



Go Green
Capitalism



Presents:

Corporate Knights Inc.
Business for a Better World 2016
Case Competition

Go-Green Capitalism Team



Laurent Sevigny

Business Consultant

Expertise:
Business and
Service
Transformation



Bhupinder Dulku

Economist

Expertise:
Investment
Forecasting and
Macroeconomic
Assessment



Dorothy Pan

Financial Analyst

Expertise:
Financial
Modeling and
Risk Analysis



Mukesh Dhatwalia

Financial Analyst

Expertise:
Equity and Capital
Markets Research

“Building A Profitably Greener Future Together Today”

Introduction

Proposal

Action Plan

Monitor

Go Green
Capitalism



Green Portfolio Challenge



Reduces Exposure to
CO₂ Emissions



Sustain High
Rates of Return



Reduce Portfolio
Risk Exposure

➤ Portfolio in Alignment with 2°C Investing

Introduction

Proposal

Action Plan

Monitor

Go Green
Capitalism



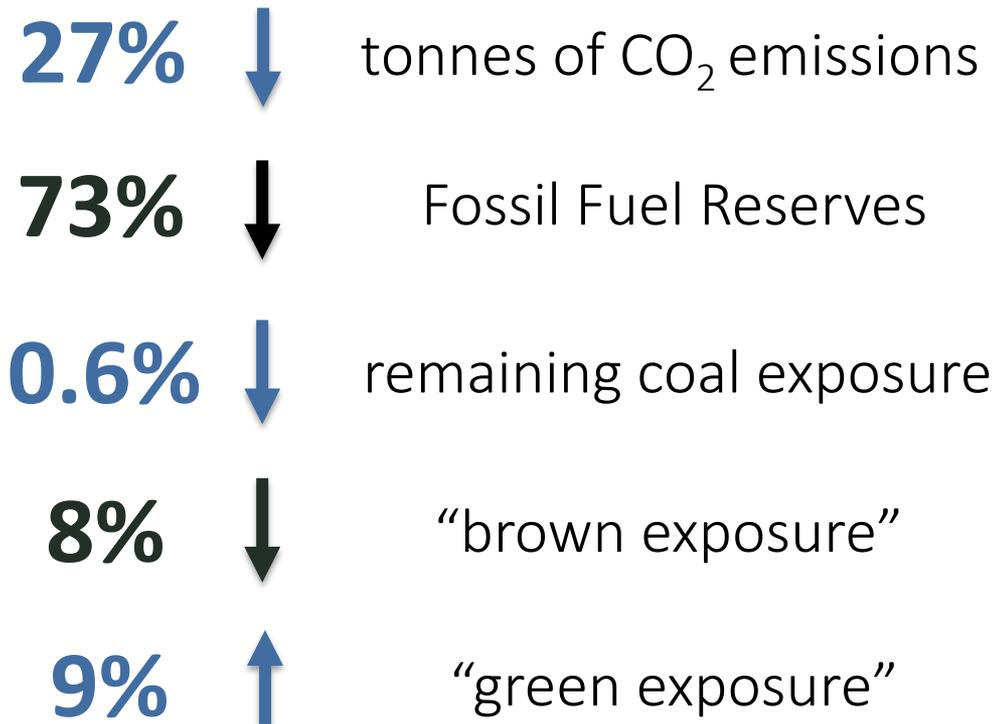
Portfolio Strategy Proposal

Divest and Re-Invest 18.8 billion (10.8%) from carbon intensive investments by 2020

Result:



Favourable Project



Introduction

Proposal

Action Plan

Monitor

Go Green
Capitalism



Portfolio Management Strategy

Action Plan

Steps to implement the portfolio management strategy:



- Step 1: Divest
- Step 2: Invest
- Step 3: Influence

➤ Action Plan is enabled by the Go-Green Capitalism Framework

Introduction

Proposal

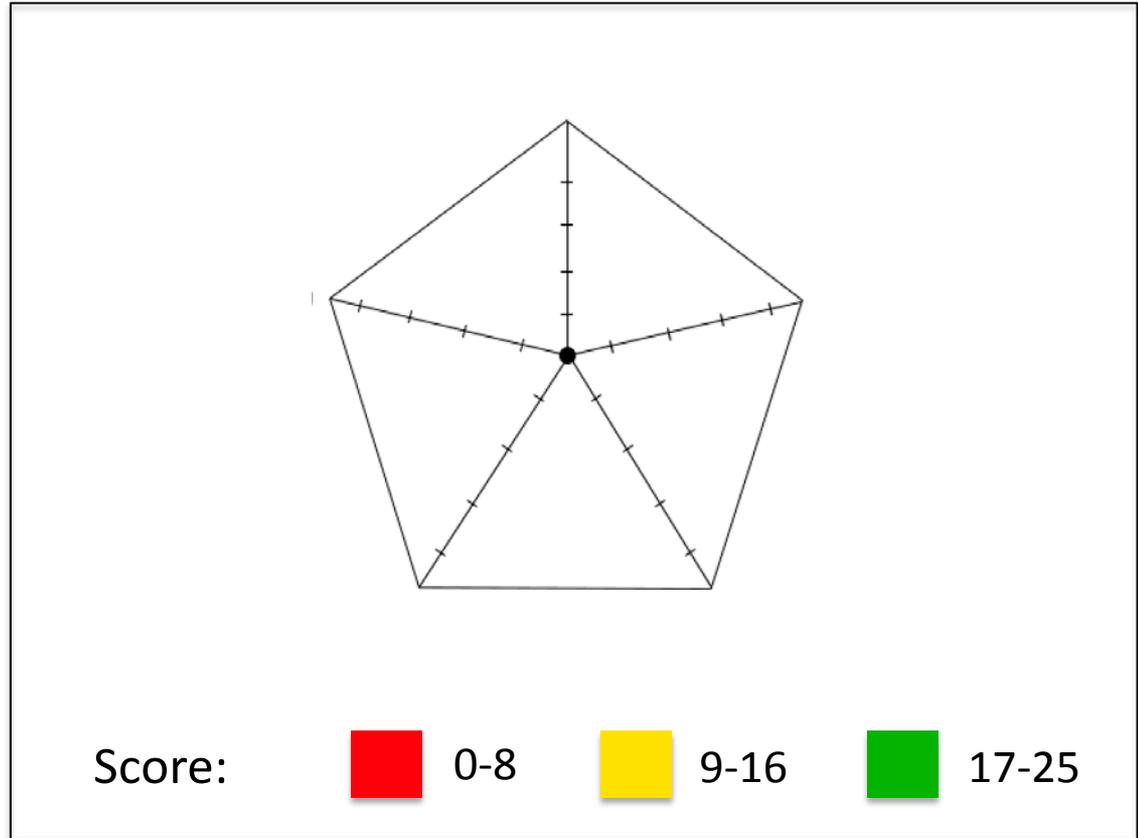
Action Plan

Monitor

Go Green
Capitalism



Action Plan: Framework



see appendix*

Introduction

Proposal

Action Plan

Monitor

Go Green
Capitalism

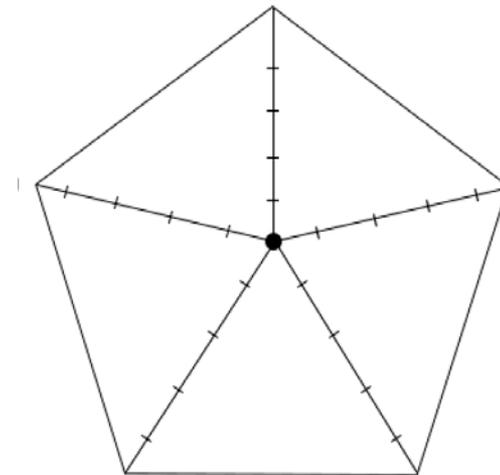


Action Plan: Framework

Financial Health

Company's
net worth and
debt/equity ratio

Financial Health



Score:



0-8



9-16



17-25

see appendix*

Introduction

Proposal

Action Plan

Monitor

Go Green
Capitalism



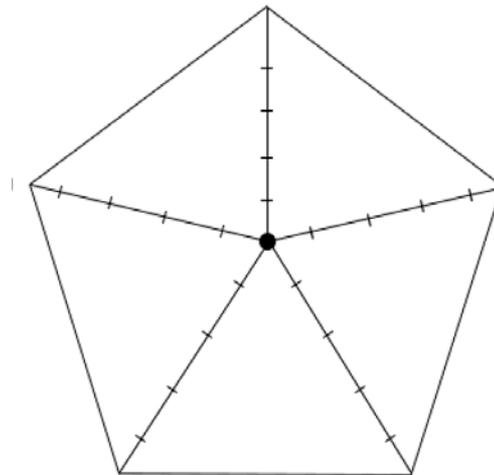
Action Plan: Framework

ESG Positioning

Sector-risk level determined on 9 sustainability factors

Financial Health

ESG Positioning



Score:



0-8



9-16



17-25

see appendix*

Introduction

Proposal

Action Plan

Monitor

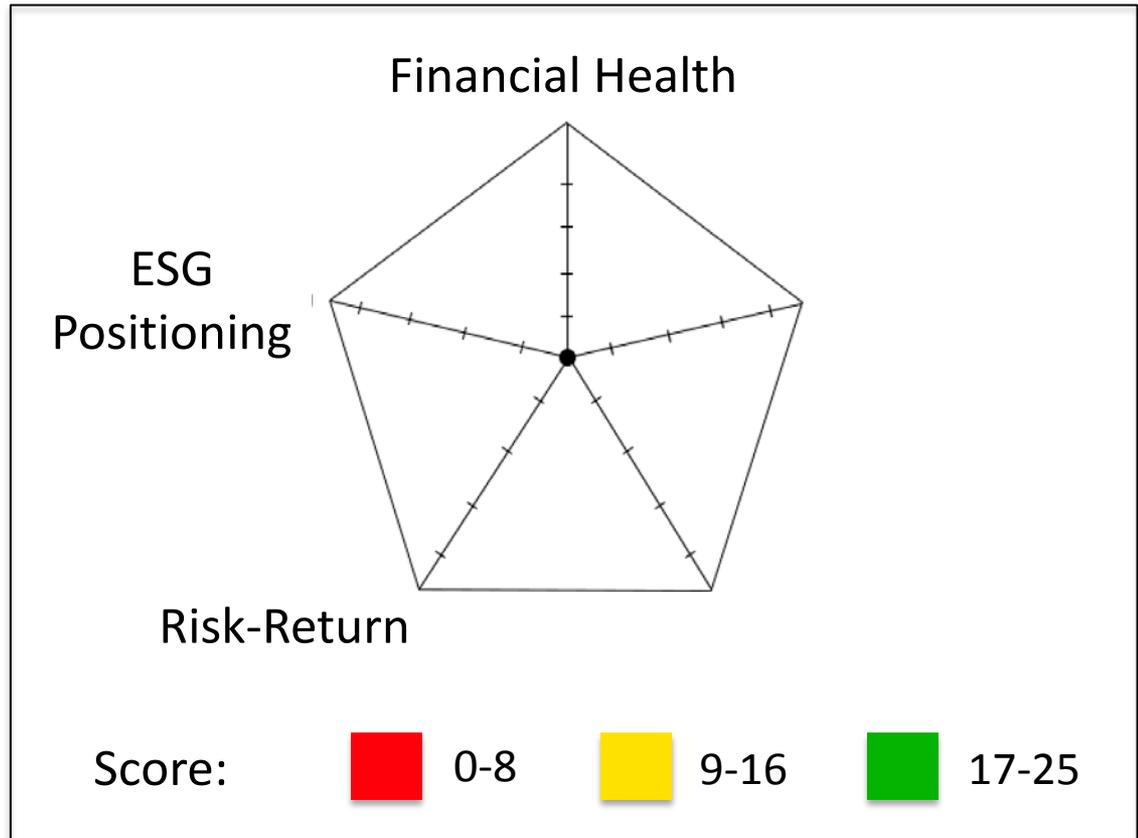
Go Green
Capitalism



Action Plan: Framework

Risk-Return

Capital Asset Pricing Model that includes beta, market and cross-sector risk



see appendix*

Introduction

Proposal

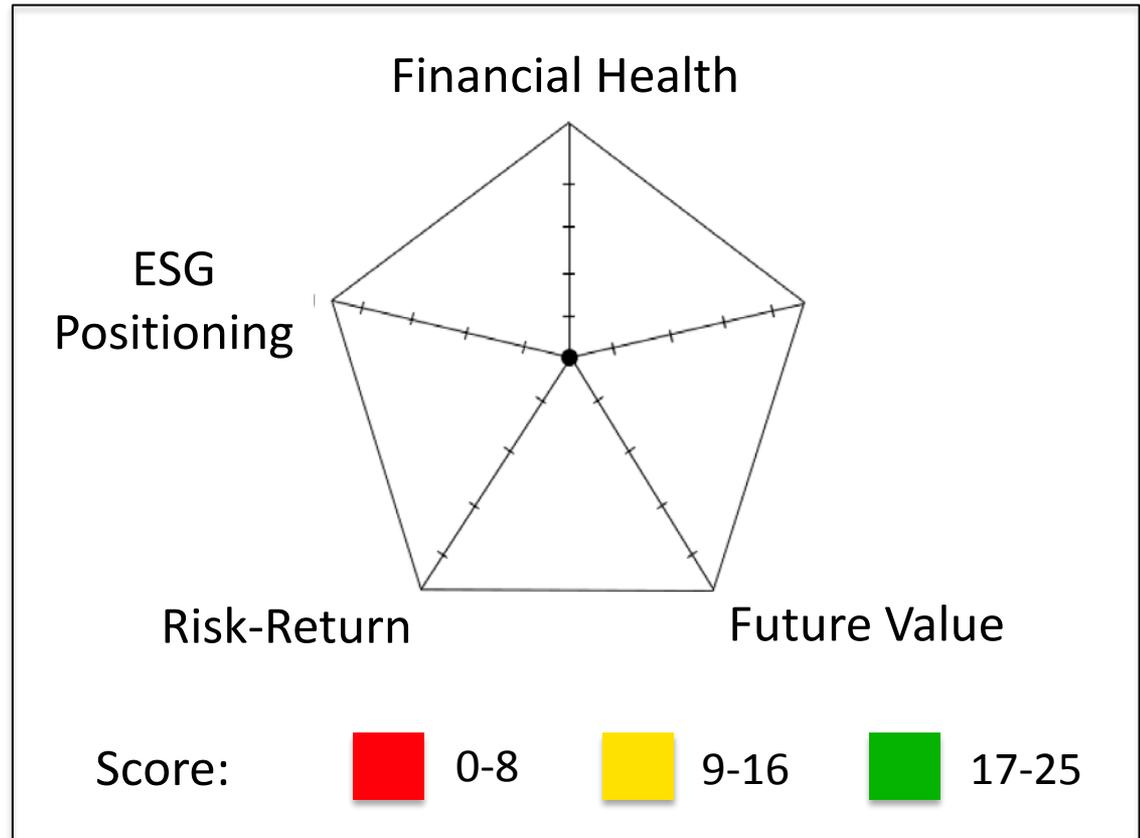
Action Plan

Monitor

Action Plan: Framework

