

FTSE4Good Developed Minimum Variance Index

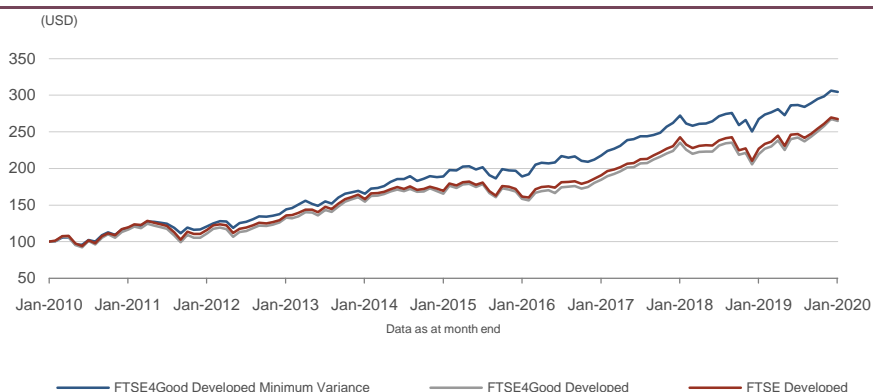
Data as at: 31 January 2020

The FTSE Developed Minimum Variance Index Series aims to deliver reduced index volatility based on historical return information, thereby offering potential improvements to the risk reward trade-off, whilst maintaining full allocation to the relevant equity market.

Reduced volatility is achieved by applying a transparent rules-based approach which minimizes historical variance subject to additional constraints on the weight of individual stocks within an index, and, at aggregate level on the weight of countries and industries represented in the index.

The FTSE4Good Developed Minimum Variance Index is based on the FTSE4Good Developed Index, which is designed to objectively measure the performance of companies that meet globally recognised environmental, social and governance (ESG) standards, and to facilitate investment in those companies. Constituents are selected from the corresponding underlying universe at the time of the review and aspects such as index reviews and company classification are governed by the corresponding Ground Rules of the universe index.

10-Year Performance - Total Return



Performance and Volatility - Total Return

Index (USD)	Return %						Return pa %*		Volatility %**		
	3M	6M	YTD	12M	3YR	5YR	3YR	5YR	1YR	3YR	5YR
FTSE4Good Developed Minimum Variance	3.3	6.1	-0.6	13.8	39.7	60.9	11.8	10.0	6.4	8.1	9.5
FTSE4Good Developed	5.7	9.4	-0.9	20.7	43.7	59.9	12.8	9.8	9.8	10.7	11.7
FTSE Developed	5.3	8.3	-0.7	17.9	40.3	57.8	11.9	9.6	9.4	10.7	11.7

* Compound annual returns measured over 3 and 5 years respectively

** Volatility – 1YR based on 12 months daily data. 3YR based on weekly data (Wednesday to Wednesday). 5YR based on monthly data

FEATURES

Methodology

The approach applies a rules-based strategy to minimise volatility. Some constraints are applied, for example, to avoid over concentration in any particular stock, sector or country.

Objective

The indexes are designed for the creation of index tracking funds, derivatives and as a performance benchmark.

Investability

Stocks in the underlying universe are free-float weighted to ensure that only the investable opportunity set is included.

Liquidity

Stocks in the underlying universe are screened to ensure that the indexes are tradable.

Transparency

Index methodologies are freely available on the FTSE Russell website.

Availability

The indexes are calculated based on price and total return methodologies.

Industry Classification Benchmark (ICB)

Index constituents are categorized in accordance with the Industry Classification Benchmark (ICB), the global standard for industry sector analysis.

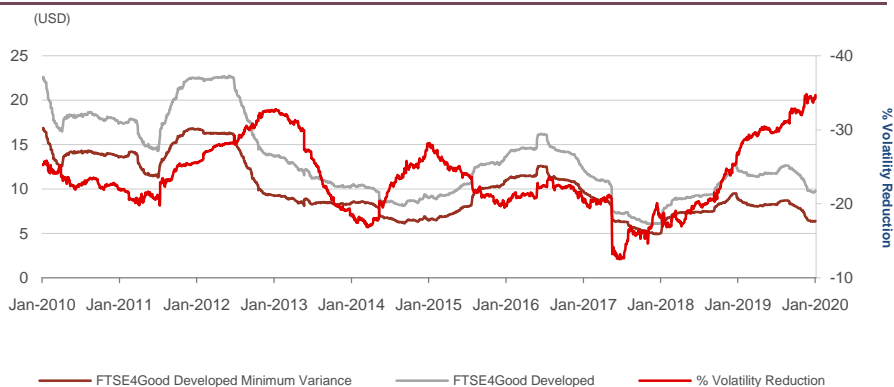
Criteria

The ESG criteria is based on the underlying FTSE4Good Index which is overseen by the independent FTSE Russell ESG Advisory Committee.

