PDC-MCP Webinar: From Measurement to Action
25 February 2016
1. Welcome from Moderator and Host: Eric Usher, Head of UNEP FI

2. Connecting carbon footprinting analysis with investment objectives: Julie Raynaud, Senior Analyst, Sustainability Research, KeplerCheuvreux

3. Practical Experience of Portfolio Carbon Footprinting: Sylvain Vanston, Head of Responsible Business, AXA Group

4. Portfolio Decarbonization Objectives and Complementing Strategies: Remco Fischer, Head of Climate Change, UNEP Finance Initiative

5. Implementing a Decarbonization Strategy: Filippa Bergin, Group Head Sustainability, Storebrand

6. Audience Q&A.
MCP Update

• 120 signatories representing $10 trillion AUM.
• Over half of signatories have disclosed their footprint
• Pledge will remain open in 2016
• PRI supporting signatories in 4 ways:
  1. Signatories can indicate their actions on climate change in PRI’s annual reporting framework;
  2. PRI supporting regional Responsible Investor workshops
  3. Launching a new investor engagement programme for investors to encourage better disclosure by corporates;
  4. PRI’s Chair serving on FSB taskforce.
PDC Update

2015

- Turning the page to portfolio-wide strategies
- Convening investors, sharing experiences
- Displaying new investor ambition to the COP process, through the notion of commitments
- 25 members, $600bn committed surpassing $100bn target

2016

- Global investor hub focused exclusively on portfolio design
- Offering an investor ‘sounding board’ for regulators, NGOs, think tanks
- Deepening the understanding of different strategies, metrics, impacts, across asset classes
- Linking investors with financial regulators (via UNEP’s Inquiry) – exporting French regulatory leadership
- PDC annual report on members progress
Research that keeps investment in the right direction
Investor guide to carbon footprinting

What's it all about?
Within the landscape of carbon metrics, it is sometimes difficult to find the right direction. We built this compass to guide you through current and developing carbon assessment tools: What can they tell you? What do they not tell you? What are the main methodological choices and how do they affect the end results? We explore and answer these questions in a simple and user-friendly way by looking at three types of metrics: carbon footprints, alternative and complementary measures (including green-brown share and avoided emissions) and static/forward-looking benchmarks. We also review the methodology of the main data providers on the market and detail the results of studies of workshops organized by the Institutional Investor Group on Climate Change (IIGCC).

In partnership with
IIGCC
2020 Investing Initiative
Deloitte.

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Transition research team
Biography: at the end of the report.
Carbon Compass: A simple answer to your questions

Objectives of the guide:

1. Give clarity on existing metrics, what they can be used for and more importantly what they cannot be used for.

2. Within each family of metrics, discuss the main methodological questions that often come back, such as ‘Should I include emissions occurring beyond my own operations’ or ‘What about double-counting’?

3. Leverage the work done by other organizations active in this field, in particular:

   - **Institutional Investors Group on Climate Change**: from theory to practice - results of their Carbon Footprinting workshops

   - **2° Investing Initiative**: Metrics and 2° Benchmarks

   - **Deloitte**: Assurance at company- and portfolio-level
Use case: What are we trying to achieve?

<table>
<thead>
<tr>
<th>Priority</th>
<th>Investors Responsible Investment Strategy</th>
<th>Investors focus</th>
<th>Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial return</td>
<td>Environmental and social impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>Screening</td>
<td>ESG integration</td>
<td>Themed</td>
</tr>
<tr>
<td>Responsible investing</td>
<td>Impact investing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Investors focus**
- Limited or no focus on ESG factors of underlying investments
- Focus on ESG risks ranging from a wide consideration of ESG factors to negative screening of harmful products
- Focus on ESG opportunities, through investment selection, portfolio management and shareholder advocacy
- Focus on one or a cluster of issue areas where “E” or “S” need creates a growth opportunity for market-rate or market-beating returns
- Focus on one or a cluster of issue areas where social or environmental need requires some financial trade-off

**Metrics**
- Portfolio carbon emissions:
  - Total carbon emissions
  - Normalised per USD m Invested
  - Normalised per USD m Sales
  - Other normalised metrics (e.g. enterprise value)
  - Weighted average carbon intensity

- Exposure to low carbon, energy-efficient solutions:
  - Green-brown metrics (point-in-time, forward-looking)
  - Avoided emissions

- Benchmarks:
  - Index-based (MSCI, FTSE)
  - Science-based targets
  - Portfolio-level 2° Benchmark

