

FTSE Environmental Opportunities Index Series

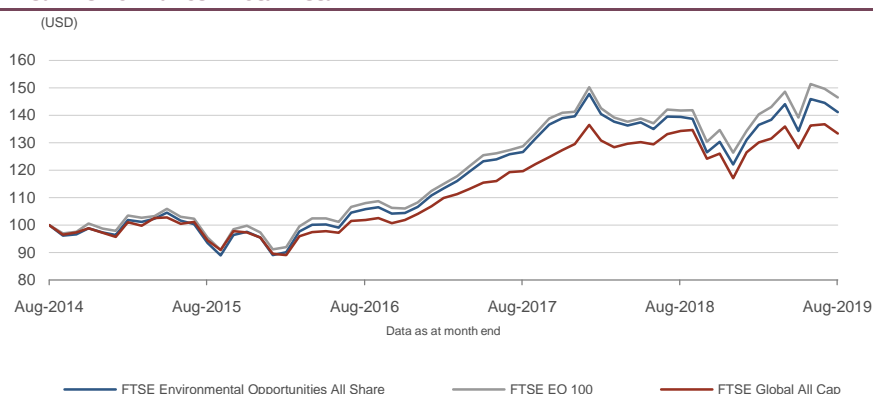
Data as at: 30 August 2019

The FTSE Environmental Opportunities Index Series measures the performance of global companies that have significant involvement in environmental business activities as defined by the FTSE Environmental Markets Classification System (EMCS). These include Renewable & Alternative Energy, Energy Efficiency, Water Infrastructure and Technology, Waste Management & Technologies, Pollution Control, Environmental Support Services, and Food, Agriculture & Forestry. Forming part of the overall FTSE Environmental Markets Index Series, the FTSE Environmental Opportunities Index Series requires companies to have at least 20% of their business derived from environmental markets and technologies (as opposed to at least 50% for the FTSE Environmental Technology Index Series).

The FTSE Environmental Markets Index Series has been developed in collaboration with Impax Asset Management and under the direction of the independent FTSE Environmental Markets Committee, further enhancing FTSE's suite of ESG indices and providing investors with a robust set of Environmental Markets tools. The two headline indices within the FTSE Environmental Opportunities Index Series are:

- FTSE Environmental Opportunities All-Share Index - The headline benchmark index, comprising all of the companies that have significant involvement in environmental business activities and meet the environmental opportunities eligibility requirements
- FTSE EO 100 Index - The headline tradable index, focusing on the top 100 largest companies by market capitalisation in the FTSE Environmental Opportunities All-Share Index

5-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
FTSE Environmental Opportunities All Share	5.1	3.3	15.6	1.2	33.3	41.1	10.1	7.1	12.6	12.2	13.2
FTSE EO 100	5.3	4.4	15.9	3.4	35.6	46.5	10.7	7.9	12.6	12.1	13.0
FTSE Global All Cap	4.2	2.6	14.0	-0.7	31.0	33.4	9.4	5.9	12.3	10.9	11.8

* 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

Coverage

The FTSE Environmental Opportunities Index Series comprises a broad range of indices including the FTSE Environmental Opportunities All-Share Index, FTSE EO 100 Index and a range of specific indices focused on the major environmental technology markets. The FTSE Environmental Opportunities Index Series features within the overall FTSE Environmental Markets Index Series.

Objective

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

Investability

Stocks are free-float weighted to ensure that only the investable opportunity set is included within the indices.

Liquidity

Stocks are screened to ensure that the index is tradable.

Transparency

Index rules are freely available on the FTSE website.

Availability

The indices are calculated based on price and total return methodologies, both real time and end-of-day.

