“Embedding Sustainability in the Corporation & Recent Developments in Reporting of Sustainability”

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Four Major Environmental Issues

- Water – growing shortage
Distribution of Earth’s Water

- Saline (oceans) 97%
- Freshwater 3%
  - Ground water 30.1%
  - Icecaps and Glaciers 68.7%
- Other 0.9%
  - Surface water 0.3%
- Rivers 2%
- Swamps 11%
- Lakes 87%
- Fresh surface water (liquid)
Four Major Environmental Issues

- Water – growing shortage
- Climate Change
Intergovernmental Panel on Climate Change (IPCC)

- Initial meeting – 1992
  - Kyoto Protocol – 1997 (set milestones)
  - By 2050, 60-80% below 1990 level
  - By 2012, 5% below 1990 level
- In 2012, 58% above 1990 level
- Carbon dioxide – historically 280 ppm
- Cannot go above 350 ppm
- In 2013, reached 400 ppm
- In 2016, consistent at over 400 ppm
Four Major Environmental Issues

- Water – growing shortage
- Climate Change
- Consumption of natural resources
Ecological Footprint for 2013

- Qatar – 31 acres
- United States – 21
- Germany – 13.6
- Japan – 12.5
- Greece – 10.4
- China – 8.9
- World – 7.16
- Biocapacity – 4.2
- India – 2.72
- Bangladesh – 1.7
Four Major Environmental Issues

- Water – growing shortage
- Climate Change
- Consumption of natural resources
- World population – heading north
Where is the world population heading?
“The practice of sustainable development assures that the natural resources and energy we use to provide today’s products and services will not deny future generations the resources necessary to meet their needs while building and preserving communities that are economically, socially and environmentally healthy.”
Adopt Sustainable Strategies

- The CERES Principles
- Eco-effective vs. Eco-efficient
- The Natural Step (and its four system conditions)
- Servicizing
- Biomimicry
Adopt Sustainable Strategies

- Base of the Pyramid
- Systems Thinking & Tunneling
- Sustaining Fisheries
- Green Buildings
- “Big Hairy Audacious Goal”
Why Do Companies Seek Sustainability?

- Profitability
- Employees
- Image
- Marketing
- Social Consciousness/Ethics
- Competitive Advantage
- Attracting Capital
- Survival
- Product Innovation
- Socially Responsible Investing
Employee Attraction

SUSTAINABILITY VS. PHILANTHROPY: THE EMPLOYEE VIEW
Employees emphasize the importance of sustainable business operations over philanthropic efforts.

IMPORTANCE TO EMPLOYEES, RELATIVE TO THE AVERAGE OF ALL ACTIVITIES (50% = NEUTRAL)

- Employee safety
- Preventing child labor
- Corporate behavior (e.g., travel)
- Reducing pollution in developing world
- Sustainable agriculture
- Reducing pollution in developed world
- Career opportunities for disadvantaged
- Supporting fair trade
- Fair wages
- Funding nonprofits in developed world
- End-user recycling
- Corruption prevention
- Tree planting
- Funding schools in developing world
- Transparency
- Cultural activities

AVERAGE

SOURCE: Bain & Company, Survey on Corporate Sustainability and Philanthropy, 2012 (n = 746)
Impact of Image on Product Selection

Q48 – Have you ever chosen one product over another or stopped purchasing a product based on the environmental record of its manufacturer?
Using Marketing to Drive Sustainability

- Charter Bank – encourages electronic banking
# Best Global Green Brands - 2014

<table>
<thead>
<tr>
<th>Rank</th>
<th>Brand</th>
<th>Industry</th>
<th>Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ford</td>
<td>Automotive</td>
<td>+3.2</td>
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<tr>
<td>2</td>
<td>Toyota</td>
<td>Automotive</td>
<td>+0.3</td>
</tr>
<tr>
<td>3</td>
<td>Honda</td>
<td>Automotive</td>
<td>+1.8</td>
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<tr>
<td>4</td>
<td>Nissan</td>
<td>Automotive</td>
<td>+6.6</td>
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<td>5</td>
<td>Panasonic</td>
<td>Electronics</td>
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<td>Nokia</td>
<td>Electronics</td>
<td>+19.0</td>
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<td>7</td>
<td>Sony</td>
<td>Electronics</td>
<td>+10.7</td>
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<td>8</td>
<td>Adidas</td>
<td>Sporting Goods</td>
<td>+6.1</td>
</tr>
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<td>9</td>
<td>Danone</td>
<td>FMCG</td>
<td>-1.3</td>
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<tr>
<td>10</td>
<td>Dell</td>
<td>Technology</td>
<td>-16.9</td>
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</table>
Selected Best Global Green Brands - 2014