Source: Kepler Cheuvreux, adapted from Bridges Ventures, Sonen Capital & KL Felicitas
## French Law: Between risk and climate-friendliness

<table>
<thead>
<tr>
<th>Type of information</th>
<th>Law text</th>
<th>Qualitative or quantitative</th>
<th>Description and context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment policies</td>
<td>“Information on how their investment decision-making process takes social, environmental and governance criteria into consideration”</td>
<td>Qualitative</td>
<td>A description of the integration of climate (and other ESG) issues into investment decisions.</td>
</tr>
<tr>
<td>Financial risk exposure</td>
<td>“The exposure to climate-related risks”</td>
<td>Unclear</td>
<td>Exposure to financial risks associated with climate change, either physical or carbon asset risk</td>
</tr>
<tr>
<td>Associated GHG emissions</td>
<td>“Including the GHG emissions associated with assets owned”</td>
<td>Quantitative</td>
<td>Carbon footprint of the investor’s portfolio or a relevant portion of the portfolio</td>
</tr>
<tr>
<td>Contribution to the energy transition (ET)</td>
<td>“The contribution to the international goal of limiting climate change and the contribution to the realisation of the energy and ecological transition. That contribution will be assessed with regards to indicative targets set by institutional investors taking into account the nature of their activities and investments, in a way that is consistent with the national low-carbon strategy”</td>
<td>Unclear</td>
<td>Degree to which investor’s portfolio is aligned with both international (i.e. a 2°C warming target) and French climate change policies</td>
</tr>
</tbody>
</table>

Source: 2°C Investing Initiative[link]
Carbon Metrics Map: Family Portrait

Within each chapter:

- ‘If you only have five minutes’ with context, high-level description and use case.
- ‘Fasten your seat belt’, with specific methodological questions and deep-dive into specific issues and/or examples.

Structure of the report:

Chapter 1
- Portfolio
- Investee
- Asset/ product/ activity/ technology

Chapter 2
- Carbon footprint
- Green-brown share
- Avoided emissions

Chapter 3
- Indices
- Science-based targets
- 2˚ benchmark

Chapter 4: Data providers - Reality Check
Carbon footprints: A useful start … not the end in itself

Example metrics:
- Total carbon emissions
- Normalised per USDm Invested
- Normalised per USDm Sales
- Other normalised metrics (e.g. enterprise value)
- Weighted average carbon intensity

What can it be used for?
- Understanding the extent to which your portfolio contributes to climate change, at a high-level, at time $t$.
- Deep-diving into the results to understand what sectors and investees contribute the most to the footprint.
- Communicating

What can it not be used for?
- Managing climate change contribution and exposure.

Improvements needed?
• Better reporting at investee-level, especially on Scope 3
• More systematic measures of uncertainty
• Assurance
• Accounting standard at the portfolio-level

Key methodological considerations?
- What scope should I include?
- What about double counting?
- What method to estimate data gaps?
- What about data quality?
- How to I aggregate results at portfolio-level?
- What normalizing metric?
- What about other asset classes?
- A proxy for risk?
An example: Should I include Scope 3?

**Scope 1:** direct emissions over which a company has control (energy used for heating and cooling for example)

**Scope 2:** indirect emissions over which a company has control (purchased electricity)

**Scope 3:** indirect emissions over which a company has direct influence but no control (upstream: emissions due to the manufacturing of intermediate materials e.g. / downstream: emissions due to the use of the product)