Future Value

Analyst prediction for potential revenue as well as EPS growth



see appendix*

Introduction

Proposal

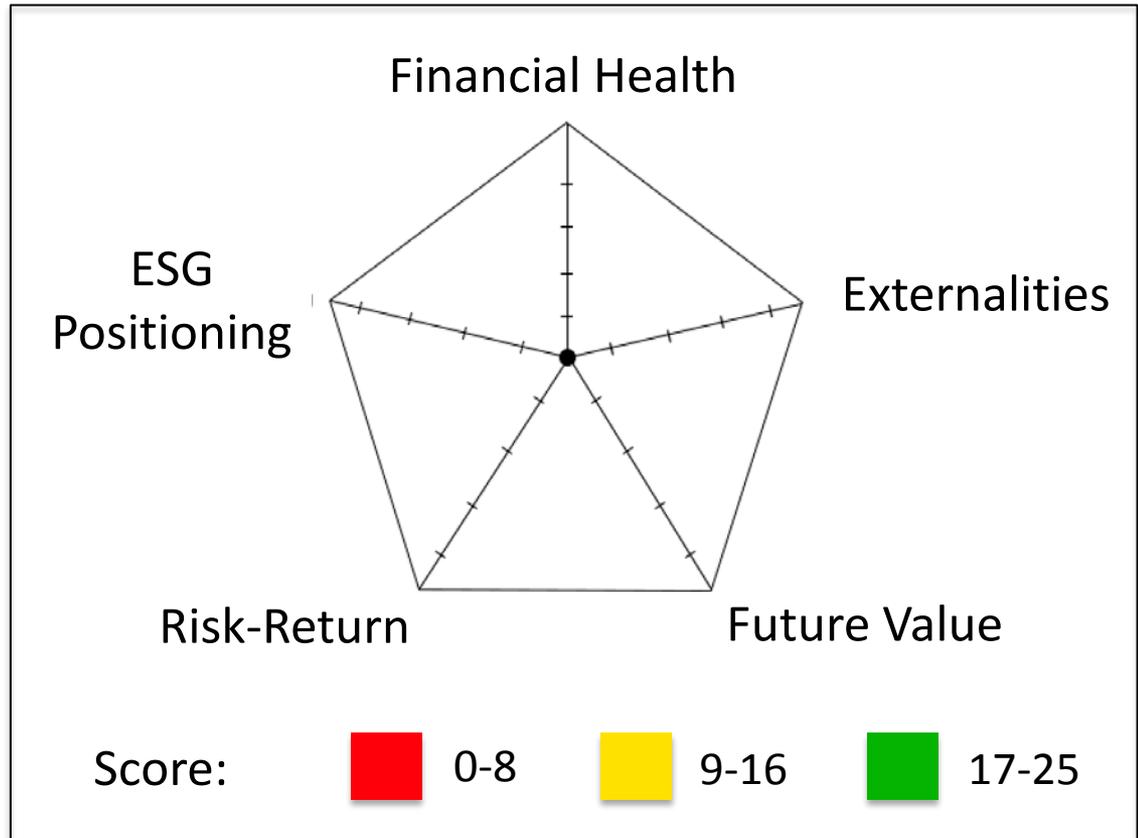
Action Plan

Monitor

Action Plan: Framework

Externalities

Security's performance within its sector to relevant sustainability metrics



see appendix*

Introduction

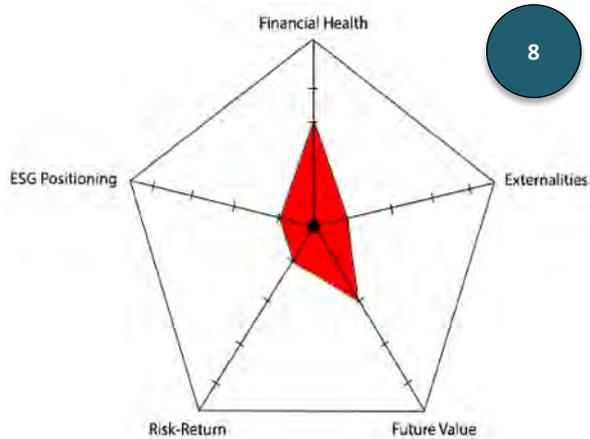
Proposal

Action Plan

Monitor

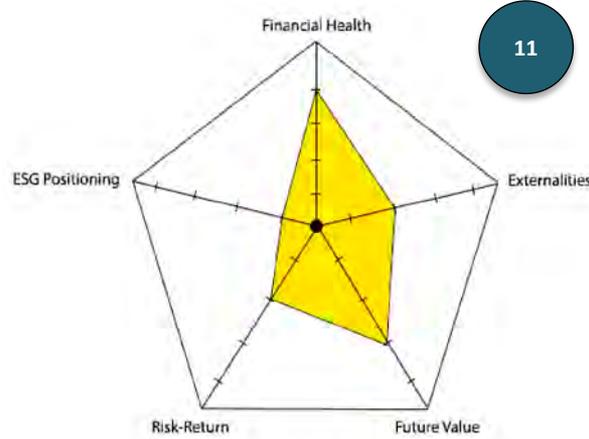
Action Plan: Framework

Glencore PLC



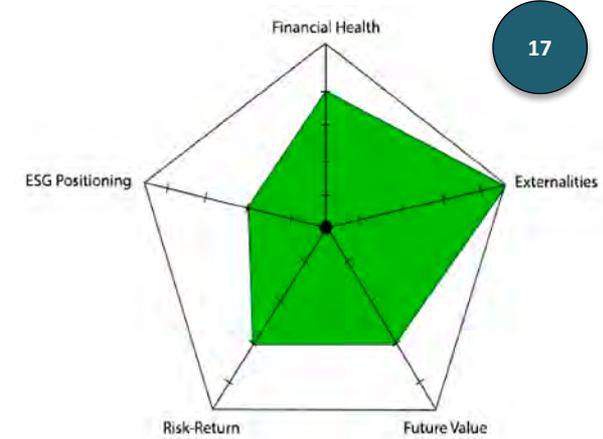
Financial	Can cover ST but not LT debt
ESG	Operates in a high risk sector
Risk-R	Expected Risk-Return is -58%
Future	Market Perform (Hold)
Ext.	Sector Underperformance

