

RESPONSIBLE INVESTMENT 2016

GOVERNMENT PENSION FUND GLOBAL

YNGVE SLYNGSTAD,
CHIEF EXECUTIVE OFFICER, NORGES BANK INVESTMENT MANAGEMENT

OSLO, 7 MARCH 2017

Our mission
Safeguard
financial wealth
for future generations



Management objectives

OBJECTIVE

HIGH LONG-TERM
RETURN

SUBJECT TO

- **Acceptable risk**
- **Efficient organisation**
- **Responsible investment**
- **Full transparency**



No. 03



1

INTRODUCTION

1.1 CEO of Norges Bank Investment Management	4
1.2 Main pillars	6
1.3 Purpose	11

2

STANDARD SETTING

2.1 Principles and expectations	14
2.2 Standards and practices	17
2.3 Research and data	22

3

OWNERSHIP

3.1 Voting	32
3.2 Interaction with companies	42
3.3 Environmental investments	58

4

RISK MANAGEMENT

4.1 Risk monitoring	68
4.2 Risk-based divestments	76
4.3 Ethical exclusions	84

ETHICAL
RESPONSIBLE
SUSTAINABLE



PRINCIPLES

SYSTEMATIC

LONG TERM



STANDARD SETTING

OWNERSHIP

RISK MANAGEMENT



Three pillars of responsible investment

Standard setting

- Principles and expectations
- Standards and practices
- Research and data

Ownership

- Voting
- Interaction with companies
- Environmental investments

Risk management

- Risk monitoring
- Risk-based divestments
- Ethical exclusions

STANDARD SETTING



Principles and expectations

- Executive Board principles
- Expectation documents
- Voting guidelines
- Position papers



Human rights

Implementing the expectation document

- Two new industry initiatives to promote better business practices
 - Global apparel supply chain
 - Business and human rights
- Ownership initiative towards Turkish apparel supply chains
 - Acute supply chain risk due to the war in Syria
 - Elevated risk of child labour and other human rights abuses
 - Dialogue with 22 companies on how they address this risk



Ownership in Ferrovial SA/Broadspectrum

Timeline

- November 2015: Risk-based divestment from Broadspectrum
 - Value of the fund's investment was 5.8 million dollars as at 31.12.2014
- May 2016: Ferrovial announces acquisition of Broadspectrum
 - Value of the fund's investment Ferrovial SA was 248 million dollar as at 31.12.2016
- May 2016: Letter about ownership in Ferrovial sent to the Council on Ethics
 - The role of the Council on Ethics for the Government Pension Fund Global is to evaluate whether or not the fund's investment in specified companies is inconsistent with its ethical guidelines, and to recommend excluding companies from the benchmark index provided by the Ministry of Finance
- August 2016: The Guardian, a UK newspaper, announces that the Australian authorities have executed an option to extend the duration of the contracts by eight months from February 2017
 - Ferrovial has announced that they would like to end the contract with the Australian authorities
- February 2017: Ferrovial confirms that Australian authorities cannot extend the duration of the contract longer than October 2017
 - Ferrovial's contracts on Manus and Nauru expire October 2017

Standards and practices

- International standards are our starting point
- Standards for industries, operations in certain geographies or specific topics
- Interaction with regulators
- Consultations about rules and regulations



International standards

Examples of submissions in 2016

- Better sustainability reporting
 - Singapore Exchange Limited
 - World Federation of Exchanges
 - US Securities and Exchange Commission (SEC)
 - Task Force on Climate-related Financial Disclosure
- Corporate governance, the investor's role and rights
 - Financial Services Agency of Japan
 - Secretariat to the Financial Stability Board
 - German Government Corporate Governance Commission

Research and data

Activities in 2016

- Research project about potential links between sustainability disclosure and financial performance, Harvard Business School
- Research project about the allocation of power between shareholders and management, Boston College
- Research project about water-related environmental and regulatory risks within the mining sector, Columbia University
- Environmental risks facing coal companies, University of Oxford
- Climate risks and financial markets, University of Oslo
- Effectiveness of engaged ownership, London Business School in cooperation with researchers at Université libre de Bruxelles and Bocconi University



Children's rights

We expect companies to respect children's rights. They should have adequate systems in place and report on their activities. We have assessed companies with activities or supply chains in sectors with a high risk of child labour since 2008.



Water management

Limited access to water is a growing risk for many companies. We have assessed companies exposed to water risk since 2010. We expect companies in particularly exposed sectors to have a clear water management strategy.



Climate change

We expect companies to analyse how their operations are affected by climate change and to develop plans and targets to address climate change risk. We have assessed companies exposed to climate change risk since 2010.

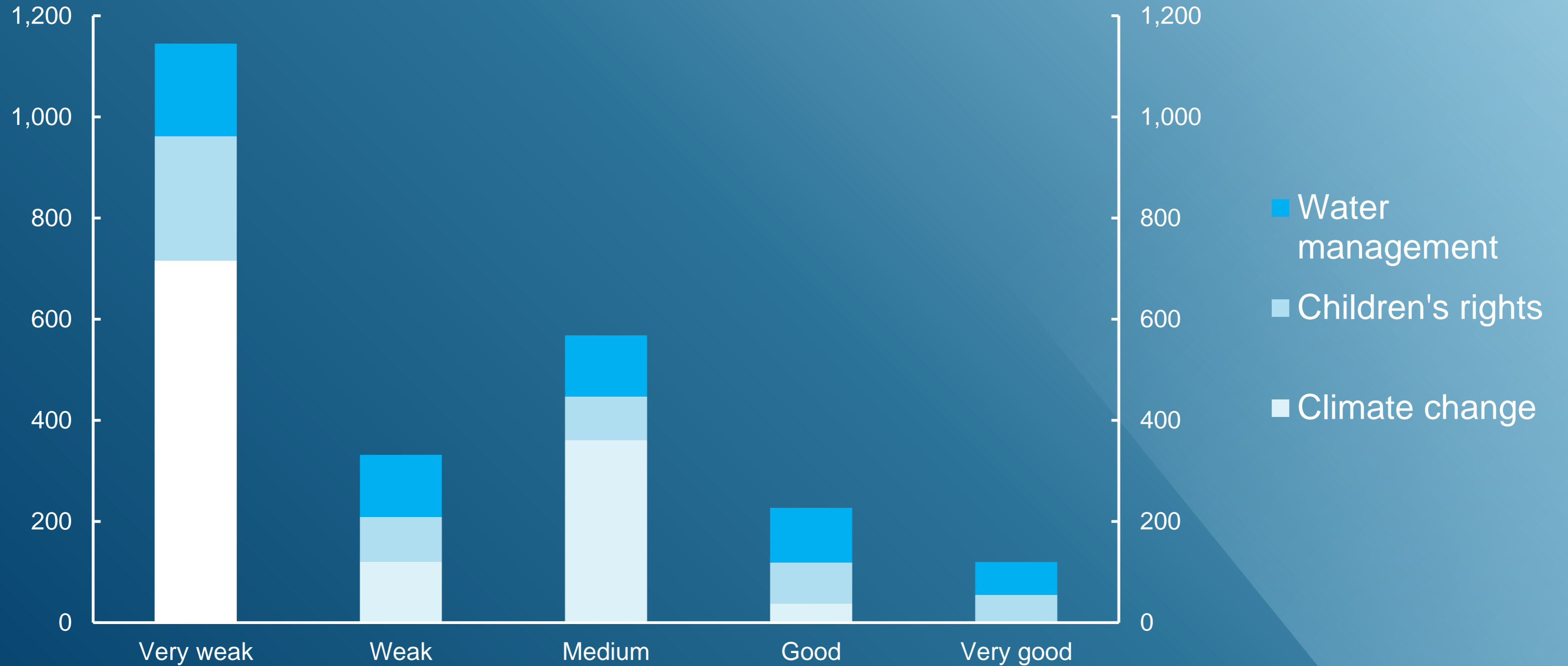


We evaluate reporting on the following topics

- **Governance structure**
- **Risk assessment**
- **Strategy and implementation**
- **Supply chain management**
- **Performance reporting**
- **Performance outcome**