Source: based on Inrate data
## An example: Comparing metrics

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>What does it tell you?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question answered</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is my portfolio's absolute carbon footprint?</td>
<td>t CO2e</td>
<td>t CO2e/USDm invested</td>
<td>t CO2e/USDm sales</td>
<td>t CO2e/USDm sales</td>
</tr>
<tr>
<td>How efficient is my portfolio in terms of carbon emissions per unit of output?</td>
<td></td>
<td>t CO2e/USDm sales</td>
<td>t CO2e/USDm sales</td>
<td>t CO2e/USDm sales</td>
</tr>
<tr>
<td>What is my portfolio's exposure to carbon-intensive companies?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>What can you use it for?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison across portfolios against a benchmark</td>
<td>No; does not take size into account</td>
<td>Yes, adjusts for portfolio size</td>
<td>Yes, adjusts for portfolio and investors' size</td>
<td>Yes</td>
</tr>
<tr>
<td>Comparison through time</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Portfolio decomposition/analysis</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Communication</td>
<td>Easier</td>
<td>Average</td>
<td>Harder</td>
<td>Easier</td>
</tr>
<tr>
<td><strong>What are the methodological considerations?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data needs</td>
<td>Medium: capital invested, market capitalisation, carbon emissions of the issuer.</td>
<td>Medium: capital invested, market capitalisation, carbon emissions of the issuer.</td>
<td>Higher: capital invested, market capitalisation, carbon emissions of the issuer, sales of the issuer, portfolio weights</td>
<td>Lower: carbon emissions of the issuer, sales of the issuer, portfolio weights</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>Sensitive to changes in market capitalisation. Can be controlled by keeping ownership metric constant (if the fluctuation in market capitalisation is only due to price changes). Sensitive to currency fluctuations.</td>
<td>Sensitive to changes in market capitalisation. Can be controlled by keeping ownership metric constant (if the fluctuation in market capitalisation is only due to price changes). Sensitive to currency fluctuations.</td>
<td>Sensitive to changes in the portfolio allocation to market capitalisation. Sensitive to currency fluctuations.</td>
<td>Sensitive to outliers. Not sensitive to changes in market capitalisation.</td>
</tr>
<tr>
<td>Linked to investment strategy</td>
<td>Yes, through the concept of ownership but less explicit.</td>
<td>Yes, through the concept of ownership.</td>
<td>Yes, through the concept of ownership but less explicit.</td>
<td>No</td>
</tr>
</tbody>
</table>

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Source: Based on MSCI
An example: IIGCC Workshops
MSCI ACWI ex Coal carbon intensity (t C02e/USDm) is only 4% lower than MSCI ACWI ... but carbon reserves are 44% lower!

MSCI ACWI ex Fossil Fuels carbon intensity (tC02e/USDm) is only 13% lower than MSCI ACWI ... but carbon reserves are 100% lower!

But portfolio have lower exposure to ‘brown’ share.
Green-brown share: Dynamic view

Focus on ‘locked-in emissions’

Focus on ‘transformation stories’

Source: 2° Investing Initiative, based IEA 2012

Source: Kepler Cheuvreux “Reporting on Impact” by Samuel Mary
Benchmarks: State of knowledge

What benchmark should I use?

Indices
- Pros: Easy and widely used
- Easy to communicate
- Cons: Biased towards fossil fuels
- Difference may not be due to actual management of carbon impact and risk
- Encourages incremental changes

Low-carbon indices
- Pros: Easy
- Easy to communicate
- Cons: Arbitrary target: inability to know whether the target is in line with a feasible energy transition scenario

2˚ Benchmark
- Pros: End goal explicit
- Forward-looking (takes into account reserves and RD)
- Free alignment check
- Use for engagement on strategy
- Communicate alignment
- Cons: Not meant to fix alignment
- Only available for a few sectors
- Emerging methodologies

Science-based targets*
- Pros: End goal explicit
- Use for engagement on targets
- Cons: Hard to aggregate at portfolio level without extra analysis
- Short-term view (based on current targets and not investments to align over a 10/20/30-year period)

* science-based targets were designed to set targets at investee-level but might indirectly be used as benchmarks
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AXA Investment Managers
AXA Group
Carbon Analysis on AXA Group Main Funds
The story behind the numbers
26/02/2016

Luisa Florez, AXA IM
Sylvain Vanston, AXA Group
**Carbon footprinting context in 2014 at AXA**

The start of a long journey

- Regulatory risks, market trends and “stranded assets” debate on the rise.
- Increasing “carbon” expectations from regulators, NGOs, media & the public in the run-up to COP21.
- Nascent peer activity (lobbying, footprinting, divestments, investment pledges, etc)
- A natural extension of AXA’s Climate risks strategy.
- A natural extension of our ESG integration efforts since 2011, and complements our “social” Impact Investment fund.
CLIMATE CHANGE FOCUS

- Key milestones
  - MEASURE: Carbon Footprint
  - DIVEST: Coal Divestment
  - INVEST: Green Bonds
  - ENGAGE: Constructing a Long term approach

![Diagram showing the timeline of key milestones: Measure (Carbon footprint), Divest (Coal Divestment), Invest (Green Bonds), Engage (Individual and collective), Constructing a Long Term approach (Risk metrics).]
Methodology used to calculate CO2 emissions for AXA’s main funds
Montreal Pledge report, **December 2015**