<table>
<thead>
<tr>
<th>Rank</th>
<th>Brand</th>
<th>Industry</th>
<th>Gap</th>
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</thead>
<tbody>
<tr>
<td>21</td>
<td>Apple</td>
<td>Technology</td>
<td>-1.1</td>
</tr>
<tr>
<td>23</td>
<td>General Electric</td>
<td>Capital Goods</td>
<td>-1.8</td>
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<td>32</td>
<td>Chevrolet</td>
<td>Automotive</td>
<td>-2.9</td>
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<td>37</td>
<td>Starbucks</td>
<td>Restaurants</td>
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<td>38</td>
<td>Kellogg’s</td>
<td>FMCG</td>
<td>-6.0</td>
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<tr>
<td>41</td>
<td>Microsoft</td>
<td>Technology</td>
<td>-9.1</td>
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<tr>
<td>43</td>
<td>McDonalds</td>
<td>Restaurants</td>
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<tr>
<td>46</td>
<td>Caterpillar</td>
<td>Capital Goods</td>
<td>+3.1</td>
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<td>48</td>
<td>Colgate</td>
<td>FMCG</td>
<td>-7.0</td>
</tr>
<tr>
<td>49</td>
<td>Disney</td>
<td>Media</td>
<td>-9.1</td>
</tr>
</tbody>
</table>
Social Consciousness Leads to Sustainable Living Brands

- 60% of our agricultural raw materials are sustainably sourced
- 100% of tea for Lipton's tea bag blends is sustainably sourced
- 25% cut in the carbon footprint of our compressed aerosol can
- 39% reduction in CO2 from energy per tonne of production in manufacturing, since 2008
- €600 million cumulative cost avoidance through eco-efficiency measures in our factories since 2008
Whole Foods Mission: Achieve a Competitive Advantage

- Reduce, reuse, recycle
- Alternative energy
  - Solar and wind
  - Electric and biodiesel vehicles
- Green buildings
- Product sourcing and packaging
- Community support

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Some Companies Must Seek to Survive

- Fisheries
- Vineyards
- Almond production
Figure 3.1
Sustainability Benefits Help Determine Business Value: The Show-Me-the-Money Model

<table>
<thead>
<tr>
<th>Elements Affected by Sustainability Program</th>
<th>Sales and Cost Factors</th>
<th>Economic Business Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Reputation</td>
<td>Reputation, Brand Strength</td>
<td>Reputation</td>
</tr>
<tr>
<td>- Innovation</td>
<td>Competitive, Effective, Desirable Products &amp; Services; New Markets</td>
<td>Profits, Cash Flow</td>
</tr>
<tr>
<td>- Meeting Customer Needs</td>
<td>Productivity</td>
<td>Stock Price</td>
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<tr>
<td>- Employee Relations, Morale</td>
<td>Operational Burden, Interference</td>
<td>Stock Dividends</td>
</tr>
<tr>
<td>- Workplace Safety</td>
<td>Supply Chain Costs</td>
<td></td>
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<tr>
<td>- Waste Prevention, Energy Efficiency</td>
<td>Cost Of Capital (Lender and Investor Appeal)</td>
<td></td>
</tr>
<tr>
<td>- Sustainable Supply of Materials</td>
<td>Legal Liability</td>
<td></td>
</tr>
<tr>
<td>- History of Meeting Commitments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Governance Commitments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Reputation with Ethical Investors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Governance/ Risk Mgmt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Legal Compliance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Fair Dealing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Safety &amp; Quality of Products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Meeting Commitments</td>
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</table>
The Evolution of ESG Investing