Royal Dutch Shell (RDSA)



Financial	Can meet debt commitments
ESG	Operates in a high risk sector
Risk-R	Expected Risk-Return is -16%
Future	Market Perform (Buy)
Ext.	Average Sector Performance

Svenska Cellulosa AB



Financial	Assets able to cover all debt
ESG	Operates in a med-risk sector
Risk-R	Expected Risk-Return is +17%
Future	L-Term Buy & Market Perform
Ext.	Outperformance to Industry

Introduction

Proposal

Action Plan

Monitor

Action Plan – Step 1: Divest

Securities	score	
Royal Dutch Shell	11	
BASF SE	12	
Total SA	12	
GDF Suez	11	
Bayer AG	12	
Glencore PLC	8	
BHP Biliton	8	
Eni Spa	7	
SSE PLC	13	
BG Group	7	
0 - 8	9 - 16	17 - 25

Divest 25% per year of \$18.8 billion over the next 4 years



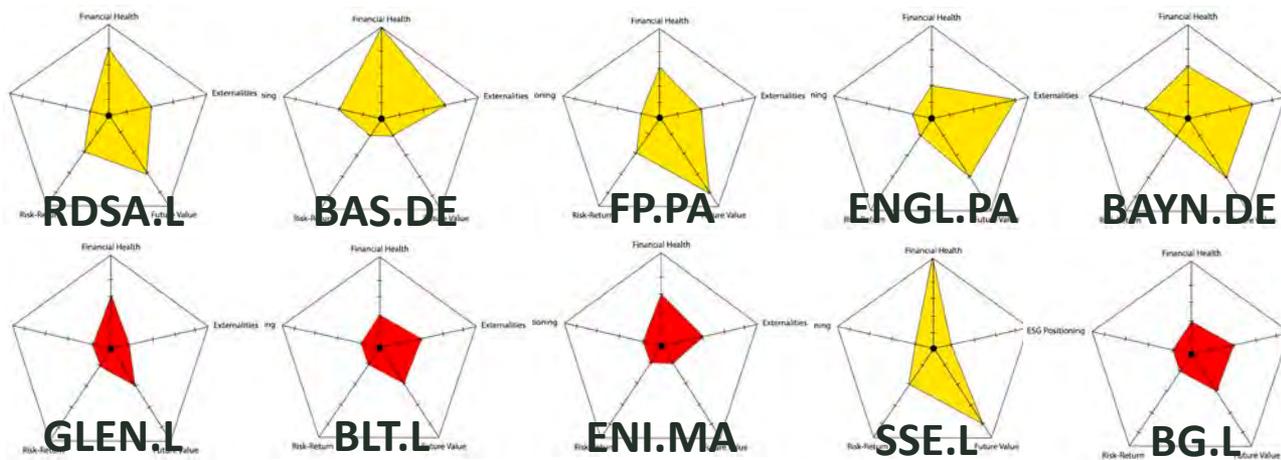
Energy



Materials



Utilities



Introduction

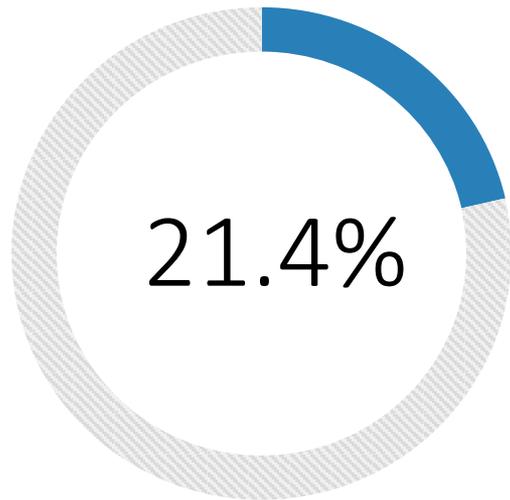
Proposal

Action Plan

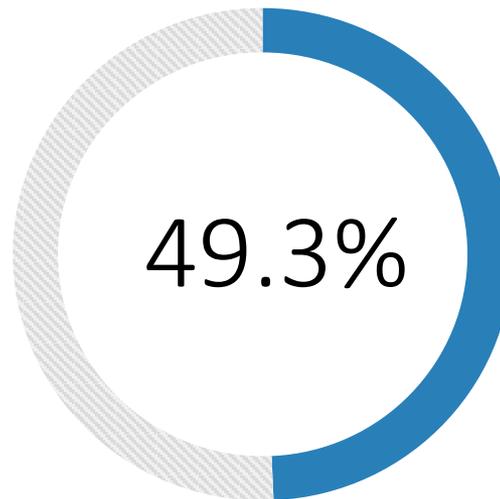
Monitor

Action Plan – Step 2: Invest

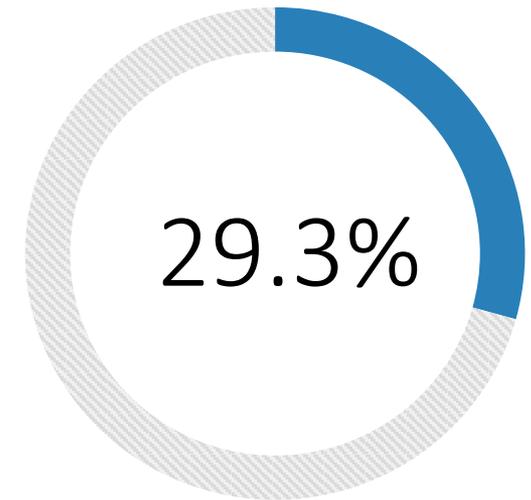
Re-Investment of \$18.8 billion into 14 securities over 4 years



Rebalancing of Energy, Materials, and Utilities



Re-Investment into existing fund positions



New investment options based on framework

see appendix*

Introduction

Proposal

Action Plan

Monitor

Go Green
Capitalism



Action Plan – Step 3: Influence

USA:

Exxon Mobil
Chevron Corp

UK:

National Grid
BP PLC

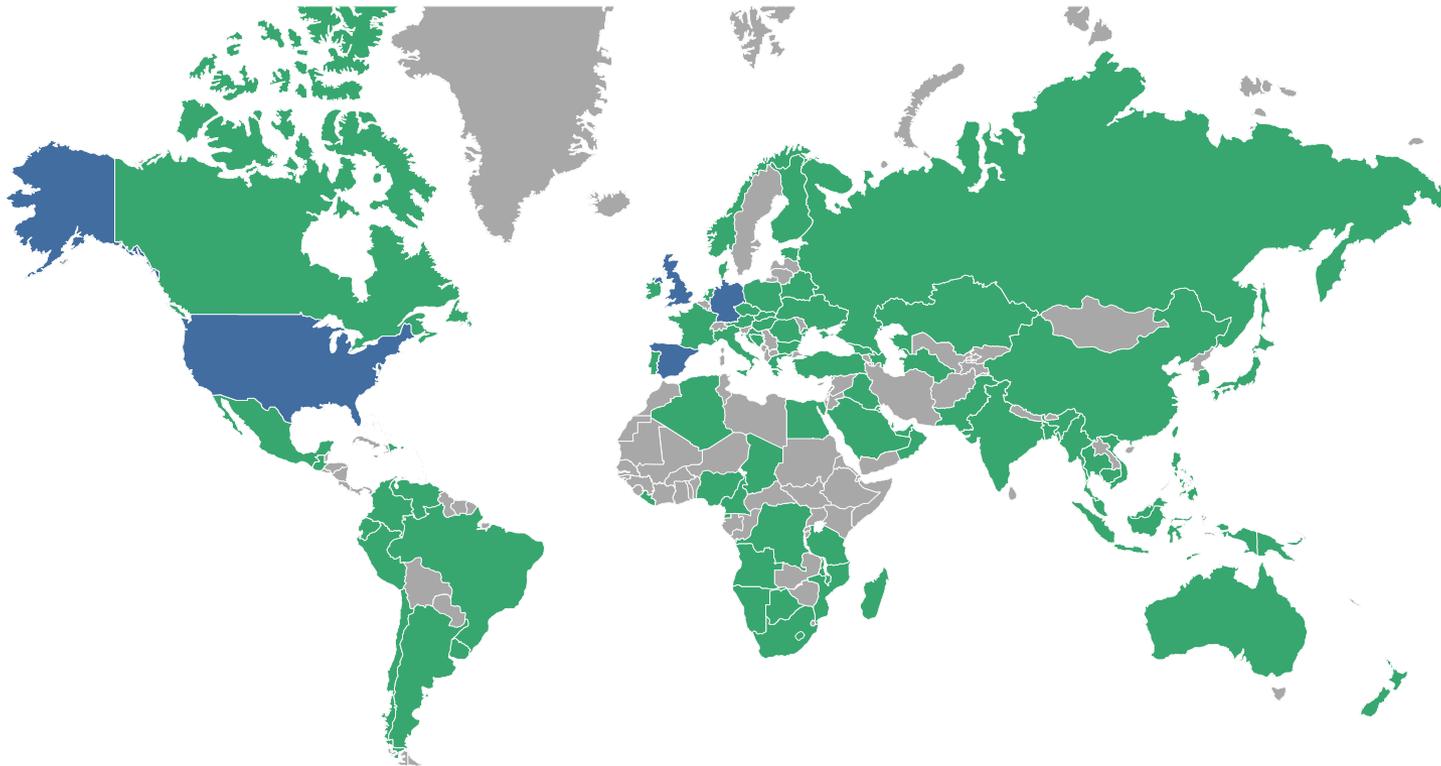
GERMANY:

Linde AG

SPAIN:

Iberdrola SA

Worldwide
Operations



Direct
Corporate
Engagement

Proxy
Voting

File
Shareholder
Proposals

see appendix*

Introduction

Proposal

Action Plan

Monitor

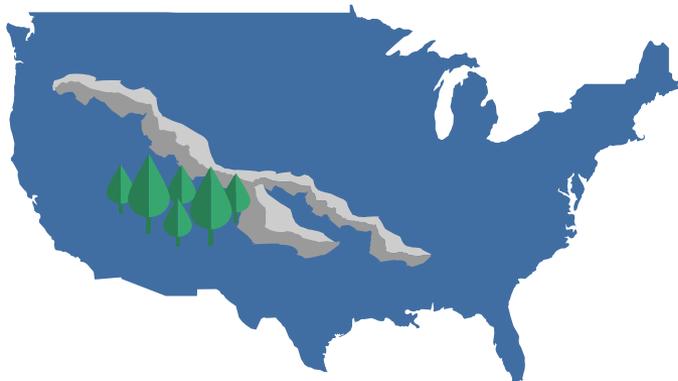
Go Green
Capitalism



Portfolio Risk-Reduction

risk-return benefits may outweigh negative sustainable performance

Example (United States):
Exxon Mobil (XOM)



Negative Sustainable Performance
Strong Contributor to CO₂



Highly Positive forecasted
Risk-Return (+24%)

- To mitigate long-term risk do not divest and instead leverage shareholder influence

Introduction

Proposal

Action Plan

Monitor

Go Green
Capitalism



Monitor: Balanced Scorecard

2020 Portfolio Objectives:
Reduce CO₂ Emissions, Risk to Volatility, Maximize Annual Return

Norway Government Pension Fund Global Performance Measurements

Portfolio CO₂ Emissions

- Position to not exceed a 2° temperature increase
Each year the portfolio will have to reduce the amount of CO₂ emissions.
- **KPI:** 27% reduction of tones of CO₂ emissions per million dollar of revenue by 2020.

Treynor Ratio

- To measure the portfolio performance risk based on the annual return, risk-free rate and calculated Beta.
- **KPI:** Decrease portfolio risk by 5% annually for a total of 20% risk reduction by 2020.

Annual Return

- The annual return will measures the portfolio's year over year capital gains and earnings from dividends.
- **KPI:** >5% Annual Portfolio Return (exceed 2014's 5% annual returns).

Strategy Investment Performance

\$18,817,656,010
Total Invested

+218.75%
Return Over Time

+69.32%
S&P500

+\$22,345,966,512
Difference from Benchmark

Zoom: [3m](#) [6m](#) [YTD](#) [1y](#) [5y](#) [10y](#) [All](#)

Jan 28, 2010 - Jan 12, 2016

● **Business For A Better World** +218.75% ● **S&P500** +69.32%



Source: Google Finance

Introduction

Proposal

Action Plan

Monitor

Go Green
Capitalism



Summary

Go Green Capitalism



Core Challenges



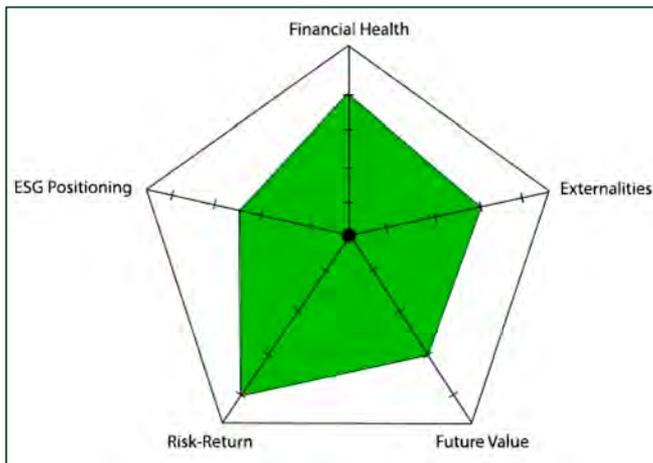
Action Plan



Framework



Result



outperforming portfolio that factors in sustainability and financial ability when generating positive market returns

Thank You!