Industry Classification Benchmark

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

Year-on-Year Performance - Total Return

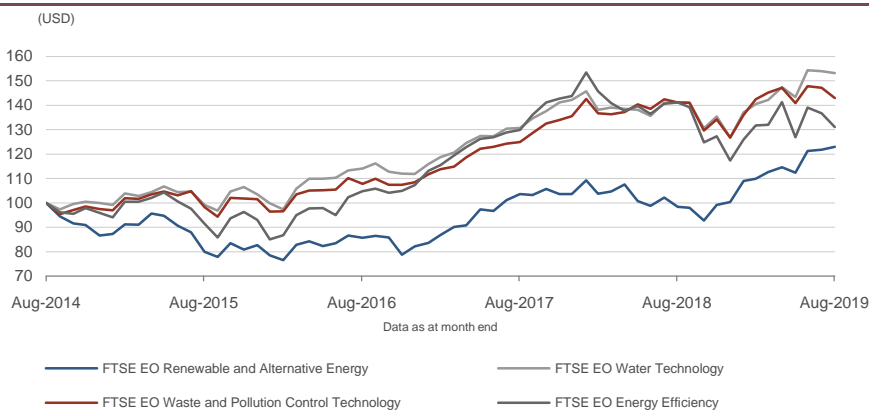
Index % (USD)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
FTSE Environmental Opportunities All Share	38.2	18.2	-13.5	16.6	31.9	0.1	-1.9	11.7	31.0	-12.6
FTSE EO 100	32.8	16.7	-13.6	17.5	31.3	0.6	-1.4	11.3	30.5	-10.5
FTSE Global All Cap	37.5	14.8	-7.6	17.2	23.9	4.5	-1.7	9.0	24.4	-9.6

Return/Risk Ratio and Drawdown - Total Return

Index (USD)	Return/Risk Ratio				Drawdown (%)			
	1YR	3YR	5YR	10YR	1YR	3YR	5YR	10YR
FTSE Environmental Opportunities All Share	0.1	0.8	0.5	0.6	-17.6	-22.5	-22.5	-30.8
FTSE EO 100	0.3	0.8	0.6	0.6	-16.5	-21.2	-21.2	-31.2
FTSE Global All Cap	-0.1	0.8	0.5	0.7	-17.5	-19.3	-19.3	-23.4

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

5-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
FTSE EO Renewable and Alternative Energy	9.5	12.0	22.6	25.0	43.6	23.0	12.8	4.2	10.8	12.0	14.1
FTSE EO Water Technology	6.8	9.1	20.8	8.5	34.3	53.2	10.3	8.9	11.0	10.4	11.3
FTSE EO Waste and Pollution Control Technology	1.4	0.3	12.8	1.2	32.6	43.0	9.9	7.4	10.4	9.9	11.3
FTSE EO Energy Efficiency	3.3	-0.5	11.7	-7.2	25.1	31.0	7.7	5.6	15.5	14.8	16.0
FTSE Environmental Opportunities UK	-0.5	-0.8	13.8	-2.5	15.8	6.4	5.0	1.2	15.6	14.0	15.7
FTSE Environmental Opportunities UK AIM	-11.2	-13.4	-5.8	-21.0	-20.0	-52.3	-7.2	-13.8	14.1	15.9	20.5
FTSE Environmental Opportunities USA	7.3	3.9	19.7	4.8	43.7	59.1	12.9	9.7	17.1	13.9	14.3
FTSE Environmental Opportunities Europe	4.3	5.4	14.9	-0.4	28.0	29.9	8.6	5.4	15.4	14.3	14.6
FTSE Environmental Opportunities Japan	2.8	1.2	9.3	-6.5	22.8	41.8	7.1	7.2	20.4	16.0	15.5
FTSE Environmental Opportunities Asia-Pacific	2.1	0.0	8.8	-4.7	21.3	27.3	6.7	4.9	16.9	14.0	14.3
FTSE Environmental Opportunities Asia-Pacific Ex Japan	0.4	-2.8	7.5	0.4	17.6	-1.4	5.5	-0.3	12.7	11.9	14.9