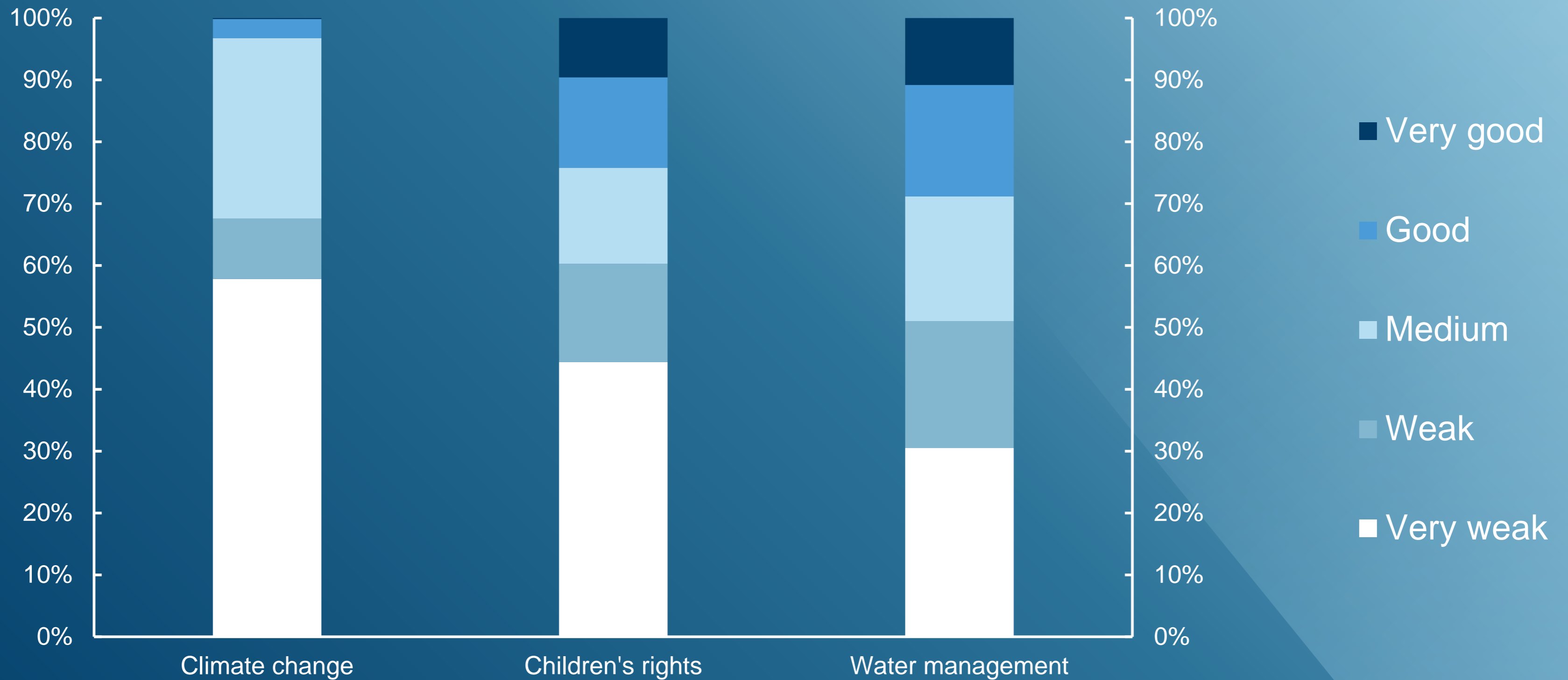
Corporate disclosure

Results from companies we have assessed in 2016. Number of companies



Corporate disclosure

Results from companies we have assessed in 2016. Percent



Companies with good reporting

Examples from various sectors



Children's rights



Water management



Climate change

Adidas AG
Vale SA
Bayer AG
The Coca Cola Co
Hennes & Mauritz AB
Mondelez International Inc
Nestlé SA
Inditex SA
Nokia OYJ
Unilever Plc

Nestlé SA
Diageo Plc
Harmony Gold Corporation
Newmont Mining Corporation
Exelon Corporation
Endesa SA
UPM-Kymmene OYJ
ConAgra Foods Inc
Coca Cola HBC AG
Heineken NV

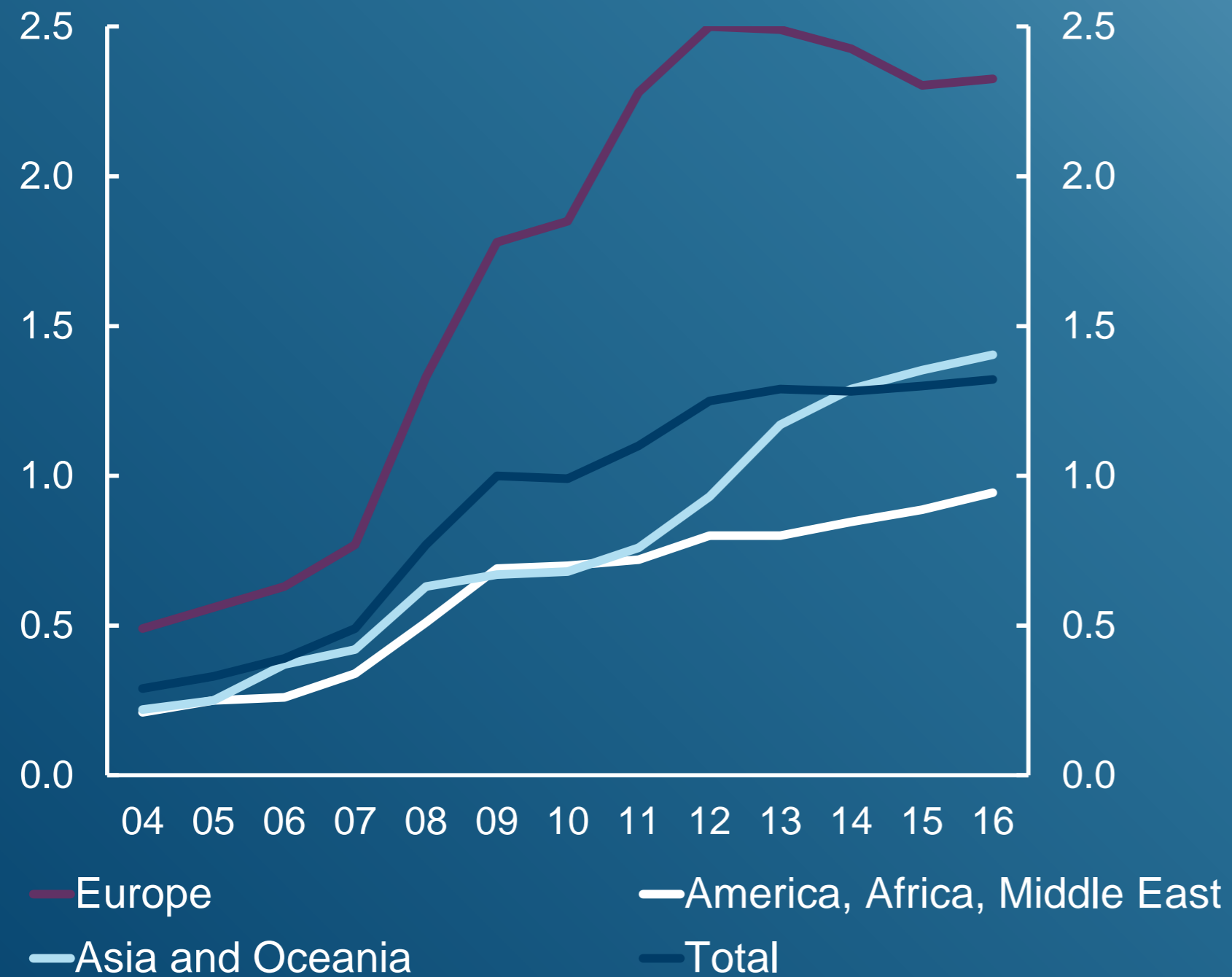
Saint-Gobain SA
Johnson Matthey Plc
British Land Company Plc
Group PSA
Newmont Mining Corporation
Engie SA
Iren SPA
Fedex Corporation
GoldCorp Inc
EVN AG

