Corporate Knights
The Company for Clean Capitalism

Summer in the City

4th Annual CSR Investing Summit

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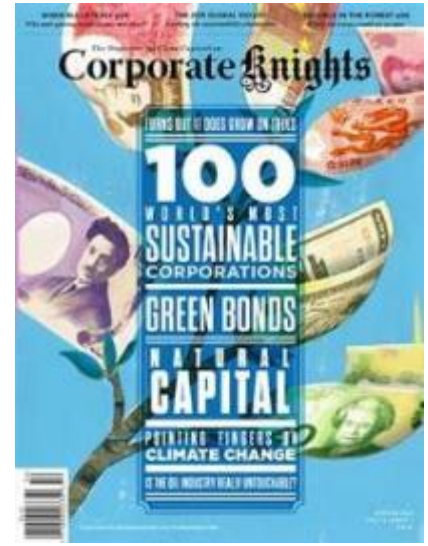
About Corporate Knights

- Independent media and financial research company, certified B Corp
- Over a decade of experience performing corporate sustainability ratings: *Global 100 Most Sustainable Corporations in the World*, *Newsweek Green Rankings*, *Sustainable Stock Exchanges Ranking*
- Designed and developed cleancapitalist.com, a global platform for portfolio benchmarking and creation according to sustainability factors
- Assist financial industry initiatives that raise awareness about climate risk, such as the Montreal Carbon Pledge and act as secretariat to the Council for Clean Capitalism



Time to build some new street lamps around ESG factors

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What is happening?

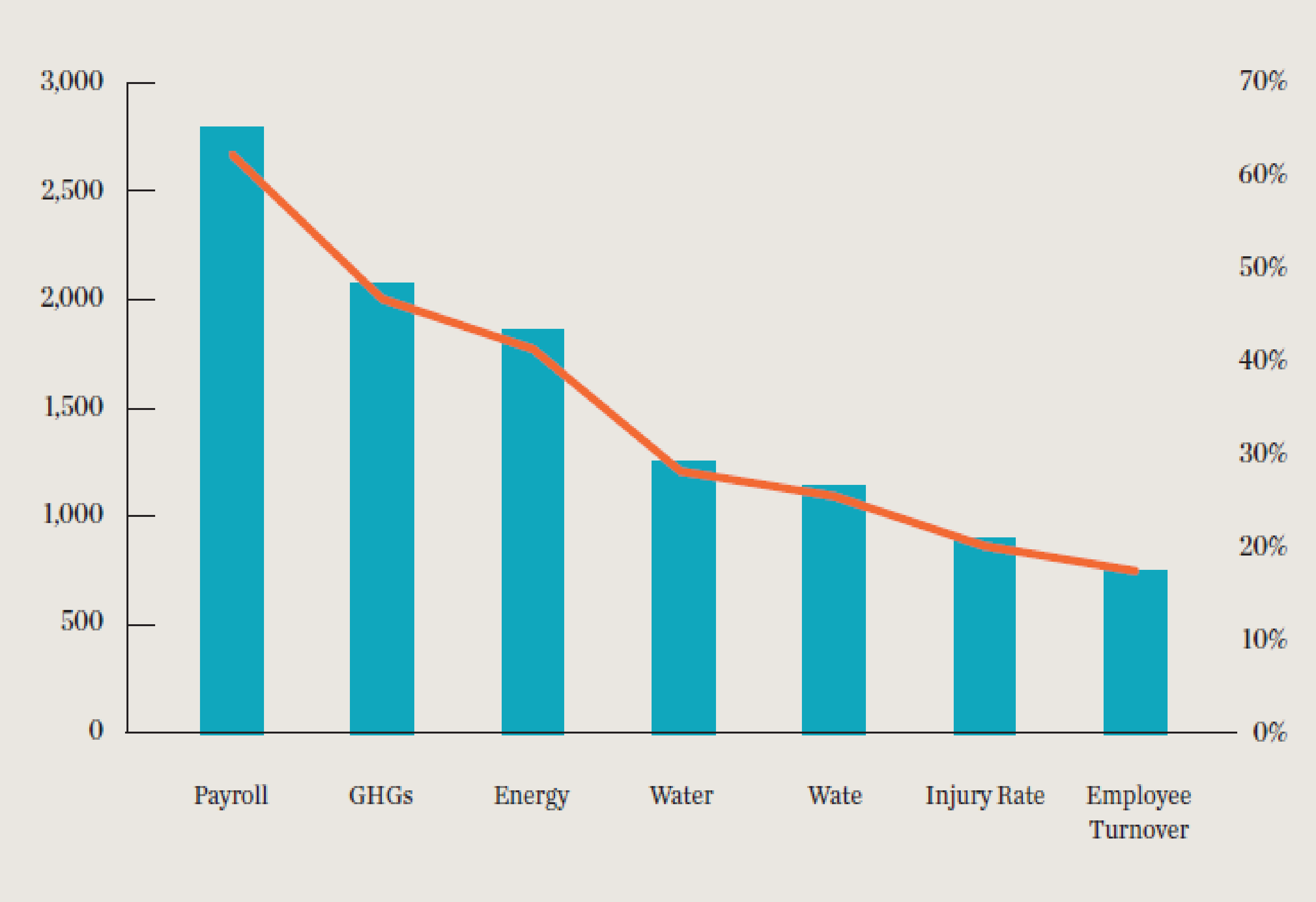
- Data is getting there, but not keeping up
- Pension funds took big hit from coal/oil hit (energy transition)
- Evolution from corporate to investor disclosure (index comparison)
- Clean versus dirty: bigger and better
- Fintech hooking up with climate/ESG investing
- Regulators fill in gap: FSB, UK, 173, Dave Jones, Regulation S-K,EU

