

# Thomas Schumann

## Water Security Index Family

### UK and EU BMR Benchmark Statement

As per the UK and EU Benchmarks Regulations

#### Change History

Version Number	Editor	Date	Comments
1.0	Gareth Parker	21/04/2021	Live document

#### Distribution

Name	Firm/Department	Location
Gareth Parker	Moorgate Benchmarks	London
Tim Black	Moorgate Benchmarks	London
Markus Barth	Anatase Ltd	London
Public		

#### Notes:

"DR" refers to [Commission Delegated Regulation \(EU\) 2018/1643](#)

"EU BMR" refers to the [EU Benchmarks Regulation \(EU\) 2016/1011](#)

"UK BMR" refers to the [Benchmarks \(Amendment and Transitional Provision\) \(EU Exit\) Regulations 2019](#), commonly referred to as the "UK Benchmarks Regulation."

## 1. General Information

### 1.1. Date of publication DR 1(1)(a)

This document is the benchmark statement for the Thomas Schumann Water Security Index Family, as first published and dated above. Moorgate Benchmarks Ltd is the administrator of the Thomas Schumann Water Security Index Family. The company provides index calculation, benchmark research & design, benchmark governance and oversight services to other benchmark administrators.

### 1.2. Reviews of benchmark statement BMR 27(1)

An update of this and of any future benchmark statement will be made whenever the information it provides is no longer correct or sufficiently precise, whenever there is a material change in the methodology for determining the indices, and will be in any case, reviewed at least annually.

### 1.3. Benchmark ISINs DR 1(1)(b)

Moorgate Benchmarks does not maintain ISINs for these benchmarks.

### 1.4. Contributions of input data DR 1(1)(c)

These benchmarks do not use contributed input data.

### 1.5. Regulated-data benchmark disclosures. DR 1(d) / DR 2)

These benchmarks use prices sourced from exchanges either regulated by the UK or EU (as applicable for benchmarks administered under the relevant regulation), meeting the requirements of Article 3(24)(a), or that are “readily-available data” as defined within the BMRs. Exchanges that provide prices deemed appropriate for use are listed within the index methodology.

Input FX data is sourced from Refinitiv, whose FX rates are administered by Refinitiv Benchmark Services under the UK and EU BMR.

### 1.6. Significant / non-significant benchmarks disclosure DR 1(d)

These benchmarks are non-significant benchmarks.

## 2. Content

### 2.1. Market reality BMR 27(1)(a)

A full description of the market reality and geographical boundaries covered by the Thomas Schumann Water Security indices is set out in its methodology document, available at [www.moorgatebenchmarks.com/clients/thomasschumanncapital](http://www.moorgatebenchmarks.com/clients/thomasschumanncapital).

### 2.2. Use of discretion BMR 27(1)(b)

The methodology of the Thomas Schumann Water Security indices is designed to remove discretion to the greatest extent possible.

The members of the Index Management Committee expect to take particular pains to ensure index methodologies are in each case developed from its members’ very significant market experience, and are updated whenever appropriate to reflect changing circumstances.

As a result, discretion / expert judgement in the calculation of the Thomas Schumann Water Security Indices is expected to be extremely rare, limited to the identification of an appropriate approach for handling unusual corporate events, or in very particular circumstances, to the assessment of valuations where on-exchange traded prices are not available. After ad-hoc discretion or expert judgement is applied, the Committee considers whether the approach taken was suitable, and whether the relevant methodology should be updated to ensure the handling of a repetition of the event is clear.

Other than in the handling of corporate events, Moorgate believes discretion / expert judgement might be necessary in the general area of stock trading suspensions. Index methodologies provide a standard approach for handling suspensions, based upon the length of a suspension. However, companies' trading can be halted for various reasons, including in some circumstances at the request of their management, and there may be scenarios where it would be appropriate, in order to minimise disruption to the indices and to minimise cost to index product investors, to retain an index constituent within the indices rather than to remove it as per the methodology.

### 2.3. External Factors BMR 27(1)(c)

Moorgate Benchmarks notes that it is possible that circumstances may arise that cause the Thomas Schumann Water Security Indices and their methodology to have to be materially altered or their publication ceased. Further details are available within the Moorgate Benchmarks Material Change and Cessation Policy, available from [www.moorgatebenchmarks.com](http://www.moorgatebenchmarks.com).

### 2.4. Changes / Cessation BMR 27(1)(d)

Those issuing or using contracts or other instruments referencing the Thomas Schumann Water Security Indices should note that such contracts or other instruments should be able to withstand material changes to or cessation of the indices.