OWNERSHIP



Equity investments

Percent of FTSE Global All Cap Index

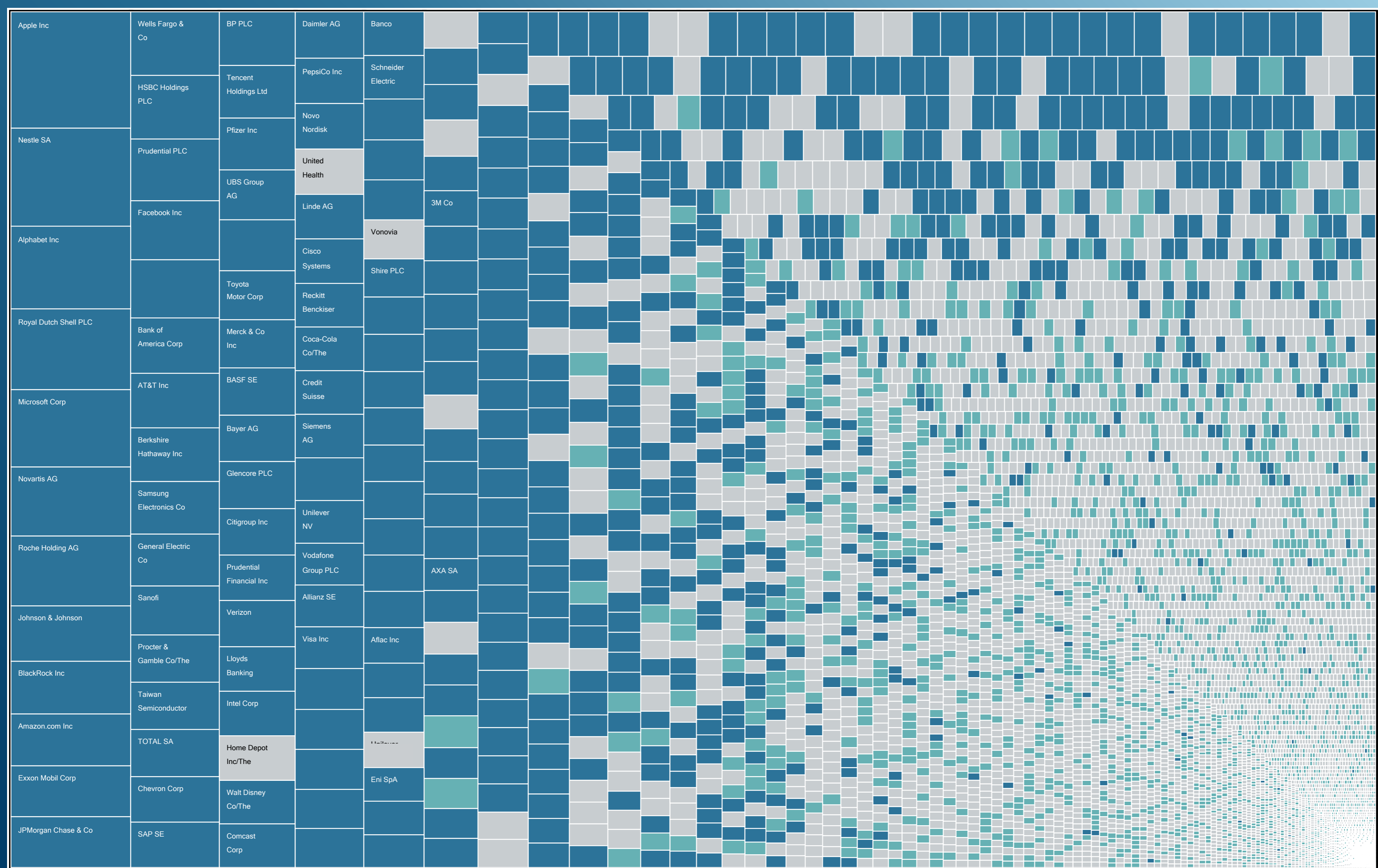


77 COUNTRIES

8,985 COMPANIES

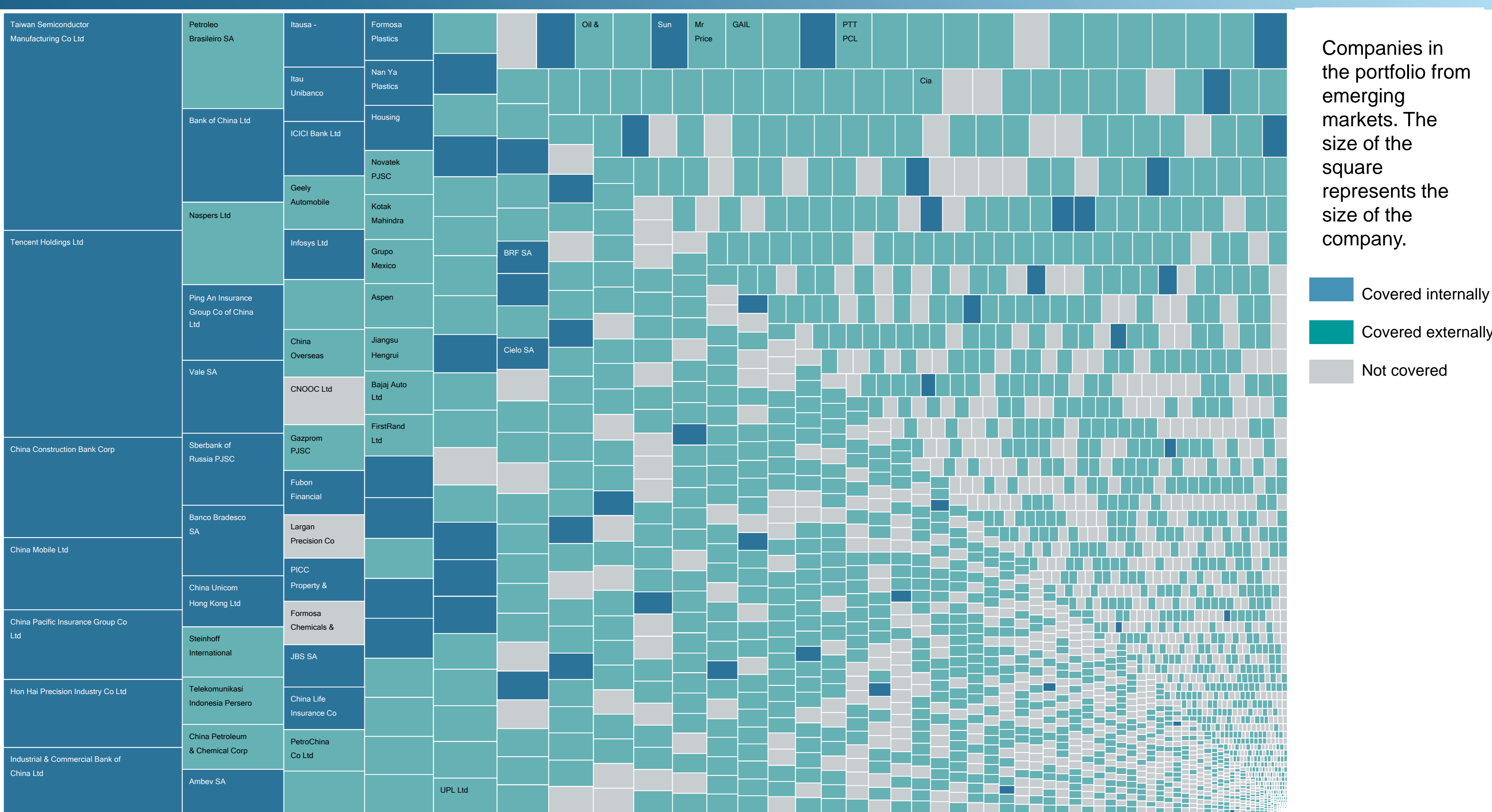
1.3% OF LISTED
COMPANIES GLOBALLY

2.3% OF LISTED
COMPANIES IN EUROPE



All companies in the portfolio. The size of the square represents the size of the company.