2020?

- Less metrics (deeper insights including asset level disclosure)
- More disclosure (from voluntary to mandatory)
- Better investing (fintech and future-fit/values-based passive investing)

ESG Disclosure: current state of play

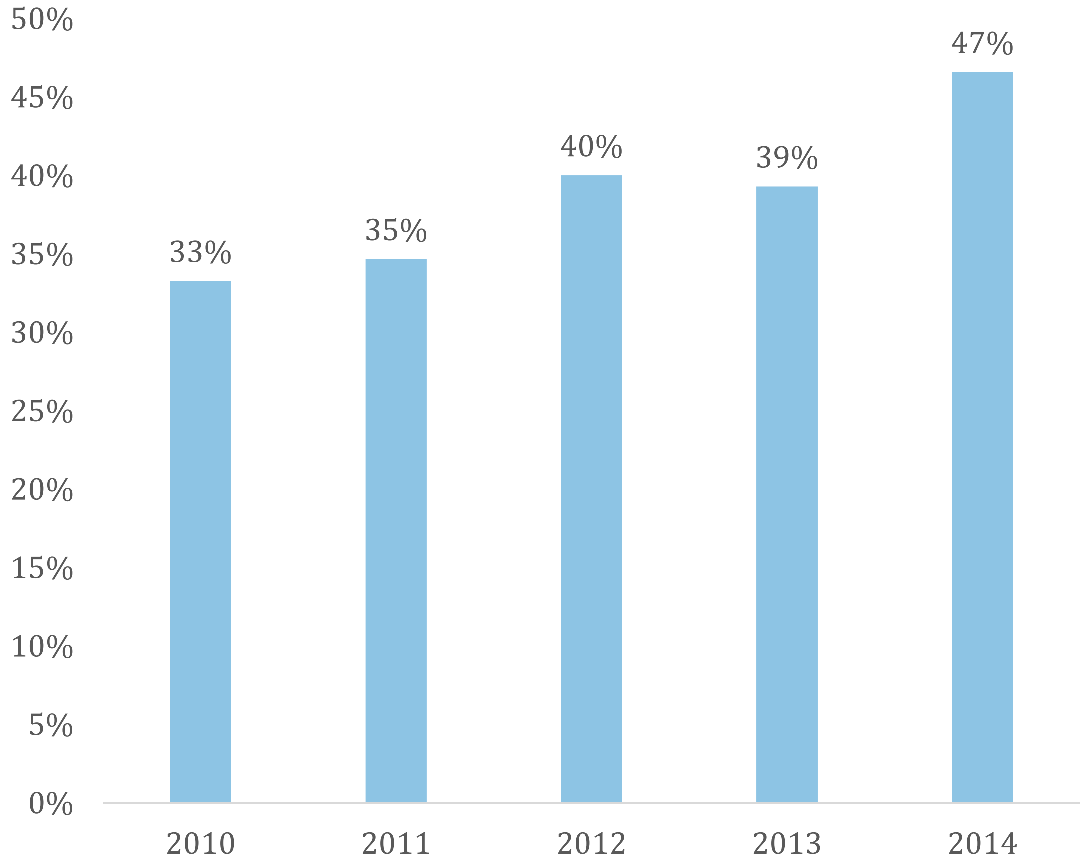
Figure 3: The seven sustainability indicators – disclosure by large companies and as a percentage of the total number of large companies, 2014