Year-on-Year Performance - Total Return

Index % (USD)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
FTSE4Good Developed Minimum Variance	13.3	0.0	18.0	23.3	11.0	4.6	7.7	23.8	-4.6	22.3
FTSE4Good Developed	7.9	-6.8	19.8	27.0	5.1	-0.3	7.1	24.1	-8.2	30.1
FTSE Developed	12.3	-5.5	17.0	26.8	5.1	-0.3	8.2	23.9	-8.6	28.0

Annualised Rolling 252 Day Volatility - Total Return



Return/Risk Ratio and Drawdown - Total Return

Index (USD)	Return/Risk Ratio				Drawdown (%)			
	1YR	3YR	5YR	10YR	1YR	3YR	5YR	10YR
FTSE4Good Developed Minimum Variance	2.1	1.5	1.1	1.1	-4.5	-12.5	-12.5	-15.4
FTSE4Good Developed	2.0	1.2	0.8	0.8	-5.9	-17.8	-18.4	-22.7
FTSE Developed	1.8	1.2	0.8	0.8	-6.0	-18.5	-18.5	-22.3

Return/Risk Ratio – based on compound annual returns and volatility in Performance and Volatility table
 Drawdown - based on daily data

Top 10 Constituents (by Wgt %) - FTSE4Good Developed Minimum Variance Index

Constituent	Country	ICB Sector	FTSE4Good Developed Minimum Variance (Wgt %)	FTSE4Good Developed (Wgt %)	Diff %
Newmont Corporation	USA	Mining	1.01	0.13	0.88
WEC Energy Group	USA	Gas Water & Multiutilities	0.89	0.11	0.78
CMS Energy Corp	USA	Electricity	0.81	0.07	0.74
Eversource Energy	USA	Electricity	0.76	0.10	0.65
Nisource	USA	Gas Water & Multiutilities	0.72	0.04	0.68
American Water Works Company	USA	Gas Water & Multiutilities	0.72	0.09	0.63
Annaly Capital Management	USA	Real Estate Investment Trusts	0.69	0.05	0.64
Agnico Eagle Mines	Canada	Mining	0.68	0.05	0.63
Hershey Company	USA	Food Producers	0.68	0.08	0.60
Church & Dwight	USA	Household Goods & Home Construction	0.63	0.06	0.57
Totals			7.59	0.78	

INFORMATION

Index Universe

FTSE4Good Developed Index

Index Launch

May 2013

Base Date

15 May 2012

Base Value

100

Investability Screen

Actual free float applied and liquidity screened

Index Calculation

End of day

End-of-Day Distribution

Via FTP and email

Currency

USD, EUR, GBP, JPY, AUD

Review Dates

Semi-annually in June and December

History

From 19 March 2004

Country Breakdown

Country	FTSE4Good Developed Minimum Variance		FTSE4Good Developed		Diff %
	No. of Cons	Wgt %	No. of Cons	Wgt %	
Australia	47	7.30	64	3.38	3.92
Austria	2	0.12	6	0.09	0.03
Belgium	4	0.58	8	0.40	0.18
Canada	18	3.28	30	3.17	0.11
Denmark	11	1.94	13	0.80	1.14
Finland	6	0.90	13	0.50	0.40
France	24	2.72	73	4.79	-2.08
Germany	20	2.02	44	3.32	-1.31
Hong Kong	17	3.02	23	1.01	2.01
Ireland	1	0.10	2	0.08	0.02
Israel	5	0.61	6	0.14	0.47
Italy	9	0.71	24	1.09	-0.37
Japan	91	13.43	177	7.91	5.51
Korea	15	1.80	32	0.55	1.25
Netherlands	9	0.97	21	1.70	-0.73
New Zealand	7	1.43	7	0.10	1.33
Norway	2	0.40	10	0.27	0.13
Poland	1	0.05	7	0.09	-0.04
Portugal	3	0.23	4	0.09	0.14
Singapore	14	2.49	14	0.40	2.09
Spain	12	1.37	26	1.43	-0.07
Sweden	4	0.56	34	1.23	-0.67
Switzerland	16	3.59	31	4.57	-0.97
UK	41	5.49	101	7.14	-1.65
USA	173	44.90	270	55.74	-10.84
Totals	552	100.00	1040	100.00	

ICB Supersector Breakdown

ICB Code	ICB Supersector	FTSE4Good Developed Minimum Variance		FTSE4Good Developed		Diff %
		No. of Cons	Wgt %	No. of Cons	Wgt %	
0500	Oil & Gas	17	1.35	39	3.28	-1.92
1300	Chemicals	13	1.87	46	2.81	-0.94
1700	Basic Resources	9	2.56	33	1.53	1.03
2300	Construction & Materials	5	0.62	27	1.10	-0.48
2700	Industrial Goods & Services	53	7.49	147	9.35	-1.86
3300	Automobiles & Parts	14	1.53	28	1.57	-0.04
3500	Food & Beverage	37	9.64	47	4.15	5.49
3700	Personal & Household Goods	35	6.20	61	5.64	0.55
4500	Health Care	51	9.24	73	13.36	-4.12
5300	Retail	44	8.41	54	3.34	5.07
5500	Media	28	4.36	39	2.65	1.70
5700	Travel & Leisure	29	6.17	42	1.85	4.32
6500	Telecommunications	29	6.84	34	3.62	3.22
7500	Utilities	39	10.27	41	2.17	8.10
8300	Banks	36	4.22	79	9.24	-5.03
8500	Insurance	41	6.37	62	4.55	1.82
8600	Real Estate	33	7.05	42	1.85	5.19
8700	Financial Services	13	2.15	62	5.93	-3.79
9500	Technology	26	3.68	84	22.01	-18.33
Totals		552	100.00	1040	100.00	

Index Characteristics

Attributes	FTSE4Good Developed Minimum Variance	FTSE4Good Developed	FTSE Developed
Number of constituents	552	1040	2164
Dividend Yield %	3.00	2.52	2.35
Constituent (Wgt %)			
Average	0.18	0.10	0.05
Largest	1.01	4.80	3.05
Median	0.16	0.03	0.02
Top 10 Holdings (Wgt %)	7.59	19.00	13.96

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