Introduction

Proposal

Action Plan

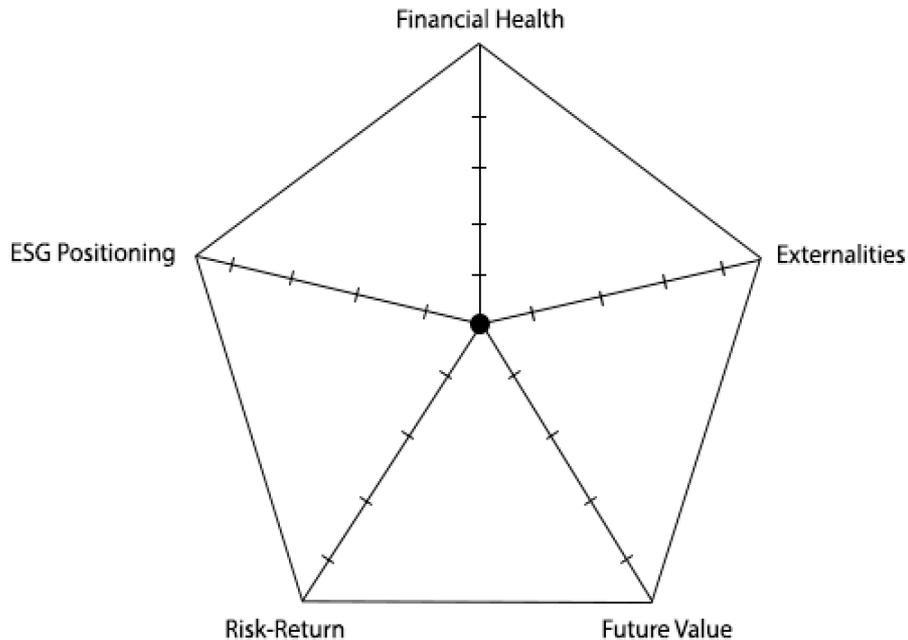
Monitor

Go Green
Capitalism



Appendix: Framework Definitions

Figure 1: Sustainability Snowflake



Aggregate Score:



Metrics:

Comparison measurement of a security's relative performance within its sector to other stocks in that sector.

Financial Health

Company's net worth and debt/equity ratio

ESG Positioning

The sector risk-level determined on 9 important sustainability factors faced by all industries. (See Appendix: ESG Positioning)

Risk-Return

Capital Asset Pricing Model (Heracles™) that includes beta, market, as well as cross-sector relationship risk between industries

Future Value

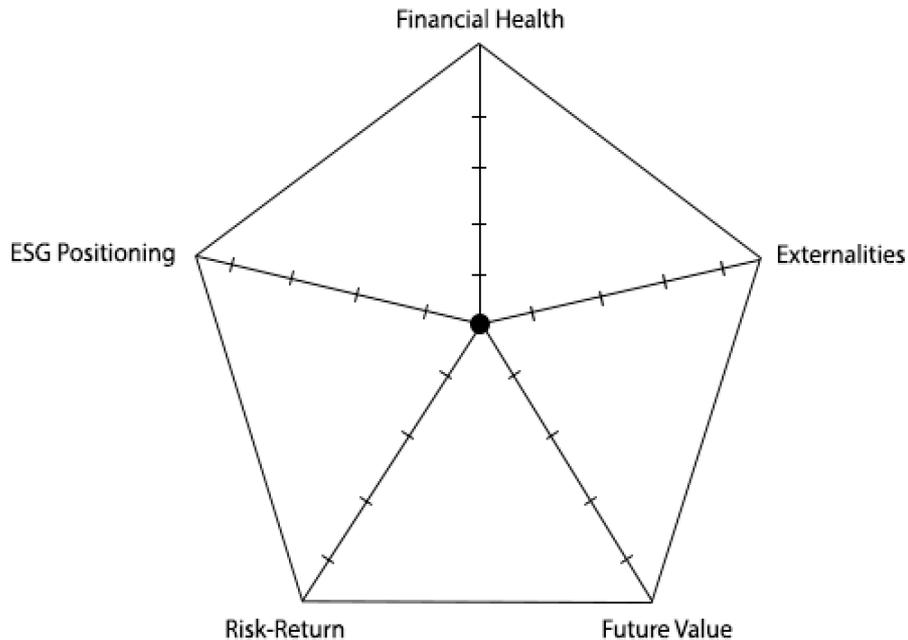
Security's potential EPS and company growth

Externalities

An assessment of a security's performance within its industry to relevant SASB metrics

Appendix: Framework Weighting for Sensitivity Basis

Figure 1: Sustainability Snowflake



Aggregate Score:



Framework Model Weighting:

<u>Financial Health</u>	given a 1.0 model weighting. Past performance of the security and management of debt/equity are important for sound growth
<u>ESG Positioning</u>	given a 1.0 model weighting. Overarching sector issues may not all be relevant to the security's performance
<u>Externalities</u>	given a 1.5 model weight. Performance of the security relative to other securities decreased risk associated with the security. Pick best performers
<u>Future Value</u>	given a 0.5 model weight due to large amount of assumption work involved
<u>Risk-Return</u>	given a 1.5 model weight as cross-sector risk relationship is an important consideration for sustainability

Introduction

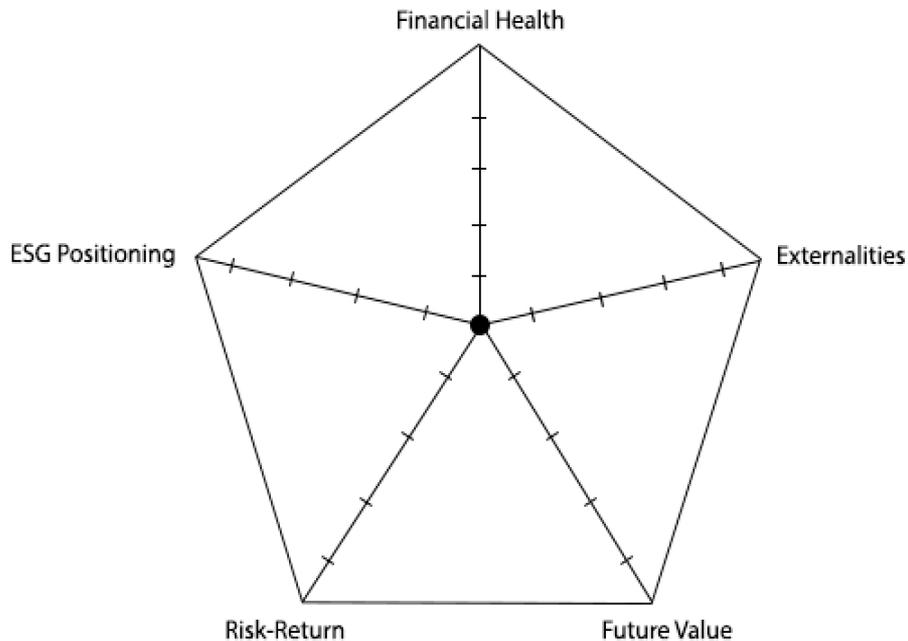
Proposal

Action Plan

Monitor

Appendix: Framework Sensitivity Results on Change

Figure 1: Sustainability Snowflake



Aggregate Score:



Sensitivity Analysis:

<u>Financial Health</u>	no change -> best metric in assessing fundamentals of investment
<u>ESG Positioning</u>	decreased to weight of 0.5 -> Not considering the sector risk level the security operates in introduces undue an incomplete investment assessment
<u>Externalities</u>	decreased to weight of 0.5 -> decreased potential return as securities did not consider their performance relative to other securities in the sector
<u>Future Value</u>	increased to weight of 1 -> caused risk level to significantly increase.
<u>Risk-Return</u>	decreased to weight 0.5 -> decreases in appropriate selection of securities. Loss of diversification due to less cross sector risk-relationship assessment

Appendix: ESG Positioning

Sustainability Issues (Factors)

1. Energy
2. Water Use
3. Emissions to Water
4. Waste
5. Emissions to Air
6. Ecosystems
7. Workplace Health & Safety
8. Disaster Risk
9. Site Contamination

Sector Risk-Level Examples (L, Medium, High)

Forestry (Medium)	Electronics (High)
Crops (Medium)	Textiles (Medium)
Chemicals (High)	Retail (Low)
Glass (Medium)	Mining (High)

- Sustainability factors taken as consideration. These sustainability metrics were involved in the literature assessment of the securities and allowed to quantifiable determine sector risk-levels with respect to sustainability issues. Each sector has potential for these concerns to come up. Examples:

Cement (High Risk Sector)

Sustainability Issues

- H Energy
- L Water Use
- L Emissions to Water
- M Waste
- H Emissions to Air
- M Ecosystems
- H Workplace Health & Safety
- M Disaster Risk
- M Site Contamination

Pharmaceuticals (High Risk Sector)

Sustainability Issues

- M Energy
- M Water Use
- H Emissions to Water
- M Waste
- M Emissions to Air
- L Ecosystems
- H Workplace Health & Safety
- H Disaster Risk
- H Site Contamination

Appendix: Action Plan – Step 2: Invest

Re-investment of \$18.8 billion into the following 14 securities

Strategy	Stock Name	Framework Score	Allocation
Re-Investment Energy, Materials, Utilities	National Grid PLC	12	10.7%
	Linde AG	9	7.1%
	Iberdrola SA	8	3.6%
Re-Investment into existing positions (from list of 100 Norway Pension Fund Global Securities)	Reckitt Benckiser Group	19	14.3%
	Johnson and Johnson	19	14.3%
	L'Oreal SA	19	3.6%
	Unilever	20	4.0%
	Novo Nordisk A/5	16	6.7%
	Svenska Cellulosa	17	6.4%
New Investment options based on sustainable investing framework	Biogen Idec	18	4.6%
	Allergan PLC	16	9.4%
	Storebrand	16	3.9%
	Dassault Systèmes	21	7.1%
	Koninklijke Philips	16	4.3%

Introduction

Proposal

Action Plan

Monitor

Appendix: Action Plan – Step 2: New Investment Selection

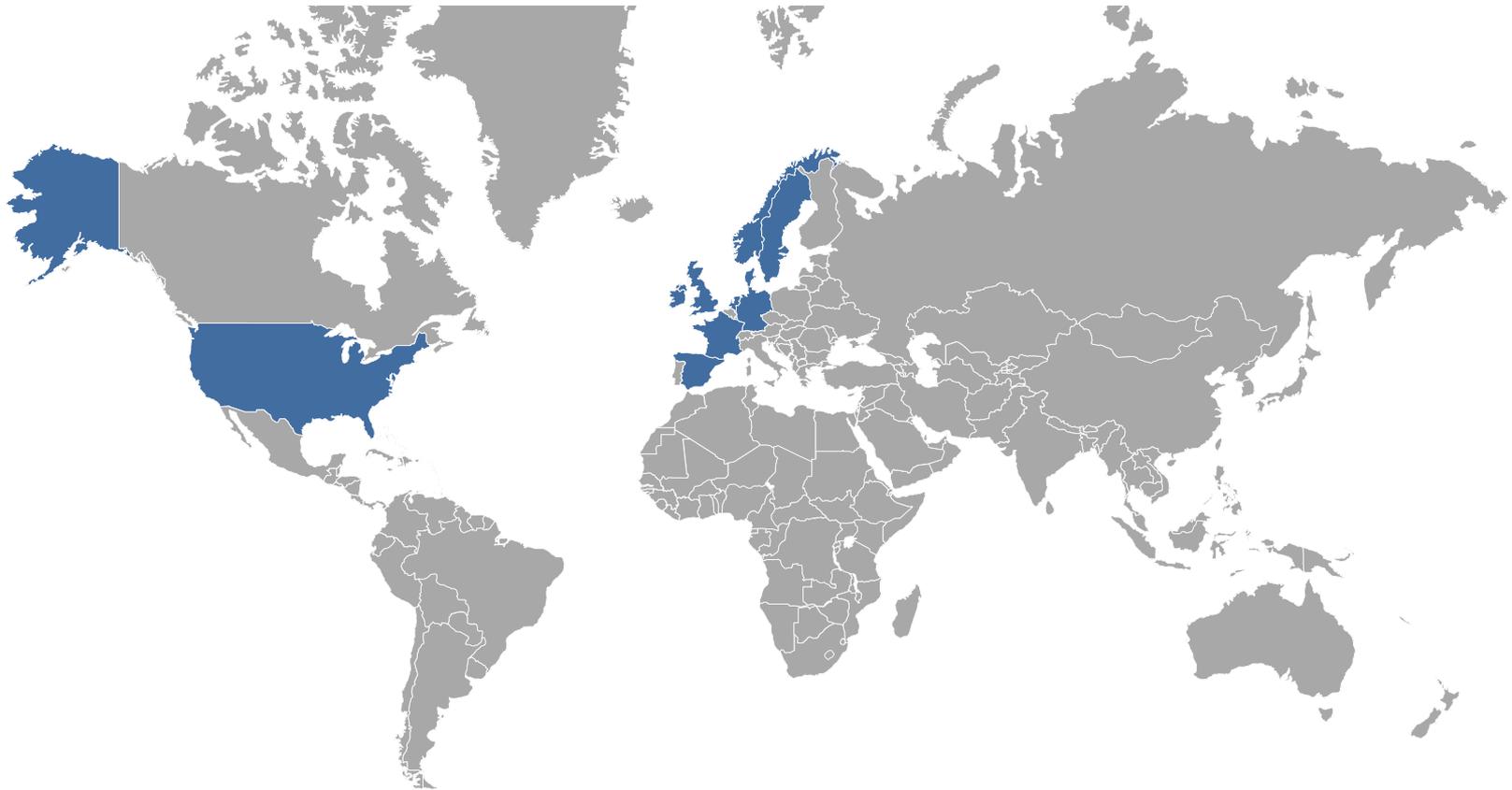
Securities for assessment were selected from Corporate Knights: The Global 100 Most Sustainable Corporations [Source: <http://www.corporateknights.com/magazines/2015-global-100-issue/2015-global-100-results-14218559/>]. Then the framework was applied to all securities found on this list and securities with a negative risk-return were removed from the list of potential candidates. Allocation was a result of an assessment of performance within sector due to externalities, future growth prospects, as well as risk-return metric.