* 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

INFORMATION

Index Universe

FTSE Global Equity Index Series

Base Date

22 September 1999

Base Value

152

Investability Screen

Free-float adjusted and liquidity screened

Index Calculation

Real-time (calculated every 15 seconds) and end-of-day indices available

End-of-Day Distribution

Via FTP and email

Currency

USD

Review Dates

Semi-annually in June and December

Year-on-Year Performance - Total Return

Index % (USD)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
FTSE EO Renewable and Alternative Energy	19.6	-5.2	-25.1	-0.5	26.0	4.4	-4.6	-0.5	26.1	-3.2
FTSE EO Water Technology	35.2	18.4	-10.3	19.3	31.5	7.4	3.4	8.1	27.2	-10.8
FTSE EO Waste and Pollution Control Technology	35.7	17.9	-9.3	19.6	30.5	0.9	4.2	6.8	24.9	-6.4
FTSE EO Energy Efficiency	46.5	27.2	-17.3	18.1	37.5	-3.7	-2.9	15.2	34.0	-18.4
FTSE Environmental Opportunities UK	48.5	31.2	1.3	35.8	36.7	-6.6	-2.4	-6.7	28.5	-15.5
FTSE Environmental Opportunities UK AIM	28.0	8.7	-31.7	13.9	21.8	-8.6	-20.7	-14.7	17.7	-26.9
FTSE Environmental Opportunities USA	33.3	22.6	-5.7	19.5	41.3	6.4	-4.8	17.3	28.8	-9.6
FTSE Environmental Opportunities Europe	36.9	13.6	-17.9	17.5	27.1	-8.7	-0.7	9.9	33.1	-14.5
FTSE Environmental Opportunities Japan	33.9	16.1	-14.1	6.6	32.9	2.4	11.1	4.8	33.6	-18.0
FTSE Environmental Opportunities Asia-Pacific	47.8	18.9	-20.1	10.1	26.8	0.9	3.8	3.7	32.2	-15.7
FTSE Environmental Opportunities Asia-Pacific Ex Japan	76.1	22.7	-28.9	17.3	13.7	-1.3	-13.2	1.0	28.3	-9.2

Return/Risk Ratio and Drawdown - Total Return

Index (USD)	Return/Risk Ratio				Drawdown (%)			
	1YR	3YR	5YR	10YR	1YR	3YR	5YR	10YR
FTSE EO Renewable and Alternative Energy	2.2	1.0	0.3	0.2	-8.0	-16.0	-27.3	-51.7
FTSE EO Water Technology	0.7	0.9	0.8	0.9	-14.8	-17.5	-17.5	-26.5
FTSE EO Waste and Pollution Control Technology	0.1	0.9	0.7	0.8	-15.1	-16.2	-16.2	-24.6
FTSE EO Energy Efficiency	-0.5	0.5	0.3	0.6	-21.8	-28.7	-28.7	-33.5
FTSE Environmental Opportunities UK	-0.2	0.3	0.1	0.7	-17.9	-22.1	-23.2	-24.3
FTSE Environmental Opportunities UK AIM	-1.5	-0.5	-0.7	-0.3	-23.2	-35.2	-52.8	-55.4
FTSE Environmental Opportunities USA	0.3	0.9	0.7	0.9	-19.8	-21.3	-21.3	-28.2
FTSE Environmental Opportunities Europe	-0.1	0.6	0.4	0.4	-17.0	-22.6	-22.6	-38.6
FTSE Environmental Opportunities Japan	-0.3	0.4	0.5	0.5	-21.4	-31.0	-31.0	-31.0
FTSE Environmental Opportunities Asia-Pacific	-0.3	0.4	0.3	0.4	-17.8	-26.8	-26.8	-28.4
FTSE Environmental Opportunities Asia-Pacific Ex Japan	0.0	0.4	0.0	0.2	-11.0	-17.5	-36.0	-41.8