- Covered internally
- Covered externally
- Not covered

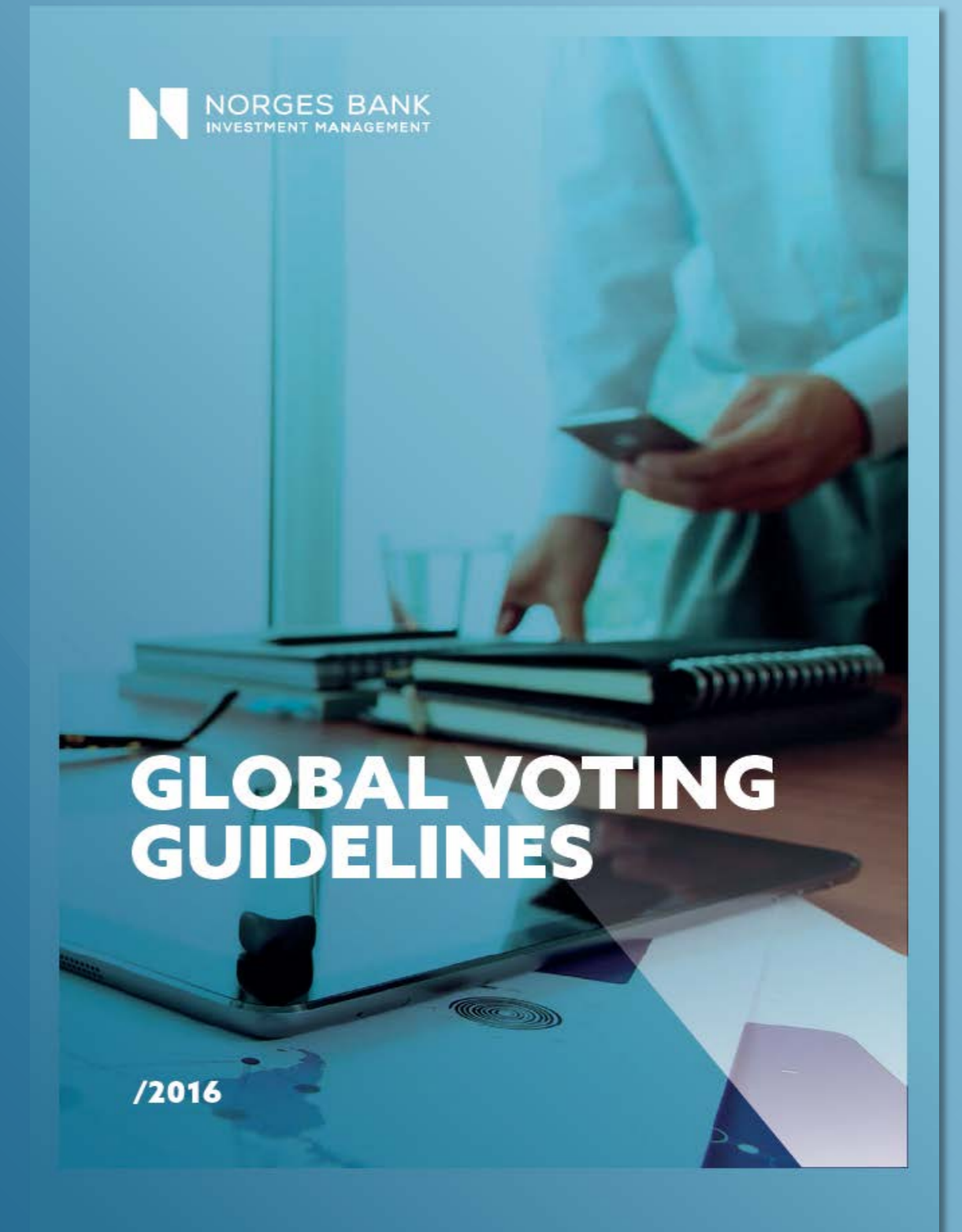


Companies in the portfolio from emerging markets. The size of the square represents the size of the company.

- Covered internally
- Covered externally
- Not covered

Voting in 2016

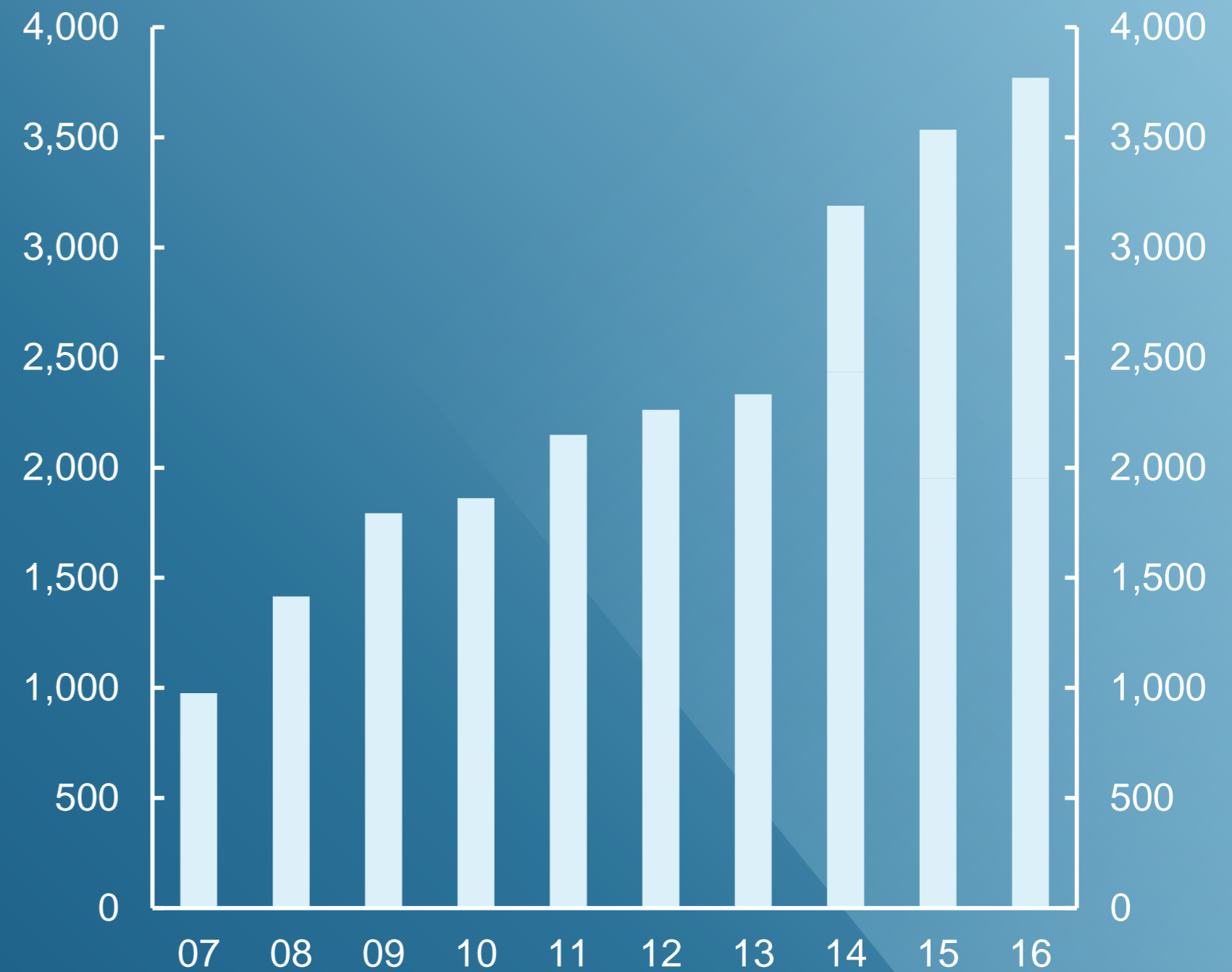
- We vote at all shareholder meetings
 - We voted at more than 11,000 shareholder meetings
 - We voted on more than 112,000 resolutions
- We published voting intentions for six companies
 - Support to proposal seeking report on impacts of climate change policies
 - Chevron Corp and Exxon Mobil Corp
 - Support to merger proposals
 - BG Group Plc / Royal Dutch Shell Plc
 - Deutsche Wohnen AG / Vonovia SE