**Total AXA General Accounts**
±500 Bn €

**FILTER 1**
Data quality

Scope refinement based on information availability in internal databases

- Core Equities: xx Bn€
- Core Corporate Bonds: Xxx Bn€
- Govies: xxx Bn€

75%

**FILTER 2**
Carbon coverage

Scope refinement based on Carbon data availability

- Core Equities: Xx Bn€
- Core Corporate Bonds: xx Bn€
- Govies: xxx Bn€

**Final scope = 402 Bn €**

**284 t CO2/$m of revenue**

- **Sovereign Debt**
- **Corporate Bonds**
- **Equities**

- **Total**
- on €402bn
- o/w €199bn
- o/w €184bn
- o/w €19bn

- **AXA Group**

- **Corporate Bonds & Equities**
- 379 t CO2/$m of revenue
- 6% Consumer non-cyclical
- 10% Energy
- 11% Industrial
- 12% Basic materials
- 55% Utilities
- 15% North-America
- 18% Asia
- 66% Europe
- 1% Others
Asset class benchmarking

December 2014 (only AXA IM assets)

Carbon data availability
- Equity: 85%
- Corp FI: 58%
- Govies: 98%

Note: benchmarked against traditional indices that do not optimize any carbon factor/kpi.
Deep dive into Fixed income data (Dec 2014, AXA IM)

Sector analysis: a misleading equation

The Energy, Industrials, Basic Materials and Utilities sectors have a low weight in the portfolio, but they account for the highest carbon emissions.
Identifying carbon weight factors

Sector vs stock effects. Note: 2014 calculations PRIOR to H2 2015 coal divestment

<table>
<thead>
<tr>
<th></th>
<th>Sector allocation effect (in CO2e tons/mns $ revenues)</th>
<th>Stock picking effect (in CO2e tons/mns $ revenues)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>53.6</td>
<td>-4.7</td>
</tr>
<tr>
<td>Corporate Fixed Income</td>
<td>76.5</td>
<td>-41.1</td>
</tr>
</tbody>
</table>

Source: AXA IM 2014

- Need to think both in terms of sector allocation and individual stock picking
- Our objective is NOT to reduce our carbon footprint / intensity. It is to reduce carbon risks and encourage / benefit from low carbon transition.
- Other Carbon KPIs are needed for this.
## Conclusion

Carbon footprint is not the right tool for piloting the transition to the LCE*

<table>
<thead>
<tr>
<th>REASONS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENCHMARK</td>
<td>The exposure of most stock-indices is strongly biased toward fossil fuels compared to the real economy.</td>
</tr>
<tr>
<td>Benchmarks used for comparison are already carbon intensive (**)</td>
<td></td>
</tr>
<tr>
<td>COVERAGE</td>
<td>Equity: 85% in AuM Vs. 66% in number of issuers</td>
</tr>
<tr>
<td>Uncomplete coverage for the whole AXA Group scope (Corporate Investments)</td>
<td>Corporate Fixed Income: 58% in AuM 61% in number of issuers</td>
</tr>
<tr>
<td>SETTING OBJECTIVES</td>
<td>Reducing carbon footprint can result in a pure naive sector optimisation effect instead of a relevant selection effort towards emitters contributing to the low carbon economy.</td>
</tr>
<tr>
<td>Results generally push for driving investments away from industrials/extractive industries</td>
<td></td>
</tr>
</tbody>
</table>

*LCE = Low carbon economy

(**) Energy, Utilities, Materials and Industrials sectors account for 25% and 28% of respectively MSCI World AC and Barclays Global Aggregate – Corporate universes
One year later
AXA Group Carbon Footprint Dashboard 2014-2015 (incl. AB and coal divestment)

AXA Group Total Assets Carbon Footprint at a glance

Since June 2014, AXA Group Carbon Footprint remains stable (+2%) at **284 CO²** tonnes/mns $ revenues-GDP, despite coal divestment. Why ?

- New local AXA entities with higher carbon intensity
- Increased exposure to some carbon intensive sectors
- Increased exposure to emerging countries issuers
- However, coal divestments mitigating these effects.

Carbon Footprint relative analysis HY 2015

- Both Equities and Corporate Bonds are more carbon intensive compared to the reference indexes.
- However, Equities Carbon intensity is improving over the period
- Sovereign Debt is less carbon intensive thanks to a strong allocation on French Sovereign issuers.
Constructing a long term approach

The Climate Change Pathway – requires engagement

The IEA CO2 projections to achieve a 2°C scenario in 2050 ...