<table>
<thead>
<tr>
<th>Environmental (E)</th>
<th>Social (S)</th>
<th>Governance (G)</th>
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<tbody>
<tr>
<td>Climate Change</td>
<td>Human Capital</td>
<td>Board</td>
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<td>Carbon Emissions</td>
<td>Labor Standards</td>
<td>Pay</td>
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<td>Natural Capital</td>
<td>Product Liability</td>
<td>Ownership</td>
</tr>
<tr>
<td>Water Stress</td>
<td>Privacy and Data Security</td>
<td>Accounting</td>
</tr>
<tr>
<td>Renewable Energy</td>
<td>Stakeholder Opposition</td>
<td>Corruption</td>
</tr>
<tr>
<td>Green Building</td>
<td></td>
<td>Business Ethics and Fraud</td>
</tr>
</tbody>
</table>
Increase in Socially Responsible Investing

- Increase by 1/3 from 2014 to 2016
- Currently at $8.7 trillion
- Represents over 1/5 of $40 trillion in total assets
- Community investments: $64 billion to $122 billion
- SRI performance comparable to broad market indexes

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Dow Jones Sustainability Group Index

• World’s first sustainability index – 1999
• Assessed almost 2,000 companies in 2016
• Criteria
  • Materiality
  • Impact Measurement and Valuation
  • Labor Practice Indicators and Human Rights
  • Brand Management

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“Sustainable” Companies (per DJSGI study)

- Deliver more predictable results
- Don’t necessarily have outstanding growth – just reliable above average performance
- Investors stay long term
Barron’s 100 Most Sustainable Companies

- 1000 largest publicly held companies
- 300 performance indicators
  - Shareholders (accounting practices; board structure)
  - Employees (workplace diversity; labor relations)
  - Customers (business ethics; product safety)
  - Planet (green-house emissions)
  - Community (human rights along the supply chain)
## Barron’s 100 Most Sustainable Companies

<table>
<thead>
<tr>
<th>Rank*</th>
<th>Name</th>
<th>Ticker</th>
<th>Weighted score</th>
<th>2017 total return</th>
<th>Market value (bil)</th>
<th>Recent price</th>
<th>2018 p/e **</th>
<th>2018 eps growth **</th>
<th>Shareholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ 1</td>
<td>Cisco Systems</td>
<td>CSCO</td>
<td>80</td>
<td>31.3%</td>
<td>$200.4</td>
<td>$41.70</td>
<td>16.8</td>
<td>4.1%</td>
<td>61</td>
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<tr>
<td>+ 2</td>
<td>salesforce.com</td>
<td>CRM</td>
<td>79</td>
<td>49.3</td>
<td>78.7</td>
<td>113.62</td>
<td>66.3</td>
<td>29.0</td>
<td>63</td>
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<tr>
<td>+ 3</td>
<td>Best Buy</td>
<td>BBY</td>
<td>79</td>
<td>64.5</td>
<td>21.2</td>
<td>74.06</td>
<td>16.7</td>
<td>14.3</td>
<td>73</td>
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<tr>
<td>+ 4</td>
<td>Intuit</td>
<td>INTU</td>
<td>76</td>
<td>39.2</td>
<td>41.5</td>
<td>168.28</td>
<td>30.7</td>
<td>15.4</td>
<td>66</td>
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<td>+ 5</td>
<td>HP Inc.</td>
<td>HPQ</td>
<td>76</td>
<td>45.7</td>
<td>37.6</td>
<td>23.58</td>
<td>12.9</td>
<td>8.3</td>
<td>68</td>
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<tr>
<td>+ 6</td>
<td>Texas Instruments</td>
<td>TXN</td>
<td>76</td>
<td>46.8</td>
<td>111.3</td>
<td>109.73</td>
<td>22.1</td>
<td>37.7</td>
<td>57</td>
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<tr>
<td>+ 7</td>
<td>Microsoft</td>
<td>MSFT</td>
<td>75</td>
<td>40.7</td>
<td>681.6</td>
<td>93.55</td>
<td>25.6</td>
<td>7.7</td>
<td>62</td>
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<tr>
<td>+ 8</td>
<td>Oshkosh</td>
<td>OSK</td>
<td>75</td>
<td>42.4</td>
<td>6.8</td>
<td>92.32</td>
<td>16.9</td>
<td>20.8</td>
<td>73</td>
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<tr>
<td>+ 9</td>
<td>Clorox</td>
<td>CLX</td>
<td>74</td>
<td>27.1</td>
<td>18.4</td>
<td>142.47</td>
<td>24.1</td>
<td>7.4</td>
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<td>+ 10</td>
<td>Xylem</td>
<td>XYL</td>
<td>73</td>
<td>39.5</td>
<td>12.7</td>
<td>73.02</td>
<td>25.9</td>
<td>17.5</td>
<td>55</td>
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<td>+ 11</td>
<td>Adobe Systems</td>
<td>ADBE</td>
<td>73</td>
<td>70.2</td>
<td>94.9</td>
<td>198.59</td>
<td>31.2</td>
<td>40.9</td>
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<tr>
<td>+ 12</td>
<td>ManpowerGroup</td>
<td>MAN</td>
<td>73</td>
<td>44.2</td>
<td>8.6</td>
<td>132.63</td>
<td>16.9</td>
<td>11.3</td>
<td>82</td>
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<tr>
<td>+ 13</td>
<td>Motorola Solutions</td>
<td>MSI</td>
<td>73</td>
<td>11.5</td>
<td>15.5</td>
<td>99.91</td>
<td>16.7</td>
<td>10.4</td>
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<td>+ 14</td>
<td>Williams-Sonoma</td>
<td>WSM</td>
<td>73</td>
<td>10.2</td>
<td>4.5</td>
<td>52.04</td>
<td>13.0</td>
<td>13.3</td>
<td>85</td>
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</tbody>
</table>
Corporate Knights Rankings