3,790 meetings with 1,589 companies

Interaction with companies in 2016

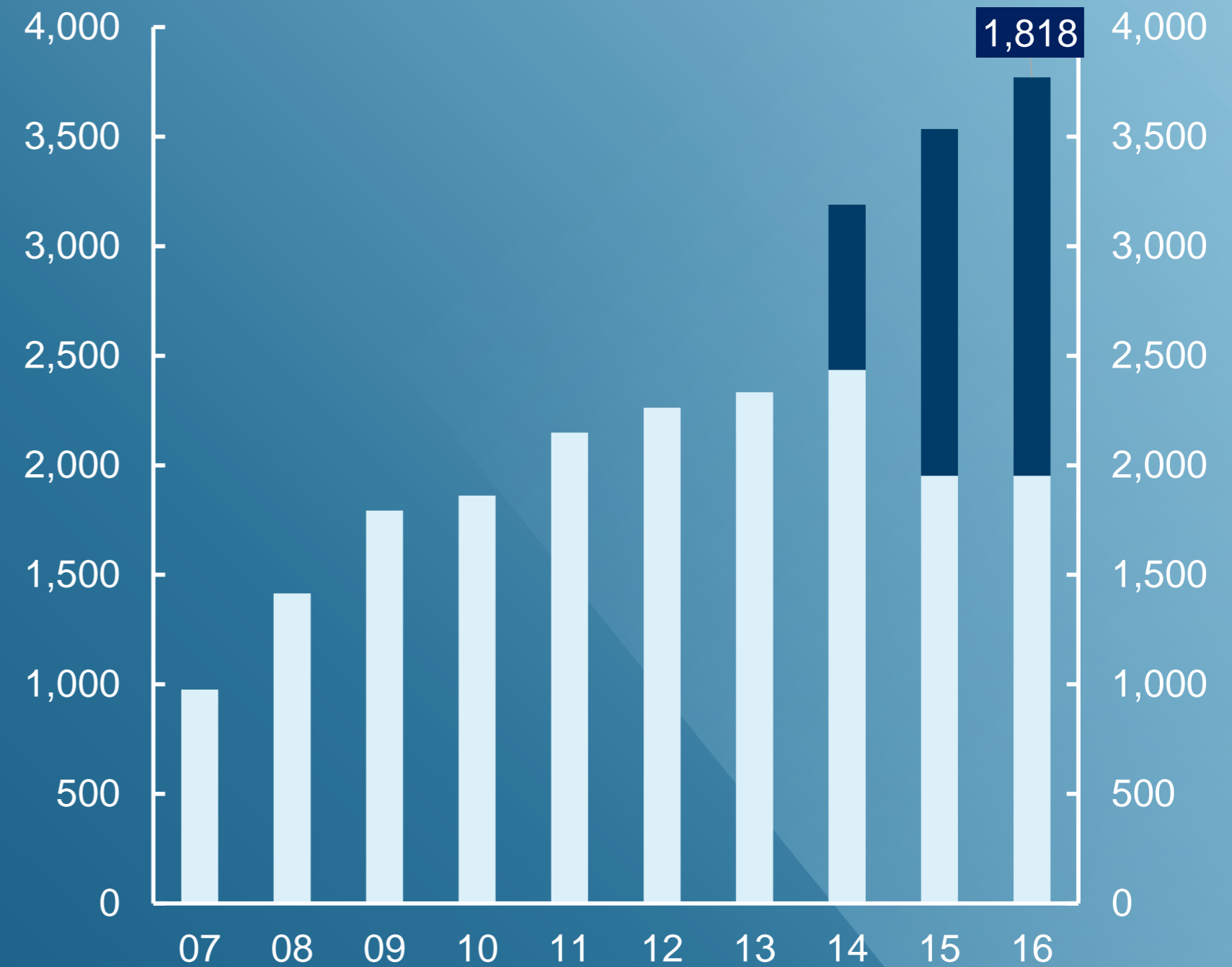
- Board nomination and election processes
- Shareholder rights
- Corporate transparency
- Sustainability



3,790 meetings with 1,589 companies

Company interaction on environmental, social and governance issues

- Board nomination and election processes
- Shareholder rights
- Corporate transparency
- Sustainability