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

1-Year Correlation - Total Return

	FTSE Environmental Opportunities All Share	FTSE Global All Cap
FTSE Environmental Opportunities All Share	1.000	0.934
FTSE Global All Cap		1.000

Top 10 Constituents - FTSE Environmental Opportunities All Share

Constituent	Country	ICB Sector	Net MCap (USDm)	Wgt %
Honeywell International Incorporation	USA	General Industrials	119,601	3.66
Linde plc	USA	Chemicals	102,403	3.14
3M Company	USA	General Industrials	90,375	2.77
Danaher Corp	USA	General Industrials	90,341	2.77
Siemens AG	Germany	General Industrials	75,781	2.32
Iberdrola	Spain	Electricity	64,132	1.96
Zoetis	USA	Pharmaceuticals & Biotechnology	60,458	1.85
Air Liquide	France	Chemicals	58,671	1.80
Enel	Italy	Electricity	56,414	1.73
Keyence Corp	Japan	Electronic & Electrical Equipment	53,312	1.63
Totals			771,491	23.62

Country Breakdown - FTSE Environmental Opportunities All Share

Country	FTSE Environmental Opportunities All Share		FTSE Global All Cap		Diff %
	No. of Cons	Wgt %	No. of Cons	Wgt %	
Australia	10	0.68	245	2.21	-1.53
Austria	5	0.32	26	0.09	0.23
Belgium	1	0.20	43	0.35	-0.15
Brazil	10	0.66	127	0.87	-0.21
Canada	9	1.22	205	3.15	-1.93
Chile	5	0.36	34	0.10	0.25
China	48	1.95	1460	3.18	-1.23
Colombia	-	-	11	0.04	-0.04
Czech Rep.	-	-	5	0.02	-0.02
Denmark	5	1.22	42	0.52	0.70
Egypt	-	-	20	0.03	-0.03
Finland	6	0.62	35	0.36	0.26
France	15	6.13	147	3.00	3.13
Germany	15	3.51	157	2.47	1.03
Greece	1	0.01	21	0.04	-0.03
Hong Kong	8	1.00	175	1.10	-0.09
Hungary	-	-	5	0.03	-0.03
India	14	0.27	317	1.10	-0.83
Indonesia	1	0.04	65	0.24	-0.20
Ireland	1	0.21	12	0.07	0.14
Israel	-	-	56	0.16	-0.16
Italy	6	2.12	93	0.77	1.35
Japan	87	17.19	1337	7.61	9.58
Korea	18	0.82	424	1.33	-0.51
Kuwait	-	-	15	0.09	-0.09
Malaysia	2	0.15	89	0.30	-0.15
Mexico	1	0.00	61	0.30	-0.30
Netherlands	7	1.00	58	1.02	-0.02
New Zealand	4	0.34	35	0.12	0.22
Norway	3	0.15	52	0.25	-0.10
Pakistan	-	-	23	0.01	-0.01
Peru	-	-	1	0.01	-0.01
Philippines	4	0.11	41	0.14	-0.03
Poland	-	-	36	0.11	-0.11
Portugal	3	0.32	14	0.06	0.26
Qatar	-	-	22	0.12	-0.12
Russia	1	0.03	43	0.42	-0.39
Saudi Arabia	-	-	79	0.16	-0.16
Singapore	2	0.15	76	0.41	-0.26
South Africa	-	-	118	0.63	-0.63
Spain	7	2.23	63	0.83	1.39
Sweden	12	2.00	114	0.85	1.15
Switzerland	15	3.87	117	2.68	1.19
Taiwan	24	1.05	416	1.44	-0.39
Thailand	5	0.20	114	0.41	-0.21
Turkey	-	-	81	0.08	-0.08
UAE	-	-	23	0.10	-0.10
UK	22	2.86	312	4.91	-2.05
USA	130	47.02	1817	55.69	-8.67
Totals	507	100.00	8882	100.00	