- Worked with three other firms
- Trimmed list of 3,500 to 400
- Looked at 12 different environmental, social and governance performance measures
Corporate Knights Performance Measures

- Energy intensity
- Carbon intensity
- Waste intensity
- Water intensity
- Innovation capacity
- Percent tax paid
- Employee turnover
- CEO-to-average-worker pay ratio
- Pension fund status
- Safety performance
- Leadership diversity
- Clean capitalism link
Corporate Knights Most Sustainable Companies for 2018

<table>
<thead>
<tr>
<th></th>
<th>Company</th>
<th>Country</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dassault Systemes</td>
<td>France</td>
<td>Software</td>
</tr>
<tr>
<td>2</td>
<td>Neste</td>
<td>Finland</td>
<td>Oil, Gas &amp; Consumable Fuels</td>
</tr>
<tr>
<td>3</td>
<td>Valeo</td>
<td>France</td>
<td>Auto Components</td>
</tr>
<tr>
<td>4</td>
<td>Ucb</td>
<td>Belgium</td>
<td>Pharmaceuticals</td>
</tr>
<tr>
<td>5</td>
<td>Outotec</td>
<td>Finland</td>
<td>Construction &amp; Engineering</td>
</tr>
<tr>
<td>6</td>
<td>Amundi</td>
<td>France</td>
<td>Capital Markets</td>
</tr>
<tr>
<td>7</td>
<td>Cisco Systems</td>
<td>United States</td>
<td>Communications Equipment</td>
</tr>
<tr>
<td>8</td>
<td>Autodesk</td>
<td>United States</td>
<td>Software</td>
</tr>
<tr>
<td>9</td>
<td>Siemens</td>
<td>Germany</td>
<td>Industrial Conglomerates</td>
</tr>
<tr>
<td>10</td>
<td>Samsung SDI</td>
<td>South Korea</td>
<td>Electronic Equipment, Instruments &amp; Components</td>
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</tbody>
</table>
## Corporate Knights Most Sustainable Companies for 2018