Selected topics for company interaction

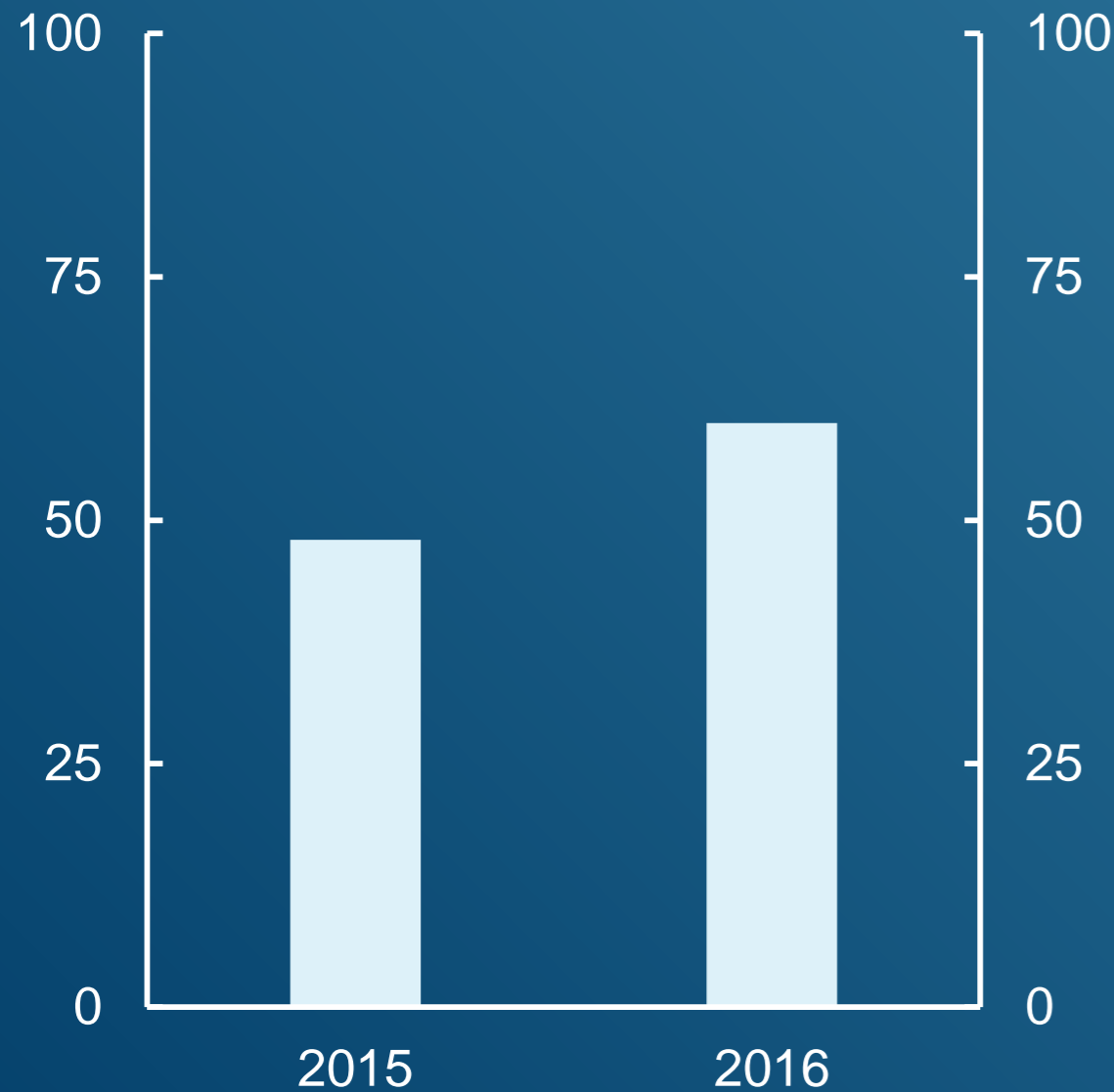
Key issues discussed with companies

Theme	Specific issue	Country
Board nomination and election processes	Individual vote count	Sweden
	Proxy access	US
	Minority shareholder candidate nomination	Brazil
	Board independence standards	Japan
Shareholder rights	Change of control rights	Switzerland
	Controlled companies	Europe
Transparency	Corruption risk	Global
	Remuneration	Global
Climate change	Transition to low carbon economy	Global
Human rights	Syrian refugees in Turkish apparel supply chains	Syria/Turkey
Water management	Pollution control	Nigeria/Ghana