### 2.5. Key terms DR 1(2)

Key terms relating to the Thomas Schumann Water Security Indices are defined within the methodology document.

### 2.6. Methodology, and changes to the methodology, and cessation of benchmarks BMR 27(2)(b) / DR 1(5)

The published methodology document details the economic interest of the benchmarks, and how they are created and maintained, including details of how the benchmarks are periodically reviewed. The published Moorgate Benchmarks Material Change and Cessation Policy details how potential changes are managed and if appropriate, approved. In brief, this document clarifies:

- A definition of materiality
- That any benchmark stakeholder can propose a change to the methodology

- That proposed changes will initially be considered by the Index Management Committee
- That where material, the Committee will consult with stakeholders
- That the final decision regarding a proposed change rests with the Index Management Committee
- That suitable forewarning will be given to stakeholders of a material change wherever possible, with a clear timetable for the implementation of the change.
- That there may be changes resulting from external factors (those beyond the control of Moorgate Benchmarks) that require changes to be made more rapidly.

#### 2.7. Input data BMR 27(2)(c)

The methodology document details the source of pricing and other data used in the construction, maintenance and determination of the Thomas Schumann Water Security Indices.

#### 2.8. Controls over judgement and discretion BMR 27(2)(d) / DR 1(4)

Judgement and discretion is reduced as far as possible within the methodology of the Thomas Schumann Water Security Indices. Response 2.2 explains where Moorgate Benchmarks considers discretion may be required.

#### 2.9. Determination of the benchmarks during stress periods BMR 27(2)(e)

Certain events can make it difficult for users of index-based products to trade index constituent securities. The Moorgate Benchmarks Equity Index Calculation Guide, available from [www.moorgatebenchmarks.com](http://www.moorgatebenchmarks.com), details how market disruption events are managed within the determination of the Thomas Schumann Water Security Indices.

#### 2.10. Input data errors BMR 27(2)(f)

The Moorgate Benchmarks Error Correction Policy, available from [www.moorgatebenchmarks.com](http://www.moorgatebenchmarks.com), details how index determination errors are managed and where appropriate resolved.

#### 2.11. Potential limitations BMR 27(2)(g) / DR 1(3)

The calculation of the indices is reliant on prices received from the various exchanges on which the index constituents trade. Where a market is closed for holidays or other reasons, or a "normal" closing price is not received (in most cases, an auction price where closing auctions normally determine official closing prices), the last traded price will be used.

The weighting of index constituents is derived from Water Risk metrics sourced from Refinitiv, which in turn relies on its ability to source appropriate information from which to derive its metrics. If the availability of this data is reduced, fewer index constituents could be assessed, with ongoing impact to the indices. The methodology details the process for using this data to assess and weight constituents and prospective constituents.

### 3. Review and Update of Benchmark Statements

#### 3.1. Review and Update of Benchmark Statements DR 6

An update of this and of any future benchmark statement will be made whenever the information it provides is no longer correct or sufficiently precise, whenever there is a material change in the methodology for determining the indices, and will be in any case, reviewed at least annually.

### 4. Disclosures

#### 4.1. Interest rate benchmarks DR 1(1)(d) / DR 3

Not applicable

#### 4.2. Commodity benchmarks DR 1(1)(d) / DR 4

Not applicable

#### 4.3. Critical benchmarks DR 1(1)(d) / DR 5

Not applicable

#### 4.4. EU Climate Transition / Paris alignment benchmarks BMR 19a / BMR 19b

Not applicable

#### 4.5. Alignment with carbon emissions reductions or Paris Agreement objectives BMR 27(2a)

This methodology does not align with the target of carbon emission reductions or seek to attain the objectives of the Paris Agreement.

#### 4.6. ESG Factors disclosure BMR 13(1)(d) / BMR 27(2a)

The Thomas Schumann Water Security Indices take account of ESG factors in their design via the exclusion of certain industries generally considered to be non-ESG compliant as well as the exclusion of companies with the lowest ESG/SDG Combined Ratings as sourced from Refinitiv and specifically, water risk factors. Please review the methodology document, available from [www.moorgatebenchmarks.com/clients/thomasschumanncapital](http://www.moorgatebenchmarks.com/clients/thomasschumanncapital), for full details of how the methodology and the indices reflect those factors.

Data summarising the ESG exposures of the indices can be found within the appendix.