Number of large companies
As a percentage

Source: Measuring Sustainability Disclosure—Ranking the World's Stock, Exchanges (Corporate Knights, 2016)

Disclosure rate of GHGs by large companies (n=4,469)



Source: Measuring Sustainability Disclosure—Ranking the World's Stock, Exchanges (Corporate Knights, 2016)

Fund Report Cards

Attribute	S%&P 500	S&P TSX Comp	EURO STOXX 600	FTSE 100	S&P 1200
Brown Exposure %	7%	10.2%	7.1%	9.1%	7.8%
Green Exposure %	4.2%	0.5%	7.9%	5.3%	5.6%

Pension Tension: High cost of hanging onto high carbon stocks

Estimated pension fund losses incurred by pension funds of hanging onto high carbon high stocks since 2012 in the:

United States: $474 billion

Globally: $757 billion

- Commodity cycle does not fully explain this.
- Energy transition is being felt.

**The starting value was $7.08 trillion for U.S. pension fund public equity holdings and $11.3 trillion for global pension fund public equity holdings as sourced from Towers Watson. The analysis, estimated the potential financial impact had U.S. and global pension funds shifted their investments from the most carbon heavy coal and oil companies to companies that derive at least 20 percent of their revenues from green sources as verified by a credible third party. From there, the total returns over a 42-month period starting on June 1, 2012, were calculated.*

Carbon Clean S&P 500

Cleaned Portfolio	Original Portfolio	Difference
S&P 500	S&P 500	-

Weighted Carbon Intensity

118 tCO_2e/$M	199 tCO_2e/$M	-41 %

Green Exposure

5.5 %	4.2 %	1.3 %

Portfolio Value after 3 Years

$1,523,025	$1,439,224	$83,801

Annualized Return (3 Yr)

14.6 %	12.5 %	2.1 %

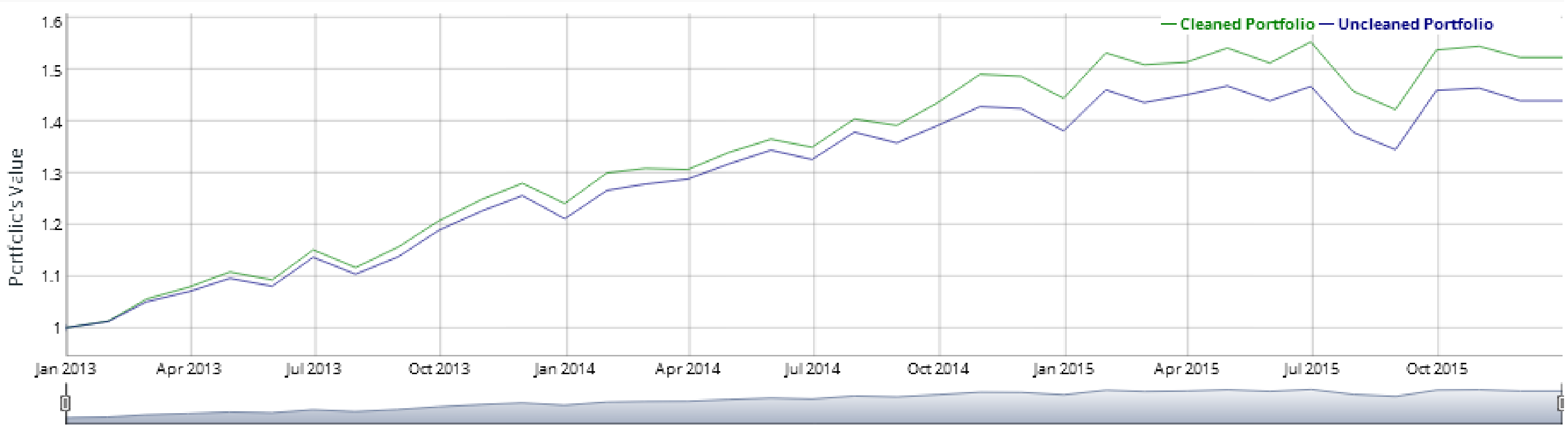
Annualized Sharpe Ratio (3 Yr)