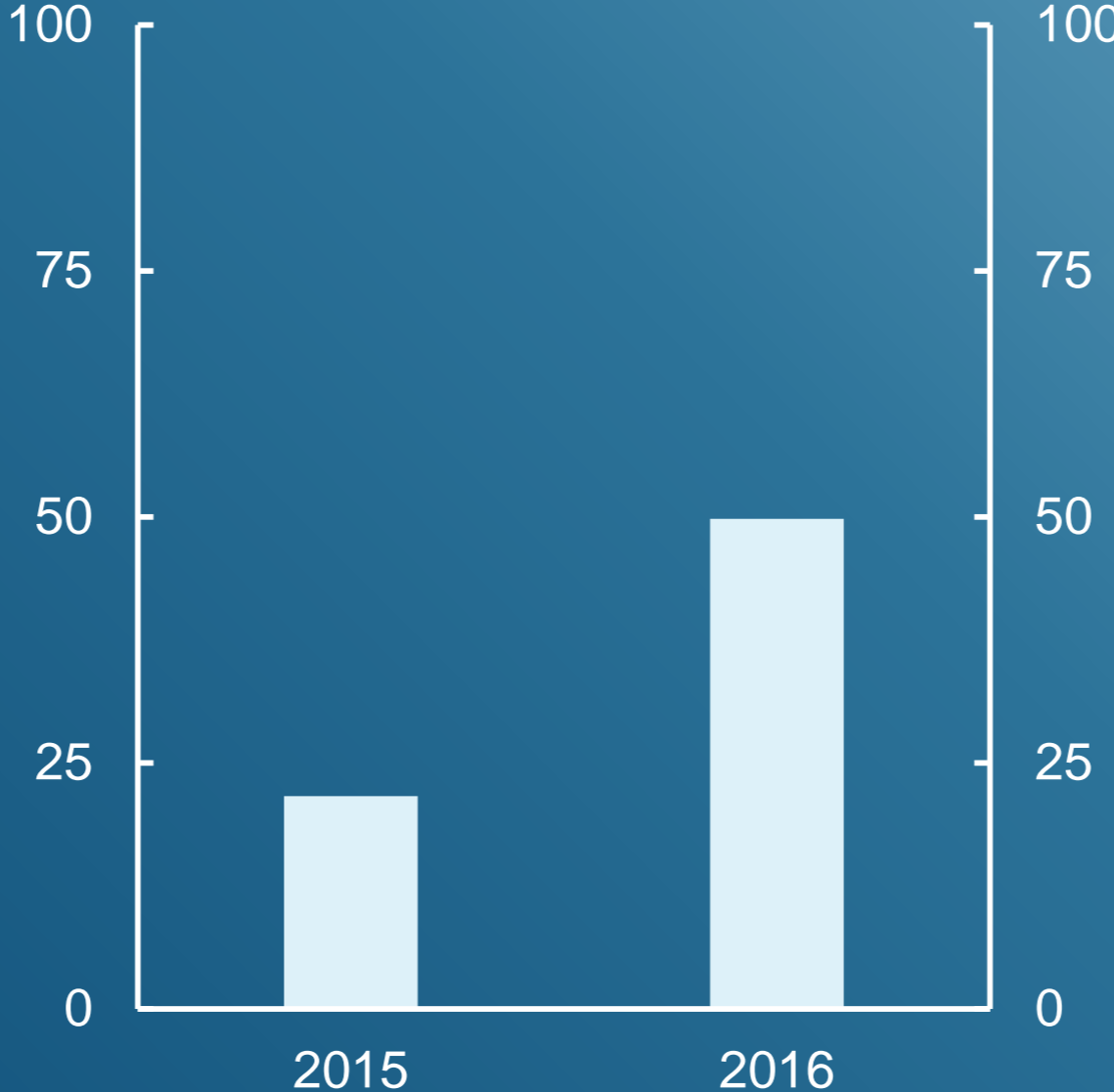
Board nomination and election processes

Percent

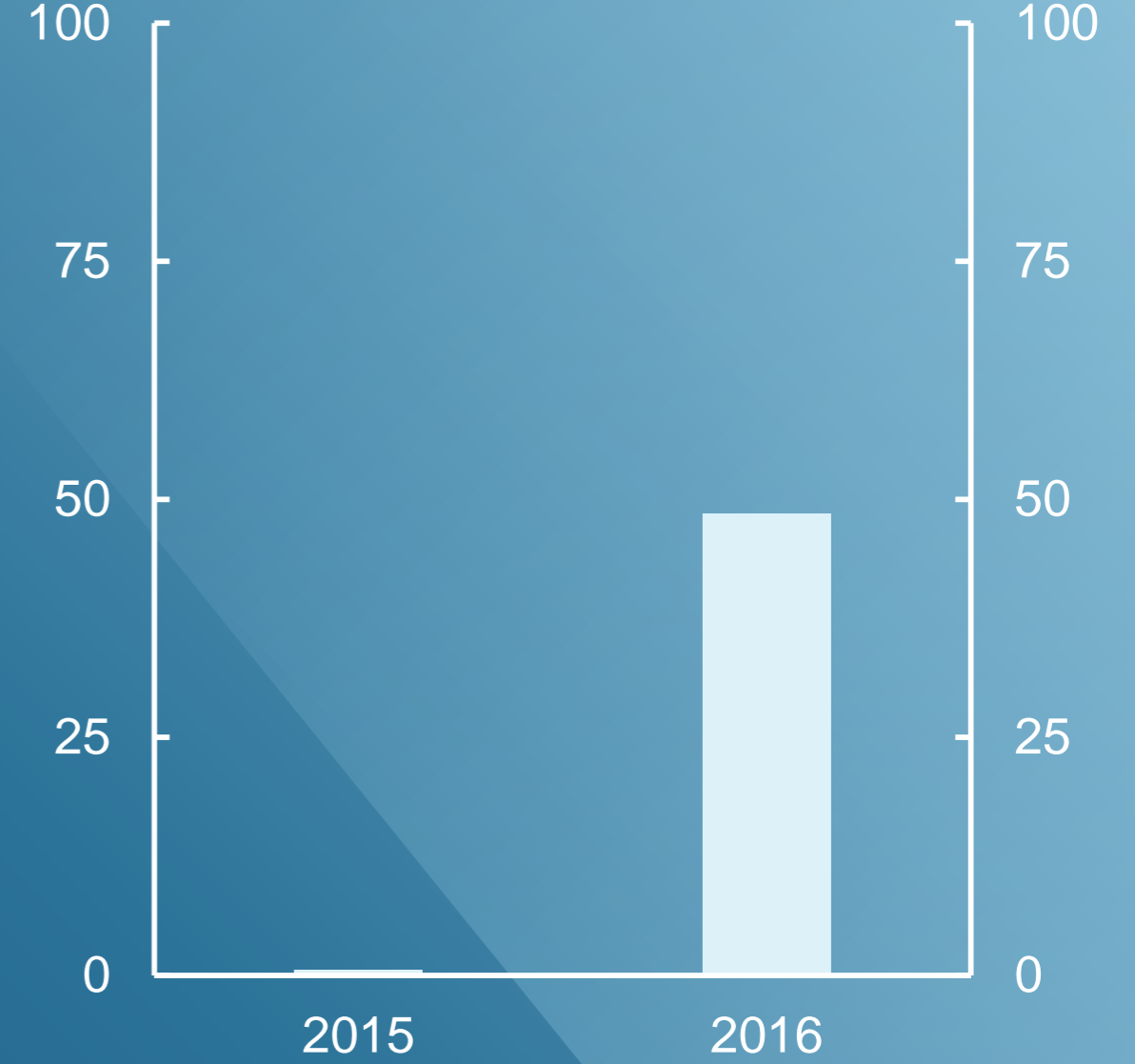
Japan: companies with two or more independent directors



US: progress of proxy access in the S&P 500



Sweden: holdings with individual director elections



Environmental investments

	Last 12 months	Last 3 years	Since 01.01.2010
Environmental investments	12.4	6.1	4.2
FTSE Environmental Technology Index	1.2	4.1	2.7
MSCI Global Environment Index	11.0	3.2	7.5
Return on the fund	6.9	5.7	7.4

Environmental investments

Environmental mandates¹

Main category	Subgroups	Number of companies	Total (billion kroner) ²
Low-emission energy & alternative fuels	Renewable energy	45	5.22
	Low-emission energy	11	11.50
	Low-emission fuels	8	1.08
Clean energy & efficiency technology	Electricity production	1	0.16
	Transport	34	5.26
	Buildings	24	7.41
	Industry	43	9.85
Natural resource management	Water	35	8.67
	Waste management and emissions reduction	16	5.35
	Sustainable agriculture	9	2.35
	Other		
Total		226	56.84



¹Excluding investments in green bonds

²Total includes cash

Top ten holdings environmental investments

Largest holdings in percent of the environmental portfolio

Alternative fuel		Clean energy		Natural resource management	
	Portfolio share		Portfolio share		Portfolio share
NextEra Energy Inc	5.1	Johnson Controls International plc	2.8	Waste Connections Inc	2.4
Iberdrola SA	4.5	Eaton Corp Plc	1.9	Xylem Inc/NY	2.0
Sempra Energy	4.3	Daikin Industries Ltd	1.8	American Water Works Co Inc	1.9
National Grid Plc	2.4	Keyence Corp	1.7	Ecolab Inc	1.8
Linde AG	2.4	Koninklijke Philips NV	1.1	Steel Dynamics Inc	1.5
Air Liquide SA	1.8	Siemens AG	1.0	AO Smith Corp	1.4
NRG Yield Inc	0.9	Shin-Etsu Chemical Co Ltd	1.0	Koninklijke DSM NV	1.3
Edison International	0.8	ABB Ltd	0.9	Covanta Holding Corp	1.3
Pattern Energy Group	0.8	Thermo Fisher Scientific Inc	0.9	DS Smith Plc	1.3
EDP Renovaveis SA	0.7	Parker-Hannifin Corp	0.9	Veolia Environnement SA	1.2

Top ten holdings environmental investments

Largest holdings (ownership share) in the environmental portfolio. Percent

Alternative fuel

Clean energy

Natural resource management

	Ownership share		Ownership share		Ownership share
Pattern Energy Group Inc	3.0	Sunrun Inc	2.9	Covanta Holding Corp	4.2
Renewable Energy Group	3.0	AMG Advanced Metallurgical Group NV	2.9	Mueller Water Products Inc	3.0
Green Plains Inc	2.8	Canadian Solar Inc	2.7	Cadiz Inc	2.5
TPI Composites Inc	2.7	TT Electronics plc	1.9	Tetra Tech Inc	2.1
Energiekontor AG	2.5	ChipMOS TECHNOLOGIES	1.9	Sound Global Ltd	2.1
Boralex Inc	2.4	Senestech Inc	1.9	DS Smith PLC	1.8
Pacific Ethanol Inc	2.1	Dana Inc	1.7	AquaVenture Holdings Ltd	1.7
NRG Yield Inc	2.1	Modine Manufacturing Co	1.6	Xylem Inc/NY	1.5
PNE Wind AG	2.0	Tenneco Inc	1.5	DIRTT Environmental Solutions	1.3
GasLog Ltd	1.9	SPCG PCL	1.3	SPX FLOW Inc	1.3

Greenhouse gas emissions

Equity portfolio. Emissions by sector, portfolio weighted sector average

Sector	Equity portfolio		Benchmark index	
	Share of portfolio market value. Percent ¹	Million tonnes CO ₂ equivalents	Million tonnes CO ₂ equivalents	
Basic materials	5.6	11,110	14,331	
Consumer goods	13.7	2,434	2,519	
Consumer services	10.3	1,699	1,554	
Financials	23.3	1,172	1,495	
Health care	10.2	595	602	
Industrials	14.1	3,069	3,715	
Oil and gas	6.4	41,549	42,986	
Technology	9.5	984	991	
Telecommunications	3.2	3,242	3,287	
Utilities	3.1	26,708	29,316	



¹ Does not equal 100 percent because cash and derivatives are not included

Greenhouse gas emissions

Equity portfolio. Emissions intensity by sector, weighted by market value of fund holdings

Sector	Equity portfolio		Benchmark index
	Share of portfolio market value. Percent ¹	Tonnes CO ₂ equivalents per million dollar in revenue	Tonnes CO ₂ equivalents per million dollar in revenue
Basic materials	5.6	604	687
Consumer goods	13.7	70	68
Consumer services	10.3	86	73
Financials	23.3	24	22
Health care	10.2	31	30
Industrials	14.1	237	254
Oil and gas	6.4	333	345
Technology	9.5	48	49
Telecommunications	3.2	43	44
Utilities	3.1	1,262	1,378

¹ Does not equal 100 percent because cash and derivatives are not included



Companies sorted by total emissions

Equity portfolio. Top 15 companies. As at 31.12.2016

Company	CO ₂ emissions	Fund company	Fund ownership of
	Scope 1&2	ownership	emissions
	Million tonnes	Percent	Million tonnes
Korea Electric Power Corp	309,876,726	0.10	301,674
ArcelorMittal	190,846,630	0.07	128,569
RWE AG	153,578,298	1.48	2,266,583
Engie SA	136,430,895	1.37	1,863,763
Exxon Mobil Corp	128,871,686	0.82	1,055,653
Enel SpA	116,128,786	1.26	1,460,878
Gazprom PJSC	111,414,424	0.40	443,282
LafargeHolcim Ltd	110,583,397	1.29	1,424,018
Tokyo Electric Power Co Holdings Inc	107,073,757	1.08	1,158,115
Southern Co/The	102,012,216	0.75	760,742
E.ON SE	101,802,941	1.87	1,903,066
Nippon Steel & Sumitomo Metal Corp	98,115,133	0.87	852,199
Metro Land Corp Ltd	97,266,603	0.56	546,570
Inter RAO UES PJSC	95,308,455	1.07	1,022,413
Royal Dutch Shell Plc	86,043,839	2.33	2,007,493