- 5 sectors produce more than 80% of CO2 emissions. The Energy Transition sectors are:
  - Power generation
  - Transport
  - Building
  - Industrials
  - Agriculture

- Overall, CO2 emissions for these sectors have to be divided by 3 to comply with a 2°C scenario

- CO2 intensity (expressed in CO2e tonnes / mns $ revenues) will have to be cut by 3 to 7% p.a in Energy Transition sectors, that is by 25% on average by 2020 and nearly 75% by 2030!

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<thead>
<tr>
<th>Sector</th>
<th>Carbon intensity annual reduction needed in a 2°C scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilities</td>
<td>-7%</td>
</tr>
<tr>
<td>Basic Materials</td>
<td>-3%</td>
</tr>
<tr>
<td>Transport</td>
<td>-5%</td>
</tr>
<tr>
<td>Auto</td>
<td>-5%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>-4%</td>
</tr>
</tbody>
</table>

Sectorial breakdown of absolute CO2 emissions budget 2011-50

... Applied to the radar CO2 Impact flag threshold

Energy Transition Sectors CO2 intensity
Current = xxxx CO2e tonnes/mns $ revenues

IEA 2°C projections by 2020

Energy Transition Sectors CO2 intensity (in Main Funds)
In 2020 = xxxx CO2e tonnes/mns $ revenues
Focus on alternative indicators reflecting genuine carbon risks
- Emissions from the combustion of Fossil Fuel reserves
- % of Generation Mix exposed to Fossil Fuel Reserves (Oil, Gas and Coal)
- % of Generation Mix exposed to Renewable Energies
- Exposure of revenues to Fossil Fuel energies

Forward looking indicators applied to AXA Group Assets:
- Carbon intensity from Fossil Fuel reserves of about 40,000 CO2e tonnes / mns $ revenues, far beyond the 280 CO2e tonnes/mns $ rev. disclosed in the dashboard.
- Nearly 50% of generation mix exposed to fossil fuel energies
- Only 11% of generation mix exposed to renewables
- On average, companies in investments derive 25% of their revenues from Coal

<table>
<thead>
<tr>
<th>Carbon Intensity From Fossil Fuel Reserves (in CO2e tonnes/mns $ revenues)</th>
<th>Generation Mix % Fossil Fuel</th>
<th>Generation Mix % Renewables</th>
<th>Revenues % Coal</th>
</tr>
</thead>
<tbody>
<tr>
<td>42,598</td>
<td>44%</td>
<td>11%</td>
<td>25%</td>
</tr>
</tbody>
</table>
Implementing a decarbonisation strategy

PDC Webinar
Filippa Bergin
Head Sustainability Storebrand ASA
25 February 2016
Storebrand Group

Leading Nordic Life and Pension provider

- 40,000 corporate customers
- 1.9 million individuals with pensions in Storebrand
- NOK 117 bn in Unit Linked reserves
- NOK 259 bn in Guaranteed reserves
- 100% of investments assessed by sustainability criteria
- History of the group dates back to 1767

Supported by:

Asset Management
NOK 552 billion in assets under management

Insurance
NOK 4.2 bn in written Premiums

Bank
Direct retail bank
NOK 25 bn in net lending
• Our strategy covers our entire AUM of in excess 560 billion NOK (approx 6.6 billion USD) and all asset classes

• Our aim is to move the majority of holdings in the right direction
We analyse all investments from their sustainability advantage

Population growth
Economic growth in developing countries
Changing consumption patterns
SPP Green Bond Fund (the world's largest green bond fund)
Drivers

• Storebrand's purpose:

• To contribute to solving societal challenges.
• Creating value beyond return.
Outcomes decarbonisation q3-q4 2015

Carbon Footprinting and Decarbonisation of Storebrand’s Equity Investments

Q3 2015

This is the first report Storebrand has released that discloses the carbon footprint of our equity investments in our mutual funds and our guaranteed portfolio, and our de-carbonisation results from the same portfolio.

