

## **Index Methodology**



## **AlphaShares China Infrastructure Index**

**October, 2009**

## AlphaShares China Infrastructure Index

### Overview

The **AlphaShares China Infrastructure Index** (“the Index”) measures and monitors the performance of an investable universe of publicly-traded Chinese companies as defined by the criteria below. The Index is created and is owned by AlphaShares, LLC. The index is maintained by Standard and Poor’s Corporation (the “Index Administrator”).

### Index Construction

The AlphaShares China Infrastructure Index is comprised of the public securities of issuers that meet the specific and objective criteria listed below:

#### 1. AlphaShares China Infrastructure Index Eligibility Criteria

To be considered for inclusion in the Index, the following criteria must be met:

- A. **China Infrastructure Exposure.** The primary criteria for selecting a company for inclusion in the index are:
  - a. Mainland China-based infrastructure companies with the GICS classification codes listed in Appendix A of this document.
  - b. Hong Kong/Macau-based infrastructure companies with the GICS classification codes listed in Appendix A of this document.
    - i. Hong Kong/Macau-base companies must derive a majority of their revenue from mainland China or the Special Administrative Regions of China such as Hong Kong and Macau. If geographic revenue data is not available for these companies or inconclusive, they can not be included in the index.
- B. **Market Capitalization.** A float-adjusted capitalization minimum of USD \$200 Million are used for initial portfolio construction and eligibility. A float-adjusted capitalization greater than USD \$150 Million are required for ongoing inclusion in the Index. See more details under Index Maintenance.
- C. **Investability.** To ensure adequate investability, only shares open to foreign ownership meeting the criteria below are eligible for inclusion in the index.
  - a. China A-Shares are not eligible for inclusion in the index.
  - b. China B-Shares are not eligible for inclusion in the index.
  - c. Hong Kong-listed securities including China H-Shares and Red Chips are eligible for inclusion in the index.
  - d. N-Shares trading in New York and their equivalents trading in other foreign markets are eligible for inclusion in the index.

- D. **Equity Securities.** Only publicly issued common equity securities trading on a major exchange are eligible for inclusion in the index. Debt or quasi-debt securities, such as convertible securities, are not eligible for inclusion.
- E. **ADRs.** American Depository Receipts (ADR's), American Depository Shares (ADSs), Global Depository Receipts (GDR's), and International Depository Receipts (IDR's) are eligible for inclusion in the index.

## 2. Target Weights

The Index uses a modified float-adjusted market capitalization weighting methodology to weight individual positions. To help insure diversification and control risk the following diversification rules are used for the Index.

### A. Security Weight

- a. **Security Weight – Maximum.** The target weight of any one position is limited to 5.0% of the Index. Annually, all individual securities with a float-adjusted market capitalization weighting greater than 5.0% will be rebalanced back to 5.0%. Excess exceeding 5.0% will be applied on a pro-rata basis to all remaining index constituents.

Once set, target weights are free to float due to market actions. Weights are reviewed and the index rebalanced according to the rules under Index Maintenance below.

## Index Maintenance

Index Maintenance is the responsibility of the Index Administrator, Standard and Poor's. Index maintenance includes monitoring and implementing any adjustments, additions and deletions to the index as per this index methodology and any adjustments, additions and deletions due to corporate actions.

### Additions

Most additions to the index will be at the annual rebalance. IPOs that meet all the eligibility criteria and fall within the top twenty stocks by capitalization of the index, will be added at the end of each calendar quarter, on the third Friday of the final month of the quarter. Any addition will be funded on a pro-rata basis from the remainder of the Index, net of any deletions. IPO additions are subject to the Target Weight rules detailed above.

### Deletions

A security will be deleted from the index immediately due to bankruptcy, acquisition or merger of the company by or into another company, spin-offs, tender offers or other similar corporate actions. In the case of such deletions, no replacement will be made until the annual rebalance. Any proceeds resulting from deletions will be invested on a pro-rata basis over the remainder of the Index, net of any additions.

### **Annual Index Reconstitution**

Index Reconstitution is the responsibility of the Index Administrator and is performed annually in December based on data as of the last business day in November. Index Reconstitution includes:

- 1. Additions to the Index.** New securities will be added to the index if they meet the eligibility requirements as defined above under Eligibility Criteria. Any additions will be funded on a pro-rata basis from the remainder of the Index, net of deletions.
- 2. Deletions from the Index.** Securities will be deleted from the index if they no longer meet the eligibility requirements as defined above under Eligibility Criteria with the exceptions detailed below under Rebalancing. Any proceeds resulting from deletions will be invested on a pro-rata basis over the remainder of the Index, net of additions.
  - i. Capitalization Buffer Zone** – A buffer zone is used to control turnover during reconstitution:
  - b. Minimum.** Companies whose capitalization has fallen below USD \$150 Million will be deleted from the Index. Companies whose capitalization lies between the USD \$200 Million cutoff and the lower bound of USD \$150 Million will remain in the Index.