1.4	1.22	0.18

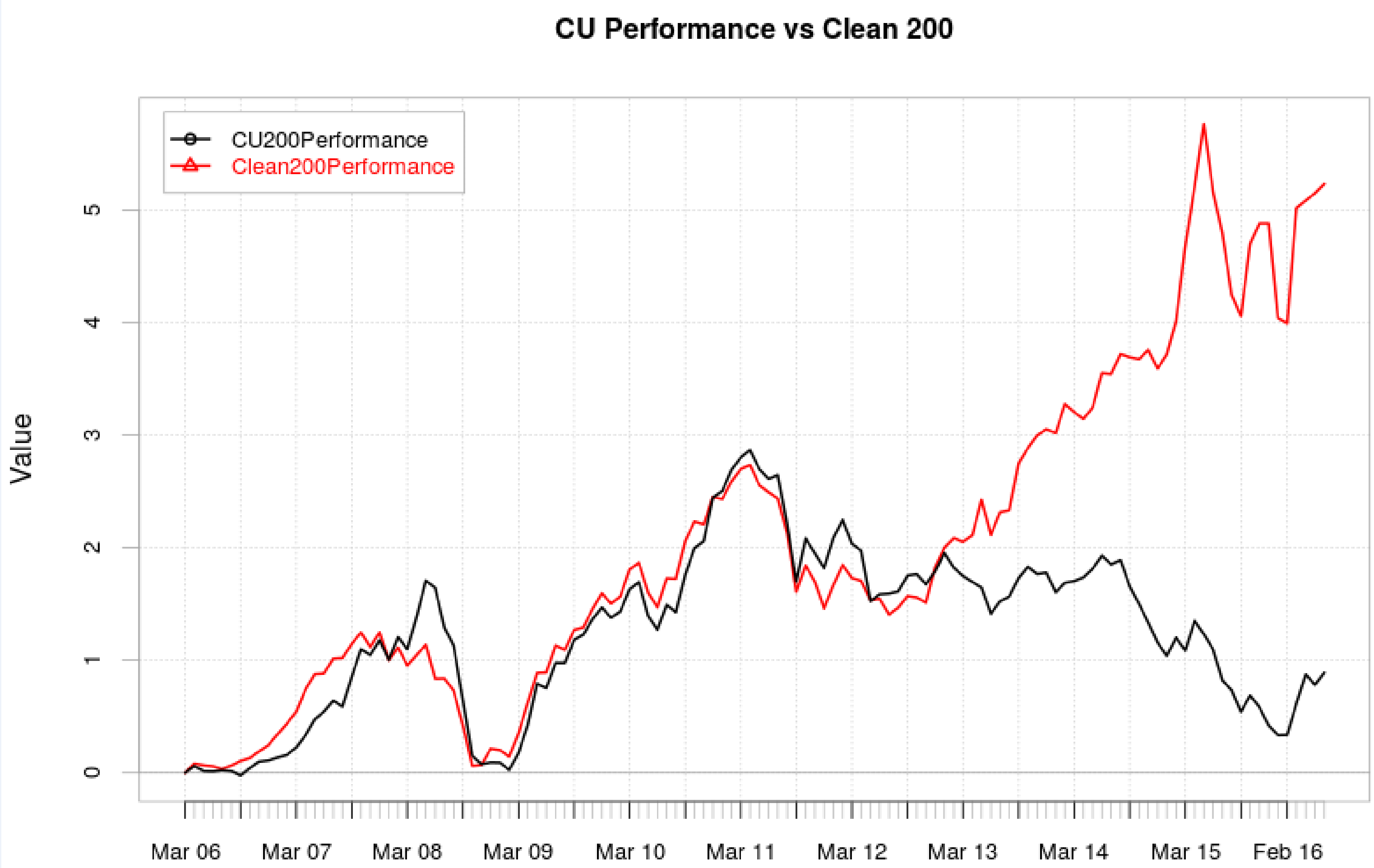
Maxiumum Draw-Down (3 Yr)