Storebrand has joined two international initiatives with a focus on reporting on and lowering the carbon footprint of our equity investments, the Montreal Pledge (http://montrealpledge.org/) and the Portfolio Decarbonisation Coalition (http://unepfi.org/pdc/). The climate issue is one of the most important strategic issues facing the world today and has a direct impact both on investments and any company’s future success. Therefore it is in the interest of both institutional and individual investors that climate impacts are measured and managed. Carbon footprinting is one method of understanding climate impact. This is why we have chosen to support both the Montreal Pledge which moved a significant part of its global equity investments in the general account from an index portfolio to a portfolio enhanced for ESG. This resulted in the general account attaining a higher average sustainability score and a lower carbon footprint. As of Q3 2015 the general account had a carbon footprint of 2.0 kg Co2e/100 NOK, as compared to 2.6 kg Co2e/100 NOK in the MSCI World Index.

Carbon Footprinting – what does it mean? The carbon footprint is a measurement of the carbon dioxide released by a company at a given time, in relation to the revenue of the company. In other words a measure of how carbon efficient a company is.
Guaranteed portfolios (approx equiv 60% of AUM)

• The guaranteed portfolio in SPP has a carbon footprint of 1,6 kg Co2e/100 SEK, as compared to the footprint of the indices MSCI World and Stockholm Benchmark Index (SBX) of 2,1 kg Co2e/100 SEK.

• The guaranteed portfolio in Storebrand has a carbon footprint of 2,8 kgCo2e/100 NOK, as compared to the footprint of the indices MSCI World and Oslo Stockmarket Benchmark Index (OSEBX) of 2,8 kgCo2e/100 NOK.

• The guaranteed portfolio in Storebrand optimized for sustainability (Global Enhanced ESG) has a carbon footprint of 2,0 kg Co2e/100 NOK, which is lower than comparable footprint of the index MSCI World of 2,6 kg Co2e/100 NOK.
Storebrand mutual funds

Carbon footprint in mutual funds listed in SEK as compared to relevant index (kg CO2e/100 SEK)
Boosting the climate-performance of institutional investors
- An overview of strategies, impacts and metrics

Remco Fischer
Climate Change
UNEP Finance Initiative
Carbon risk view
Climate performance view

1. Climate
2. Civil society pressure
3. Public mandates

Source: EM-DAT 2015

Source: OECD 2014
Relationship between proved oil reserves and high-cost capex

Source: Authors, based on CTI 2014 & EY 2013
Relationship between fuel efficiency and margins of automobile manufacturers

Source: Authors, based on Duddenhofer 2013 & Fuel Economy 2015
How can we frame and understand investor climate-friendliness?

From a ‘climate-friendly’ activity by the investor…

...to real GHG-reduction impact in the real economy.
From ‘investor climate-friendliness’ to climate impact

- ‘Climate-friendliness’ is always a necessary, but often an insufficient condition, for impact
- Impact often requires other conditions such as preferential financing conditions or a critical mass of investors acting in concert
### Corporate bonds

<table>
<thead>
<tr>
<th>Climate-friendly investor activity</th>
<th>Immediate GHG-emissions impact?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set negative industry / sector screens from bonds from high-carbon companies or cap exposure below their share in global bond markets</td>
<td>Highly liquid markets – Immediate impact, via cost-of-capital channels, only likely if a <strong>critical mass</strong> of investors acts in concert.</td>
</tr>
<tr>
<td>Set absolute or relative targets in portfolios for green corporate bonds and asset-backed securities</td>
<td>Highly liquid markets – Immediate impact only likely if a <strong>critical mass</strong> of investors acts in concert.</td>
</tr>
<tr>
<td>Implement preferential financing conditions for green bonds</td>
<td>Impact achieved even in the absence of a critical mass – green investment is incentivised through preferential financing</td>
</tr>
</tbody>
</table>
# Project finance / project bonds

<table>
<thead>
<tr>
<th>Climate-friendly investor activity</th>
<th>GHG-emissions impact?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set negative screens for high-carbon assets (e.g. oil, gas, coal).</td>
<td><strong>Cost / availability of capital</strong>: depends on liquidity of the market. Unlikely in oil &amp; gas.</td>
</tr>
<tr>
<td>Set targets for green shares in the fund. Green technologies can be derived from taxonomies (CBS) or standardized categories (CDM).</td>
<td>Can make an impact if a general lack of financing is the bottleneck. Especially the case in developing countries.</td>
</tr>
<tr>
<td>Implement preferential financing conditions for climate-friendly project finance.</td>
<td>Impact achieved - green investment would not occur (or is incentivised) in the absence of the preferential financing.</td>
</tr>
</tbody>
</table>
Private equity