### **Semi-Annual Index Rebalance**

Index rebalancing is the responsibility of the Index Administrator and is performed semi-annually on the third Friday of June and December based on data as of the close of market that Friday. Index Rebalancing includes:

- 1. Rebalancing.** The Index will be rebalanced to enforce the target weights as described above under Index Construction and to accommodate any additions or deletions to the index as described above.

## **Index Administration**

Standard and Poor's serves as the Index Administrator. These responsibilities include monitoring and implementing adjustments, additions and deletions to the indices due to eligibility rules described above and corporate actions.

## **Index Calculation**

Standard and Poor's serves as the Calculation Agent for the indices. The Calculation Agent is responsible for compiling, calculating, maintaining, and disseminating the value of the indices.

## **Index Review**

Index Administrator will review and adjust the Index on an annual basis ("Index Reconstitution") on the third Friday of December. Changes resulting from the Index Reconstitution are implemented before the market open on the first trading day following the reconstitution.

## **AlphaShares Index Committee**

The AlphaShares Index Committee solely maintains the AlphaShares China Infrastructure Index Methodology and is not involved in any way in the day to day maintenance or administration of the index.

The Index Committee will meet once annually in November to review this methodology. Any changes to the methodology will be publicly disclosed at [www.alphashares.com](http://www.alphashares.com) prior to implementation. A minimum ten (10) trading days prior notice will be given prior to the implementation of any such change by the Index Administrator.

## Appendix A

### AlphaShares China Infrastructure Index Included GICS Sectors

**10102040 Oil & Gas Storage & Transportation**

Companies engaged in the storage and/or transportation of oil, gas and/or refined products. Includes diversified midstream natural gas companies facing competitive markets, oil and refined product pipelines, coal slurry pipeline and oil & gas shipping companies.

**10101020 Oil & Gas Equipment & Services**

Manufacturers of equipment, including drilling rigs and equipment, and providers of supplies and services to companies involved in the drilling, evaluation and completion of oil and gas wells.

**15102010 Construction Materials**

Manufacturers of construction materials including sand, clay, gypsum, lime, aggregates, cement, concrete and brick. Other finished or semi-finished building materials are classified in the Building Products Sub-Industry.

**15104010 Aluminum**

Producers of aluminum and related products, including companies that mine or process bauxite and companies that recycle aluminum to produce finished or semi-finished products. Excludes companies that primarily produce aluminum building materials classified in the Building Products Sub-Industry.

**15104050 Steel**

Producers of iron and steel and related products

**20102010 Building Products**

Manufacturers of building components and home improvement products and equipment. Excludes lumber and plywood classified under Forest Products and cement and other materials classified in the Construction Materials Sub-Industry.

**20103010 Construction & Engineering**

Companies engaged in primarily non-residential construction. Includes civil engineering companies and large-scale contractors. Excludes companies classified in the Homebuilding Sub-Industry.

**20106010 Construction & Farm Machinery & Heavy Trucks**

Manufacturers of heavy duty trucks, rolling machinery, earth-moving and construction equipment, heavy farm machinery and manufacturers of related parts. Includes non-military shipbuilding.

**20305010 Airport Services**

Operators of airports and companies providing related services.

**20305020 Highways & Railtracks**

Owners and operators of roads, tunnels and railtracks.

**20305030 Marine Ports & Services**

Owners and operators of marine ports and related services.

**50101010 Alternative Carriers**

Providers of communications and high-density data transmission services primarily through a high bandwidth/fiber-optic cable network.

**50101020 Integrated Telecommunication Services**

Operators of primarily fixed-line telecommunications networks and companies providing both wireless and fixed-line telecommunications services not classified elsewhere.

**50102010 Wireless Telecommunication Services**

**55101010 Electric Utilities**

## AlphaShares China Infrastructure Index

Companies that produce or distribute electricity. Includes both nuclear and non-nuclear facilities.

### **55102010 Gas Utilities**

Companies whose main charter is to distribute and transmit natural and manufactured gas. Excludes companies primarily involved in gas exploration or production classified in the Oil & Gas Exploration & Production Sub-Industry. Also excludes diversified midstream natural gas companies classified in the Oil & Gas Storage & Transportation Sub-Industry.

### **55103010 Multi-Utilities**

Utility companies with significantly diversified activities in addition to core Electric Utility, Gas Utility and/or Water Utility operations.

### **55104010 Water Utilities**

Companies that purchase and redistribute water to the end-consumer. Includes large-scale water treatment systems.