#### 4.7. Specific disclosures relating to significant equity/bond benchmarks and EU Climate Transition / Paris-aligned benchmarks BMR 27(2a)

Not applicable

## APPROVAL

This Benchmarks Statement was approved by the directors of Moorgate Benchmarks Ltd and Moorgate Benchmarks GmbH, and is reviewed at least annually.

# Appendix

The following information is derived from data sourced from Refinitiv.

	<b>TSC Euro Water Security Index</b>	<b>TSC US Water Security Index</b>
Top 10 Holdings Wtd Average ESG Score	80.56	75.10
Combined ESG Score	77.64	69.17
<b>ESG Measures</b>		
Environmental Score	77.35	65.58
GHG Intensity	100.48	83.50
GHG Emissions Reported	4,440,589	3,127,659
% GHG Reported versus Estimated	N/A	N/A
Social Score	83.23	73.39
Absence of Anti Corruption Policies	3.5%	1.5%
Anti-Corruption Violations	13.6%	8.5%
Social Violations	83 / 36.4%	142 / 26.3%
Weighted Average Accidents, Injuries, Fatalities	300.0	768.8
Gender Pay Gap	25.4%	33.1%
Governance Score	69.13	66.19
% of Female Board Members	37.1%	29.1%
% of Independent Board Members	66.0%	67.5%
% Exposure to No Due Diligence Policies	3.1%	17.8%
Determination of Controversial Weapons	N/A	N/A
% Exposure to Controversial Weapons	N/A	N/A
% Exposure to Climate-Related Risks	83.8%	65.1%
% Exposure to Tobacco Sector	0%	0%

<b>Exposure to Sections A to H and L of Annex I - Regulation No 1893/2006</b>		
Agriculture, Forestry & Fishing	0.0%	0.0%
Mining & Quarrying	0.0%	0.8%
Manufacturing	51.7%	39.1%
Electricity, Gas, Steam and Air Conditioning Supply	3.0%	1.2%
Water Supply, Sewerage, Waste Management, Remediation Activities	0.3%	0.3%
Construction	2.6%	0.3%
Wholesale & Retail Trade; Motor vehicle repairs	5.9%	8.7%
Transportation & Storage	2.0%	2.1%
Real Estate Activities	2.0%	2.2%
<b>Exposure to Divisions 05-09, 19, 20 of Annex I Regulation No 1893/2006</b>		
Mining of Coal & Lignite	0.0%	0.0%
Extraction of Crude Petroleum and Natural Gas	0.0%	0.0%
Mining of Metal Ores	0.0%	0.0%
Other Mining & Quarrying	0.0%	0.0%
Mining Support Service Activities	0.0%	0.0%
Manufacture of Coke and Refined Petroleum Products	0.0%	0.0%
Manufacture of Chemicals and Chemical Products	0.0%	0.0%
<b>Exposure to Environmental Goods &amp; Services Article 2, point 5 EU 691/2011</b>		
Alternative electric utilities	0.0%	0.0%
Biodiesel	0.0%	0.0%
Biomass & biogas fuels	0.0%	0.0%
Biomass & waste to energy electric utilities	0.0%	0.0%
Biomass power energy equipment	0.0%	0.0%

Carbon capture & storage	0.0%	0.0%
Environmental consultancy services	0.0%	0.0%
Environmental land services & biotechnology	0.0%	0.0%
Environmental organizations	0.0%	0.0%
Environmental services & equipment (NEC)	0.0%	0.3%
Ethanol fuels	0.0%	0.0%
Geothermal electric utilities	0.0%	0.0%
Geothermal equipment	0.0%	0.0%
Hydrogen fuel	0.0%	0.0%
Hydropower equipment	0.0%	0.0%
Photovoltaic solar systems & equipment	0.0%	0.1%
Purification & treatment equipment	0.0%	0.0%
Pyrolytic & synthetic fuels	0.0%	0.0%
Renewable energy equipment & services (NEC)	0.3%	0.0%
Renewable energy services	0.0%	0.0%
Renewable fuels (NEC)	0.0%	0.0%
Renewable IPPs	0.1%	0.0%
Renewable utilities	0.0%	0.0%
Solar electric utilities	0.0%	0.0%
Stationary fuel cells	0.0%	0.1%
Thermal solar systems & equipment	0.0%	0.0%
Waste management, disposal & recycling services	0.1%	0.0%
Waste to energy systems & equipment	0.0%	0.0%
Wave power energy equipment	0.0%	0.0%
Wind electric utilities	0.0%	0.0%
Wind systems & equipment	0.3%	0.0%