<table>
<thead>
<tr>
<th>11</th>
<th>Aareal Bank</th>
<th>Germany</th>
<th>Thrifts &amp; Mortgage Finance</th>
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<tbody>
<tr>
<td>12</td>
<td>Enbridge</td>
<td>Canada</td>
<td>Oil, Gas &amp; Consumable Fuels</td>
</tr>
<tr>
<td>13</td>
<td>Merck</td>
<td>United States</td>
<td>Pharmaceuticals</td>
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<td>14</td>
<td>Natura Cosmeticos</td>
<td>Brazil</td>
<td>Personal Products</td>
</tr>
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<td>15</td>
<td>Pearson</td>
<td>United Kingdom</td>
<td>Media</td>
</tr>
<tr>
<td>16</td>
<td>Amadeus IT Group</td>
<td>Spain</td>
<td>IT Services</td>
</tr>
<tr>
<td>17</td>
<td>Bayerische Motoren Werke</td>
<td>Germany</td>
<td>Automobiles</td>
</tr>
<tr>
<td>18</td>
<td>Companhia Energetica de Minas Gerais CEMIG</td>
<td>Brazil</td>
<td>Electric Utilities</td>
</tr>
<tr>
<td>19</td>
<td>Koninklijke Philips</td>
<td>Netherlands</td>
<td>Industrial Conglomerates</td>
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<tr>
<td>20</td>
<td>Allergan</td>
<td>United States</td>
<td>Pharmaceuticals</td>
</tr>
</tbody>
</table>
Newsweek Green Ratings

• Key performance indicators
  • Combined Energy Productivity – 15%
  • Combined GHG Productivity – 15%
  • Combined Water Productivity – 15%
  • Combined Waste Productivity – 15%
  • Green Revenue Percent Range – 20%
  • Sustainability Pay Link – 10%
  • Sustainability Board Committee – 5%
  • Audited Environmental Metric – 5%
Newsweek Ratings – 2017 World

- L’Oreal, France, Consumer Staples
- Centrica, UK, Utilities
- Enbridge Inc, Canada, Energy
- Siemens, Germany, Industrials
- Cisco Systems, USA, Information Systems
- Henkel, Germany, Consumer Staples
- Accenture, Ireland, Information Technology
- BT Group, UK, Telecommunication
- Adidas, Germany, Consumer Discretionary
- Koninklijke, Netherlands, Health Care
Newsweek Ratings – 2017 USA

- Cisco Information Technology
- Ecolab Materials
- Hasbro Consumer Discretionary
- PG&E Utilities
- Sealed Air Corp. Materials
- Best Buy Consumer Discretionary
- Celgene Corp Health Care
- Apple Information Technology
- CMS Energy Utilities
- Johnson & Johnson Health Care
The Importance of Commitment

- Board Commitment
- Officer Commitment
- Manager Commitment
- Employee Commitment
Global Reporting Initiative (GRI)

- Economic standards
  - Economic performance
  - Market presence, anti-corruption
- Environmental standards
  - Materials; energy, emissions
  - Water; waste; effluents
- Social standards
  - Employment; training
  - OSHA; non-discrimination
United Nations

SUSTAINABLE DEVELOPMENT GOALS

1. NO POVERTY
2. ZERO HUNGER
3. GOOD HEALTH AND WELL-BEING
4. QUALITY EDUCATION
5. GENDER EQUALITY
6. CLEAN WATER AND SANITATION
7. AFFORDABLE AND CLEAN ENERGY
8. DECENT WORK AND ECONOMIC GROWTH
9. INDUSTRY, INNOVATION AND INFRASTRUCTURE
10. REDUCED INEQUALITIES
11. SUSTAINABLE CITIES AND COMMUNITIES
12. RESPONSIBLE CONSUMPTION AND PRODUCTION
13. CLIMATE ACTION
14. LIFE BELOW WATER
15. LIFE ON LAND
16. PEACE, JUSTICE AND STRONG INSTITUTIONS
17. PARTNERSHIPS FOR THE GOALS
What is Really Happening in Industry?

- Accenture Report for UN Global Compact - 2016
  - 89% sustainability having impact on industry
  - 80% social sustainability a differentiator
  - 88% integrating sustainability in financial markets

- Weinreb Group found 36 U.S. CSOs (2014)
  - Up from 29 in 2011
  - 42% women, up from 29% in 2011

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Must Make CSR Everyone’s Responsibility

- Larry Fink’s Annual Letter to CEOs – “A Sense of Purpose”

- Apply a framework:
  - Incubate
  - Launch
  - Entrench
Thank you for this opportunity!

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847-927-3526