

What is TICCS®?

Any infrastructure investment ultimately corresponds to shares (or quasi-equity) invested in a company or debt instruments issued by a company (or borrower). The Infrastructure Company Classification Standard or *TICCS*® is a taxonomy designed to classify and organise data about equity and debt investments in infrastructure companies.

TICCS® is a class-based taxonomy: it consists of four pillars:

1. Business risk (divided into BR classes)
2. Industrial activity (IC classes)
3. Geo-economic exposure (GE classes)
4. Corporate governance (CG classes).

Each of these is made of non-overlapping super-classes, classes and sub-classes of *pure* characteristics.

Real-life infrastructure companies *always* belong to each individual pillar and may also fall into *multiple* classes within each pillar e.g. an infrastructure project company may own both a water treatment plant and a power generation asset. This 'one-to-many' approach to classifying infrastructure companies keeps the taxonomy pure, which was a recommendation of the *TICCS* Review Committee in January 2020, following the 2019 Market Consultation. In practice, if a company falls under multiple *TICCS*® categories within a pillar, users may assign weights to each class e.g. in the example above: 30% water, 70% power.

Some classes tend to be correlated across pillars. For instance, network utilities (IC80) tend to be corporates (CG02). *TICCS*® ignores such correlations but applying it allows the structure of the investment universe to be documented empirically in terms of each pillar. Thus, the largest share of the investible market on the equity side is made of corporate utilities.

TICCS® is also about risk. However, it is not designed to discriminate between pure sources of *systematic* risks in infrastructure companies. Rather, as a taxonomy of infrastructure companies, *TICCS*® aims to be an exhaustive list of objective, real world, distinguishing characteristics i.e. a system to organise information about actual firms.

Each *TICCS*® pillar captures a different dimension of what makes infrastructure companies both unique and relatively more homogenous. In that sense, the *TICCS*® pillars capture differences in aggregate *risk profile* that represent *combinations* of systematic risk factors, even though these are not the object of the taxonomy.



TICCS® is a Standard for the Industry

TICCS® is a common classification standard that can be used by asset owners and managers, regulators, banks, and other investors across the various stages of the infrastructure-investment value chain, including consultants and researchers. It is designed to help investment and research professionals:

- take into account the evolution of the infrastructure-procurement landscape in space and time;
- compare sectoral- and business-risk exposures of investor portfolios with broad market benchmarks;
- document investable infrastructure markets;
- analyse the contribution of individual categories of companies to an infrastructure portfolio; and
- design consistent sector- and business-risk-driven investment strategies in infrastructure globally.

Key Features of *TICCS*®

- **Robust:** *TICCS*® is built on the basis of academic research on the financial economics of infrastructure companies.
- **Global:** Its range of categories ensures that any private infrastructure company worldwide can be integrated into this framework, be it a regulated utility or a solar-project company.
- **Risk focused:** While *TICCS*® aims to categorise companies on the basis of their *prima facie* characteristics. It focuses on groupings that are relevant to risk and that play a role in asset pricing and portfolio construction.
- **Dynamic:** Infrastructure companies evolve over their life cycles and with changes in national and sector regulation. The evolution of their characteristics plays an important role in infrastructure investment and can be reflected consistently and homogeneously over time.

TICCS® Structure and Methodology

TICCS® is a four-pillar multi company-classification system designed to capture the characteristics of infrastructure investments. It consists of:

- 3 classes and 5 sub-classes of business risk;
- 8 industrial superclasses, corresponding to 33 industry classes of specific industrial activities and 95 industrial asset-level subclasses;
- 4 geoeconomic classifications; and
- 2 corporate-governance classes with 2 subclasses.

Companies are classified on the basis of individual qualitative and quantitative criteria, including their contractual and regulatory structure and environment; their source of revenues; and their type of industrial activity, including the complexity and level of uniqueness of the relevant infrastructure both from a construction and an operational perspective. Their financial and corporate structure is also taken into account.

The *TICCS*® Comparative Advantage

TICCS® is built in the context of the EDHEC*infra* database of private infrastructure investments, the largest of its kind, which tracks the financial performance of hundreds of infrastructure companies globally.

Each national market included in the EDHEC*infra* universe is analysed in detail, including all the relevant aspects of infrastructure-procurement history and regulation in order to match this classification.

TICCS® is also reviewed regularly as new markets and companies are added to the EDHEC*infra* database. The design of this universe is described in the [Index Methodology Standards](#) document available on the EDHEC*infra* website.

Discover *TICCS* in this two-minute video