ICB Industry Breakdown - FTSE Environmental Opportunities All Share

ICB Code	ICB Industry	FTSE Environmental Opportunities All Share		FTSE Global All Cap		Diff %
		No. of Cons	Wgt %	No. of Cons	Wgt %	
0001	Oil & Gas	29	1.77	324	5.14	-3.37
1000	Basic Materials	43	12.34	757	4.21	8.13
2000	Industrials	250	55.72	1914	13.83	41.90
3000	Consumer Goods	44	5.75	1175	11.02	-5.27
4000	Health Care	8	3.38	657	10.78	-7.40
5000	Consumer Services	17	4.09	1080	11.72	-7.63
6000	Telecommunications	-	-	133	2.68	-2.68
7000	Utilities	89	13.32	318	3.39	9.94
8000	Financials	5	0.85	1768	21.42	-20.57
9000	Technology	22	2.77	756	15.81	-13.04
Totals		507	100.00	8882	100.00	

Index Characteristics

Attributes	FTSE Environmental Opportunities All Share	FTSE EO 100	FTSE Global All Cap
Number of constituents	507	100	8882
Net MCap (USDm)	3,265,896	2,438,155	51,447,853
Dividend Yield %	2.12	2.09	2.50
Constituent Sizes (Net MCap USDm)			
Average	6,442	24,382	5,792
Largest	119,601	119,601	1,041,695
Smallest	32	1,984	4
Median	1,995	18,100	901
Weight of Largest Constituent (%)	3.66	4.91	2.02
Top 10 Holdings (% Index MCap)	23.62	31.64	10.18

Index Characteristics

Attributes	FTSE EO Renewable and Alternative Energy	FTSE EO Water Technology	FTSE EO Waste and Pollution Control Technology	FTSE EO Energy Efficiency
Number of constituents	94	80	112	160
Net MCap (USDm)	348,624	262,386	564,792	1,251,435
Dividend Yield %	3.14	2.29	1.98	2.08
Constituent Sizes (Net MCap USDm)				
Average	3,709	3,280	5,043	7,821
Largest	64,132	26,927	50,626	119,601
Smallest	32	81	38	60
Median	1,061	1,409	2,083	3,055
Weight of Largest Constituent (%)	18.40	10.26	8.96	9.56
Top 10 Holdings (% Index MCap)	67.05	54.37	45.53	40.09

Index Characteristics

Attributes	FTSE Environmental Opportunities USA	FTSE Environmental Opportunities Europe	FTSE Environmental Opportunities Japan	FTSE Environmental Opportunities Asia-Pacific
Number of constituents	130	125	87	227
Net MCap (USDm)	1,535,520	875,214	561,380	782,096
Dividend Yield %	1.68	2.90	1.80	2.08
Constituent Sizes (Net MCap USDm)				
Average	11,812	7,002	6,453	3,445
Largest	119,601	75,781	53,312	53,312
Smallest	321	121	38	32
Median	4,383	2,371	2,295	940
Weight of Largest Constituent (%)	7.79	8.66	9.50	6.82
Top 10 Holdings (% Index MCap)	45.78	48.85	58	41.63

About Impax Asset Management

Impax Asset Management is an award winning, leading investment manager dedicated to investing in the opportunities created by the scarcity of natural resources and the growing demand for cleaner, more efficient products and services, through both listed and private equity strategies.

Impax's listed equity funds seek out mis-priced companies that are set to benefit from the long-term trends of changing demographics, urbanisation, rising consumption, and the resultant increases in resource scarcity. Investment is focused on a small number of deeply researched global equity strategies across alternative energy, energy efficiency, water, waste, food and agriculture related markets.

Impax's private equity infrastructure funds follow an operationally focused, value-add strategy, investing in renewable power generation and related assets throughout Europe. The Climate Property Fund focuses on developing sustainable and energy efficient commercial property, primarily in the UK, adding synergistically to Impax's wider real asset investment strategy within private markets.



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Data definitions available from
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