<table>
<thead>
<tr>
<th>Climate-friendly investor activity</th>
<th>GHG-emissions impact?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio construction: choose climate-friendly private equity funds, and screen-out climate-unfriendly funds</td>
<td>Relatively illiquid market - likely impact through <strong>cost/availability of capital channels</strong></td>
</tr>
<tr>
<td>Engage with companies through targeted programs to reduce operational emissions</td>
<td>Typically small companies with concentration of capital. Easy for an investor to reach critical mass.</td>
</tr>
</tbody>
</table>
# Listed equity – portfolio construction

<table>
<thead>
<tr>
<th>Climate-friendly investor activity</th>
<th>GHG-emissions impact?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active mandates for climate-friendly investment</td>
<td>Highly liquid, plus difficult to mobilize a critical mass through active mandates</td>
</tr>
<tr>
<td>Passive mandates through carbon- or otherwise-tilted / best-in-class indexes (can be sector-neutral)</td>
<td>Highly liquid, but low tracking-error can help mobilize a critical mass; sector neutrality provides incentives for companies to react; signalling not as strong as through full-sector divestment</td>
</tr>
<tr>
<td>Passive mandates through full sector exclusion</td>
<td>Strong signalling, difficult to reach a critical mass, given diversification constraints</td>
</tr>
</tbody>
</table>
## Listed equity – engagement

### Climate-friendly investor activity

Engagement can focus on:

- Corporate CAPEX and R&D plans
- Corporate GHG emissions targets
- Corporate disclosure of climate-related information
- Corporate incentives related to climate change

### GHG-emissions impact?

Only successful engagement leads to impact.

In the space of large, listed companies success will also require a critical mass of shareholders acting in concert.

Investors strategies sequencing engagement and divestment likely to be more impactful than plain-vanilla engagement
1. Positioning:

Impact likely for green investments in illiquid markets, especially when financing is the bottleneck to investment and the investor offers preferential financing terms (often required in developing countries).

In most cases, it is orchestrated action by investors, through a critical mass, that will make climate-friendly behaviour have an impact on the ground.

2. Signalling:

Public policies on climate change are key for the climate-friendliness of all actors. Investors can influence the broader policy and market environment by sending a political signal.
Global standard and central metric for disclosure in the real economy
Mainstream use by institutional investors only since 2015

PROs / APPLICATIONS
- Universal unit of measurement
- Significant margin of error at security level; low error at portfolio level
- Low-cost of implementation for institutional investors
- Can be used for carbon-tilting of portfolios
- Powerful for investor signalling in political contexts, such as COP21

CONs
- Scope 3 data is important but uncertain
- Says little about current development of green technologies (R&D)
- Backward-looking as opposed to forward-looking
- Can be used for engagement but only on operational emissions rather than future, locked-in emissions, resulting from today’s CAPEX
Industry-specific indicators distinguishing between climate solutions and climate problems

Typically: ratios to exposure to different business lines, technologies, at security as well as at portfolio level

**PROs / Applications**

• Easily used and applied in project finance, for reporting and target-setting

• Underpinning the establishment and growth of the green bond market

• Useful in complementing the use of carbon-metrics in portfolio design and construction

• Allows for more focused engagement on corporate CAPEX and R&D priorities than carbon metrics
• Qualitative scores based on a range of climate-related indicators.
• To date focused on scoring companies, but AODP has started on investors

PROs:
• Summary indicator, offering a more comprehensive and accurate assessment

CONs:
• Only applicable to companies, not projects, funds, and other destinations of capital.
• Subsumed in a broader ESG score. Can be a PRO for some.
• The choice of qualitative metrics and weightings makes scores subjective, introducing a risk for the validity of the indicator. BLACK BOX
Recommendations to investors

**Dont’s**

- **Objective**: Don't try to kill two birds with one stone.
- **Strategy**: Don't focus exclusively on liquid markets.
- **Metrics**: Don't rely exclusively on carbon metrics.

**Do’s**

- **Objective**: Demystify the case for clim. performance.
- **Strategy**: Engage & focus on mobilizing a critical mass.
- **Metrics**: Explain the strategy and report.
- **Strategy**: Consider the exposure to green technologies.
- **Metrics**: Distinguish metrics by asset class and strategy.
Thank You & Join Us
Next stop: the climate performance of banks

Remco Fischer
Climate Change
UNEP Finance Initiative
Thank You

http://montrealpledge.org
www.unepfi.org/pdc