar quarter.

Weight Date: Second Friday of Rebalance/Reconstitution Month.

Rebalance Dates: Indexes are rebalanced quarterly on the third Friday of the last month of each calendar quarter.

### Supporting Documents

This methodology is meant to be read in conjunction with supporting documents providing greater detail with respect to the policies, procedures and calculations described herein.

The list of the main supplemental documents for this methodology can be found in the Methodologies and Governance tabs on the [Index Resources](#) page as follows:

| Supporting Documents                 |
|--------------------------------------|
| Index Maintenance Policy             |
| Index Governance                     |
| Index Policies                       |
| Methodology Policies                 |
| Glossary                             |
| Index Change and Consultation Policy |

## Eligibility Criteria and Index Construction

### Universe

Common shares of companies trading on approved national exchanges <sup>1</sup>(See appendix for a list of approved exchanges) belonging to the following five business segments:

Alternative Energy Resources. Companies whose technologies are involved with:

- Solar Power- : companies in the following sectors - 1) Photovoltaic, Concentrated Solar Power, and Solar Thermal Power; 2) Solar Integrators; and 3) Related Technologies.
- BioEnergy- including power and fuel.
- Wind Power
- Hydro Power, Tidal Power and Wave Power
- Geothermal Power

Distributed Generation. Companies whose technologies produce power at or near the end user. These technologies include:

- Micro Turbines
- Diesel Engines
- Fuel Cells
- Hydrogen Generation and Storage

Energy Efficiency. Companies whose technologies are involved with:

- Lighting
- White Tags
- Cogeneration
- Energy Recycling
- Advanced Metering
- Demand Response

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<sup>1</sup> NASDAQ (US), stocks must be “reported securities” under 11Aa3-1 of the Securities and Exchange Act, i.e., National Market System stocks. Similar criteria apply to stocks with foreign listings.

Enabling Technologies. Companies whose technologies are involved with:

- Power Electronics
- Advanced Battery Chemistries
- Flywheels
- Superconductors
- Ultracapacitors
- Advanced Materials

Environmental Technologies. Companies whose technologies are involved with:

- Air Quality and Emission Mitigation
- Clean Coal

## Index Construction

### Constituent Selection

Composite:

A company must derive at least 50% of its revenue from the five business segments (20% for existing companies) or meet the following criteria:

- 1) such revenues represent more than 20% of the company's total revenues and such revenues are independently reported in the company's financial reports,
- 2) applicable revenues are likely to have a material impact on the company's overall share price performance,
- or
- 3) the company's applicable business is likely to have a significant impact on the alternative energy sector as a whole.

Additionally, companies must meet the following criteria:

- Minimum Market and Free Float Market Cap – new: 100 million USD; current: 50 million USD
- Minimum Free Float Percent – 20%
- Minimum R score – new: 0.25; current: 0.15 (R-Score = 3-month ADTV (thousands USD) / Float Market Capitalization (millions USD))

AGIXL and SOLRX additionally require a 1 million USD 3-month ADTV for new constituents and a 600k USD ADTV for current constituents.

Securities that traded at least 22 days but less than 3 months use their entire history in the preceding 3 month period to measure liquidity.

SOLRX:

Companies that are part of the Solar Power category within the Alternative Energy Resources segment.

Regional Indexes:

Securities are selected from the composite based on their principal place of business.

Extra Liquid:

- Alerian Global Alternative Energy Extra-Liquid Index

The 30 stocks from the composite index with the highest average rank of float market capitalization and average daily dollar turnover for the previous three months. Stocks must be ranked in the top 25 to be added and lower than 35 to be dropped.

- Alerian North America Alternative Energy Extra-Liquid Index and Alerian EMEA Alternative Energy Extra-Liquid Index

The 15 stocks from the corresponding regional index with the highest average rank of float market capitalization and average daily dollar turnover for the previous three months. Stocks must be ranked in the top 12 to be added and lower than 18 to be dropped.

### Constituent Weightings & Constraints

Weights are float market cap adjusted. Constituents are capped at 20% and the aggregate weight of constituents that exceed 5% shall not exceed 45%. Capped weight is distributed to the uncapped constituents.

## Index Maintenance

### Rebalancing and Reconstitution

The Indexes are rebalanced on the “Rebalance Date” and additionally reconstituted on the “Reconstitution Date”. Pricing used in share weights used for reconstitutions are as of the “Weight Date”. Share weights for the rebalanced Indexes are computed as of the “Weight Date”. Changes to the Indexes related to the rebalances are as of the “Rebalance Date”. Additions are only made on reconstitution dates.

### Corporate Actions

Please refer to the Index Maintenance Policy document for information on Corporate Action processing.

## Base Date and History Availability

Index history availability, base dates and base values are shown in the table below.

| Index   | Price Index | Base Date | Base Value | Total Return Index | Base Date | Base Value |
|---|-------------|-----------|------------|--------------------|-----------|------------|
| Alerian Global Alternative Energy Composite Index           | AGIGL       | 04/24/12  | 901.61.54  | AGIGLT             | 12/17/04  | 928.54     |
| Alerian Global Alternative Energy Extra-Liquid Index        | AGIXL       | 08/04/13  | 1143.10    | AGIXLTR            | 08/04/13  | 1185.37    |
| Alerian North America Alternative Energy Index              | AGINA       | 04/26/12  | 712.65     | AGINAT             | 04/26/12  | 722.39     |
| Alerian North America Alternative Energy Extra-Liquid Index | AGINAXL     | 04/26/12  | 746.34     | AGINAXLT           | 04/26/12  | 752.90     |
| Alerian EMEA Alternative Energy Index                       | AGIEM       | 04/26/12  | 749.43     | AGIEMT             | 04/26/12  | 774.58     |
| Alerian EMEA Alternative Energy Extra-Liquid Index          | AGIEMXL     | 04/26/12  | 950.16     | AGIEMXLT           | 04/26/12  | 984.38     |
| Alerian Global Solar Energy Index                           | SOLRX       | 12/31/04  | 1000       | SOLRXTR            | 12/31/04  | 1000       |

## Index Calculation

Please refer to the Index Maintenance Policy document for information on index calculations.

