

# Speedwell Settlement Services

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## Benchmark Statement

This is the Benchmark Statement for the following family of Parametric Climate Indices:

### Producer Wind Benchmarks Energy Output Fraction

(the 'Speedwell Wind Benchmarks')

This is a family of non-significant benchmarks pursuant to The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019 as it does not meet either the critical benchmark thresholds or the EUR 50 billion significant benchmark threshold detailed in the Regulations.

### Version Control

Release1	8 October 2018	Initial Listing
Release2	15 September 2020	Addition of ERA5 source

### Regulatory Background

Speedwell Settlement Services Ltd ('Speedwell Settlement Services') has been granted a Part 4A permission under Part 4A of the Financial Services and Markets Act 2000 to carry on the regulated activity of administering a benchmark.

Speedwell Settlement Services was authorised by the United Kingdom Financial Conduct Authority with an effective date of 7 August 2018 and was granted a Part 4A permission under Part 4A of the Financial Services and Markets Act 2000 ("FSMA") to carry on the regulated activity of administering a benchmark. That Part 4A permission constitutes SSS's 'Registration' for the purposes of the UK Benchmarks Register.

### Introduction

SSS is the Benchmark Administrator for the Speedwell Wind Benchmarks Energy Output Fraction family of indices.

Wind Benchmarks are parametric indices that permit risk transfer relating to energy output from for specific windfarm assets ("Producer Wind Benchmarks"). Each Benchmark represents daily or sub-daily theoretical energy production as a fraction of theoretical maximum output based on the "frozen" installed wind generation capacity as of a specific date and separately defined for each index in the family. The methodology can be applied to any basket of wind generation assets to permit risk transfer.

### General Disclosure

This Benchmark Statement was first published on 8 October 2018 and has been updated as shown in the Version Control section.

### Regional Relevance

The methodology behind this family of Wind Benchmarks can be applied to produce Wind Benchmarks for any producer-specific generation assets in any location with appropriate gridded data coverage.

### Source Data

The Benchmarks in this family use MERRA-2 or ERA5 gridded wind speed data as source data. In the event of failure of this data source or where this data is not yet available, the source data for a particular day is provided by a proprietary WRF model initialised using ECMWF or GFS wind data.

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## Speedwell Settlement Services

Speedwell Settlement Services Limited is registered in England number 10135203.  
Its registered address is Mardall House, 9-11 Vaughan Road, Harpenden, Hertfordshire AL5 4HU  
Speedwell Settlement Services Limited is authorised by the FCA to administer regulated benchmarks

Mardall House  
9-11 Vaughan Road  
Harpenden, Herts  
AL5 4HU, United Kingdom

Tel: +44 (0)1582 465 551

418 King St  
Floor 2  
Charleston, SC 29403  
United States

Tel: +1 (843) 737-4843

## Calculation Method

The calculation of the Speedwell Wind Benchmarks uses the following method:

- Metadata defining the relevant physical characteristics and location of wind turbines relevant for a specific Wind Benchmark is collated.
- ERA5 or native MERRA-2 3-hourly wind speed data at a number of relevant atmospheric levels are downscaled to provide a high-resolution geospatial grid for each location.
- The downscaled wind speed is transformed to a power output for respective turbines using the concept of the power curve.
- The total energy output is then derived for each hour or 3-hour periods depending on the grid source.
- Given that ERA5 and MERRA-2 gridded data are only available in arrears, a proprietary industry-standard forecast model (“WRF Model”) is run to estimate the final value. The WRF Model is itself initialised with wind data using outputs from the GFS or ECMWF forecast models.
- The daily values constituting the delivered Benchmark will either be grid-derived or WRF Model-derived depending on the settlement time period agreed. Where grid-derived values are available for a particular day, those values will be senior to the WRF Model-derived values.
- The values so obtained in MWH are normalised by dividing by theoretical maximum energy output.

**Units:** N/A. Fractional.

**Granularity:** Daily

**Sub daily Composition:** the daily value of each member of this family of Benchmarks are derived from the addition of sub daily energy generation periods. These sub periods may correspond to the full 24 hours, or to peak hours or to other tailored sub daily periods as defined for each individual Benchmark.

**ISIN:** there is currently no ISINs attributed to this family of Benchmarks.

**Resilience:** For the removal of doubt, this family of Benchmarks does not rely on market data for the derivation of its values. Therefore, the provision of this family of Benchmarks does not depend on a liquid traded market in any traded index based on it.

## Methodology Change:

SSS shall publish on its website any material changes to methodology. There is no procedure for public consultation. National and Regional Wind Benchmarks are subject to periodic review to reflect changes in the underlying renewables asset base. For the removal of doubt, no change shall be made to methodology while there are open transactions based on a specific Speedwell Wind Benchmark.

## Updates

Wind Benchmarks are subject to an update on an annual cycle to reflect the latest installation or decommissioning of wind turbines. Where a previous version of such a Wind Benchmark is still subject to an open risk-transfer contract, previous versions of the Wind Benchmarks will be maintained in parallel.

## Publication Timings

11 00 GMT at the latest

## Notice and Disclaimer

Speedwell Settlement Services Ltd (“Speedwell Settlement Services”) is registered in England with registered number 10135203 and registered office at Mardall House, 9-11 Vaughan Road, Harpenden, United Kingdom. Speedwell Settlement Services is authorised by the UK Financial Conduct Authority as a registered Benchmark Administrator (FRN 804610).

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