New Investment options based on sustainable investing Framework

Security	Country	Framework Score	Allocation of \$18.8 billion
Biogen Idec	USA	18	4.6%
Allergan PLC	Ireland	16	9.4%
Storebrand	Norway	16	3.9%
Dassault Systèmes	France	21	7.1%
Koninklijke Philips	Netherlands	16	4.3%

Appendix: Action Plan – Step 2: Re-Investment Geography

Geographic Representation of the \$18.8 billion Re-investment



Introduction

Proposal

Action Plan

Monitor

Go Green
Capitalism



Appendix: Action Plan – Step 3: Influence

- NGFP has the ability to influence corporate policies on environmental and social concerns with investment decisions.
- NGFP may leverage shareholder engagement for the fund to influence positive change with sustainable business investing.

Securities	score
National Grid	12
Exxon Mobil	12
Linde AG	9
Iberdrola SA	8
Chevron Corp.	12
BP PLC	11

Action Plan: Influence

- **Direct Corporate Engagement** – leverage shareholder power to influence corporate behaviour and boards of directors
- **Proxy Voting** – vote in favour of ESG supported decision making
- **Filing Shareholder Proposals** – take the lead on putting together proposals that address a company’s performance and future investment in sustainable operations

Appendix: Literature Review

- A variety of sources, including primary and secondary, were used in the creation of the action plan, framework, and risk assessment.

Sources

- Benson, C., Gupta, N., and Mateti, R. (2010). "Does Risk Reduction Mitigate the Costs of Going Green? An Empirical Study of Sustainable Investing." *Southern Journal of Business and Ethics*, Vol. 2, 2010, 7-25
- Clark, G. L., Feiner, A., & Viehs, M. (2014). *From the Stockholder to the Stakeholder: How Sustainability Can Drive Financial Outperformance*.
- McGlade, Christophe and Paul Elkins (2015). "The Geographical Distribution of Fossil Fuels Unused When Limiting Global Warming to 2 degrees". *Scientific Collective*. MacMillan Publishers Ltd. <http://www.collectif-scientifique-gaz-de-schiste.com/fr/accueil/images/pdf/texteschoisis/McGlade_et_al-2015- Nature.pdf>
- Swanest. *Intelligent Investing Made Simple: Swany*. <www.swanest.com>
- Willard, B. (2012). *The New Sustainability Advantage: Seven Business Case Benefits of a Triple Bottom Line*. New Society Publishers.
- Urwin, Roger and Claire Woods. *Sustainable Investing: Principles and Practices* (2011). *Towers Watson*. <<https://www.towerswatson.com/en/Insights/IC-Types/Ad-hoc-Point-of-View/Perspectives/2011/Sustainable-Investing-Principles-and-Practices>>

Note: Not an exhaustive list of all the secondary sources used. Important ones listed above

Introduction

Proposal

Action Plan

Monitor

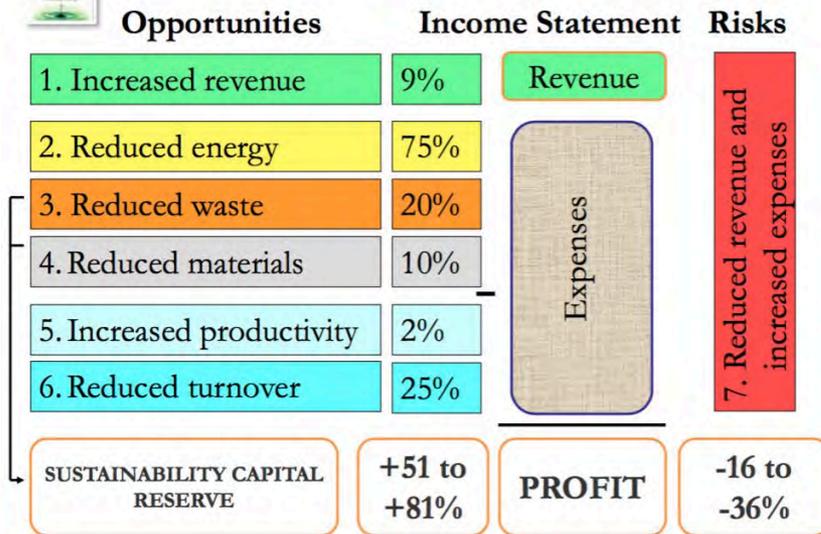
Appendix: Business Case for Sustainability

Best in Class Screening Investment Strategy

- invest in profitable companies who excel in Environment, Social and Government (ESG) factors



SUSTAINABILITY BUSINESS CASE



- <http://sustainabilityadvantage.com/2013/02/05/5-reasons-i-low-ball-employee-productivity-in-the-business-case-for-sustainability/>

Shifting Trend in Environmental Subsidies

- Governments spend over USD 640 billion / year on environmental harmful fossil fuel subsidies compared to the USD 121 billion spent on renewable-energy subsidies (OECD, 2013).
- trend towards subsidy spending with environmental initiatives

Debunking The Myth That Sustainable Investment is Not Profitable

'From The Stockholder To The Stakeholder Art' by Arabesque Partners and the University of Oxford

- "80% of the studies [more than 200 studies] show that stock price performance is positively influenced by sustainability practices"
- "Positive environmental news triggers positive stock price movements"
- Oppositely: "Following environmental disasters...stock price of affected firms reacts significantly negatively"
- "Firms that are more 'eco-efficient' significantly outperform firms that are less 'eco-efficient'"

Appendix: Trade-Off Analysis

What is the trade-off of sustainable investing?



Investing with a sustainable focus may mean smaller returns in the short run however in the long run undoubtedly generates higher returns. Furthermore there is some undue risk attached to not knowing the future and the direction trends will head. But the same holds for negative sustainable companies generating returns.



Mitigation:

The Norwegian people are long-term planning individuals that want to protect returns in the long run and not be dependent on the volatility of the short term. Investing sustainably promotes this philosophy and is in line with goals of the Norway Government Pension Fund