## Index Governance

The index is governed and managed by a VettaFi Index Committee for the purpose of meeting the goals of the index. For more information, please refer to the Index Governance document.

## Index Policies

Please refer to the Index Policies document for information regarding Announcements, Holiday Schedules, Unexpected Exchange Closures, and Recalculation Policy.

## Contact Information

For any questions regarding an index, please contact: [index.production@vettafi.com](mailto:index.production@vettafi.com)



## Appendix

### List of Approved Exchanges

| EXCHANGE        | COUNTRY          |
|-----------------|------------------|
| ASE             | AUSTRALIA        |
| ASX             | AUSTRALIA        |
| Australian      | AUSTRALIA        |
| Vienna          | AUSTRIA          |
| EN Brussels     | BELGIUM          |
| Euron. Brussels | BELGIUM          |
| Sao Paulo       | BRAZIL           |
| Toronto         | CANADA           |
| Sant. Comerc    | CHILE            |
| Sant. Elec      | CHILE            |
| SANTIAGO        | CHILE            |
| Hong Kong       | CHINA            |
| Shanghai        | CHINA            |
| Shenzen         | CHINA            |
| Shenzhen        | CHINA            |
| Singapore       | CHINA            |
| Prague          | CZECH REPUBLIC   |
| Prague-SPAD     | CZECH REPUBLIC   |
| Copenhagen      | DENMARK          |
| Reykjavik       | DENMARK          |
| Cairo           | EGYPT            |
| Egypt (EGX)     | EGYPT, ARAB REP. |
| Tallin          | ESTONIA          |
| Tallinn         | ESTONIA          |
| Helsinki        | FINLAND          |
| EN Paris        | FRANCE           |
| Euronext Paris  | FRANCE           |
| Berlin          | GERMANY          |
| Dusseldorf      | GERMANY          |
| Frankfurt       | GERMANY          |
| Munich          | GERMANY          |
| Athens          | GREECE           |
| Hong Kong       | Hong Kong        |
| NASDAQ CM       | HONG KONG        |
| Budapest        | HUNGARY          |
| Indonesia       | INDONESIA        |
| Indonesia SE    | INDONESIA        |
| Dublin          | IRELAND          |
| Tel Aviv        | ISRAEL           |
| Brsaltaliana    | ITALY            |
| Milan           | ITALY            |
| Fukuoka         | JAPAN            |
| Jasdaq          | JAPAN            |
| Nagoya          | JAPAN            |
| Osaka           | JAPAN            |

| EXCHANGE          | COUNTRY        |
|-------------------|----------------|
| Tokyo             | JAPAN          |
| KO                | Korea, Rep.    |
| Luxembourg        | LUXEMBOURG     |
| Bursa Malays      | MALAYSIA       |
| Bursa Malaysia    | MALAYSIA       |
| Kuala Lumpur      | MALAYSIA       |
| Malaysia ACE Mkt  | MALAYSIA       |
| Mexico            | MEXICO         |
| Mexico City       | MEXICO         |
| EN Amsterdam      | NETHERLANDS    |
| Euron. Amsterdam  | NETHERLANDS    |
| New Zealand       | NEW ZEALAND    |
| NZX               | NEW ZEALAND    |
| Oslo              | NORWAY         |
| Philippine SE     | PHILIPPINES    |
| Philippines       | PHILIPPINES    |
| Warsaw            | POLAND         |
| Warsaw Continuous | POLAND         |
| EN Lisbon         | PORTUGAL       |
| Euronext Lisbon   | PORTUGAL       |
| Catalist          | SINGAPORE      |
| Johannesburg      | SOUTH AFRICA   |
| Lagos             | SOUTH AFRICA   |
| Korea             | SOUTH KOREA    |
| Korea SE          | SOUTH KOREA    |
| KOSDAQ            | SOUTH KOREA    |
| Continuous        | SPAIN          |
| Madrid            | SPAIN          |
| Madrid-SIBE       | SPAIN          |
| Nordic GM         | SWEDEN         |
| Stockholm         | SWEDEN         |
| SIX Swiss         | SWITZERLAND    |
| SIX Swiss Ex      | SWITZERLAND    |
| Taiwan            | TAIWAN         |
| Istanbul          | TURKEY         |
| London            | UNITED KINGDOM |
| LONDON INTL       | UNITED KINGDOM |
| London Plus Mkt   | UNITED KINGDOM |
| Nasdaq            | UNITED STATES  |
| NASDAQ GM         | UNITED STATES  |
| NASDAQ GS         | UNITED STATES  |
| New York          | UNITED STATES  |
| NYSE Amex         | UNITED STATES  |
| NYSE ARCA         | UNITED STATES  |
|                   |                |