Companies sorted by fund ownership

Equity portfolio. Top 15 companies. As at 31.12.2016

Company	CO ₂ emissions Scope 1&2	Fund company ownership	Fund ownership of emissions
	Million tonnes	Percent	Million tonnes
RWE AG	153,578,298	1.48	2,266,583
Royal Dutch Shell Plc	86,043,839	2.33	2,007,493
E.ON SE	101,802,941	1.87	1,903,066
Engie SA	136,430,895	1.37	1,863,763
Enel SpA	116,128,786	1.26	1,460,878
LafargeHolcim Ltd	110,583,397	1.29	1,424,018
Linde AG	24,853,002	4.76	1,182,682
Tokyo Electric Power Co Holdings Inc	107,073,757	1.08	1,158,115
Glencore Plc	36,782,849	3.07	1,127,475
Exxon Mobil Corp	128,871,686	0.82	1,055,653
Iberdrola SA	31,520,428	3.35	1,054,957
Evrax PLC	45,771,055	2.26	1,034,284
Inter RAO UES PJSC	95,308,455	1.07	1,022,413
Veolia Environnement SA	33,788,858	2.80	946,442
HeidelbergCement AG	60,228,533	1.53	918,471



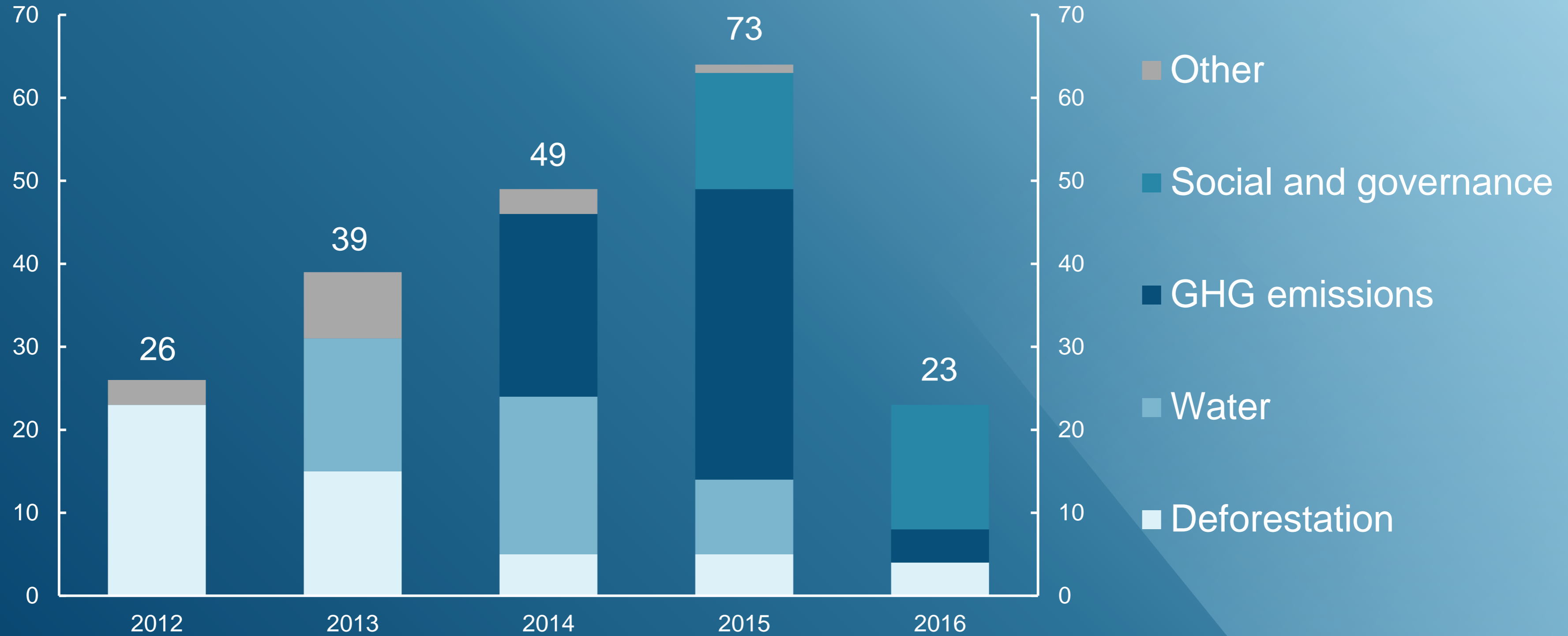
RISK MANAGEMENT

Risk-based divestments in 2016

Category	Theme	2016
Greenhouse gas emissions	Oil sands production	3
	Coal-fired power generation	1
Deforestation	Pulp and paper	4
	Human rights issues in seafood industry	2
Social and governance	Social and governance issues in the mining and metals industry	10
	Corruption	3
Total		23



Risk-based divestments



Exclusions based on coal

Guidelines for observation and exclusion

- Two criteria
 - Conduct-based climate criterion (from 1 January 2016)
 - Product-based coal criterion (from 1 February 2016)
- Norges Bank identifies companies under the product-based coal criterion
- The criteria follow the established processes for observation and exclusion
 - The Executive Board decides
 - The decisions on exclusions are made public after the divestment has been completed
- In 2016: 59 companies excluded, 11 companies put under observation

Update on exclusion decisions

Made public on 7 March 2017

■ Exclusion

- Eneva SA
- CEZ AS
- Great River Energy
- HK Electric Investments & HK Electric Investments
- Huadian Energy Co Ltd
- Korea Electric Power Corp
- Malakoff Corp Bhd
- Otter Tail Corp
- PGE Polska Grupa Energetyczna SA
- SDIC Power Holdings Co Ltd

■ Observation

- NorthWestern Corp
- Portland General Electric Company

Observation and exclusion in 2016

Changes from 31.12.2015 to 31.12.2016

■ Exclusion

- ZTE Corporation, 7 January 2016
- San Leon Energy Plc, 4 March 2016
- Kosmos Energy Ltd, 28 June 2016
- Cairn Energy Plc, 28 June 2016
- Duke Energy Corp, including selected subsidiaries, 7 September 2016
- 59 coal companies, 14 April 2016 and 21 December 2016

■ Removed from the list of excluded companies

- Singapore Technologies Engineering Ltd, 30 September 2016
- Raytheon Co, 25 January 2017

■ Observation

- Petroleo Brasileiro SA, 28 January 2016
- 11 coal companies, 21 December 2016

Exclusions and observation as at 31.12.2016

Ethical exclusions

Category	Criteria	Number of companies
Product-based exclusions	Production of tobacco	20
	Production of specific weapon types	16
	Thermal coal mining or coal-based power production	59
Conduct-based exclusions	Serious or systematic human rights violations	3
	Severe environmental damage	18
	Contributions to climate change	0
	Gross corruption	1
	Other fundamental ethical norms	5
	Serious violations of the rights of individuals in situations of war or conflict	2
Observation	Severe environmental damage	1
	Gross corruption	1
	Thermal coal mining or coal-based power production	11

Total

137



Main points

- Expectation document on human rights
- Better sustainability reporting
- Promote shareholder influence
- Implementing the coal criteria

RESPONSIBLE INVESTMENT 2016

GOVERNMENT PENSION FUND GLOBAL

YNGVE SLYNGSTAD,
CHIEF EXECUTIVE OFFICER, NORGES BANK INVESTMENT MANAGEMENT

OSLO, 7 MARCH 2017