8.4 %	8.4 %	0 %

Simulated Cumulative Return



Impact of switching clean for dirty: 3x returns + lower vol + higher sharpe

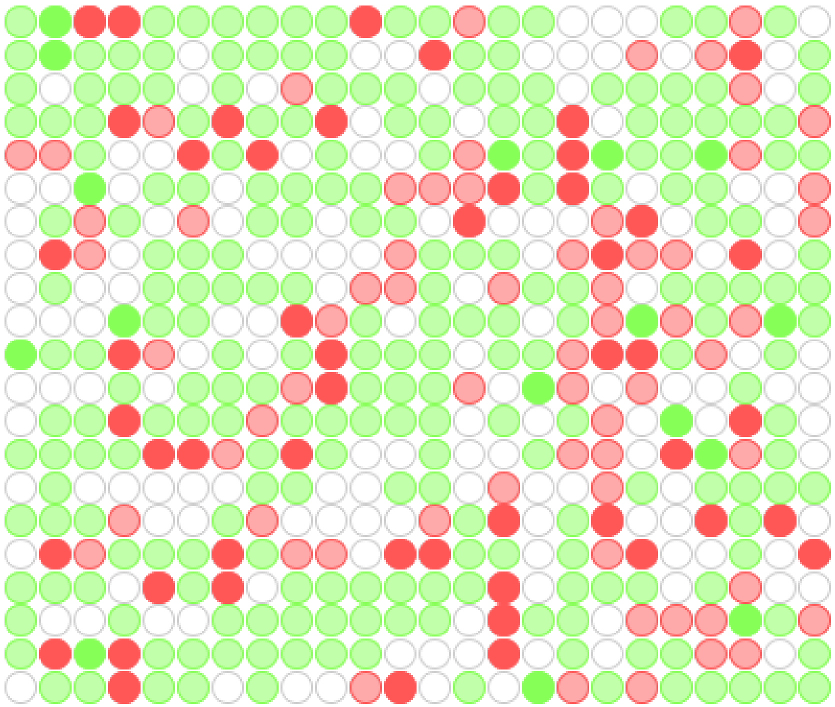


Methodology: To calculate the performance of the Carbon Underground 200 versus the Carbon Clean 200, a snapshot in time analysis was used consisting of the current constituents of the Carbon Clean 200 and the most recent publicly available Carbon Underground 200 (2015), equally weighted and re-balanced quarterly from March 1, 2006 to June 1, 2016. Returns were calculated using Bloomberg monthly total return including gross dividends for each security. Rebalancing takes effect immediately after the rebalancing date. The snapshot analysis introduces a survivorship bias, which applies to both lists, and most likely advantages the Carbon Underground 200, given the number of bankruptcies experienced during the energy/utilities sector crash in the recent past.

Fintech meets ESG: Openinvest.co

You can see how your selections affect your portfolio

This grid represents all companies in the S&P500, an index which broadly tracks the US stock market.
Companies that are aligned with your values are highlighted in green, and will be more heavily weighted.
Companies that go against your values are highlight in red, and will always be excluded.
Highlight each item for a breakdown on all the issues.



Regulators filling in the gap

- FSB Task Force on Climate-related Financial Disclosures
- UK's 2013 update of the Companies Act Made GHG disclosure mandatory for listed
- EU Directive on the disclosure of non-financial and diversity information
- California Insurance Commissioner Dave requiring all insurance companies to disclose annually their carbon-based investments including those in oil, gas and coal
- SEC Regulation S-K: an historic opportunity to establish a market standard for the disclosure of sustainability-related information. The SEC is accepting comments on this concept release until July 21st.
- Article 173: France became the first country to introduce mandatory climate change-related reporting for institutional investors requiring investors to disclose how they address climate change-related risks, split into "physical" and "transition" risks, and to assess and report on their contribution to international efforts to cap global warming and to supporting France's "energy transition"