MARKET WATCH:

Investors take charge of climate policy

When it comes to investments, the smart bet may be on clean energy and low-carbon infrastructure. Sonja van Renssen looks at the causes and implications of divestment from fossil fuels.

he Carbon Tracker initiative has put the whole notion of a carbon bubble — quite simply that 60–80% of the fossil fuel reserves that give oil, gas and coal companies their value must be left untouched to avoid dangerous climate change — on the map. According to the initiative's Chairman, Jeremy Leggett: "you actually don't need policymakers to do anything — you just need recognition of the risk that they might." "If the divestment movement continues... [at UN climate talks] in Paris [in 2015] there may actually be a sense of policymakers playing catch up"1.2.

Policymakers are supposed to be taking the lead in delivering on the public interest, but on the issue of climate change, investors are taking matters into their own hands. The Global Investor Coalition on Climate Change, which represents US\$20 trillion in assets (the US GDP was US\$17 trillion last year) from investors in Europe, North America, Asia and Australia and New Zealand, is pushing for "workable frameworks that will reduce climate risk and support low-carbon investment"3. A US\$3 trillion subset of this group wrote to the world's top 45 oil, gas, coal and power companies last September asking them to report back on their exposure to climate policies and impacts4.

"Most [of the companies targeted] have been engaging fairly constructively", says Ryan Salmon, oil and gas manager at Ceres, the not-for-profit sustainable investment campaign group behind the letters. "[But] the discussion has evolved from where we started. We now see the possibility that future demand for fossil fuels may not be as robust as the industry is planning for — certainly for coal and possibly for oil — even in the absence of strong international policy action on climate change."

In a nutshell, not only are the big international oil firms spending more and finding less oil, but a host of trends threatens to dampen demand, from improvements in end-use efficiency, air

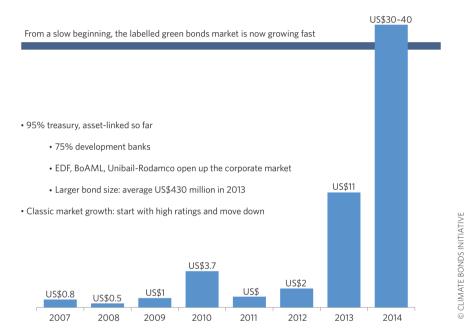


Figure 1 | Green bond issuance has exploded in the past year. Values are in billions of US\$. The growth of the 'labelled' green or climate bonds market is an indication that investors increasingly care about the impact of their assets. The average bond-size quadrupled to US\$430 million from 2012 to 2013 and most bonds were oversubscribed. Nearly all the bonds at this stage, although being allocated to climate-related investments, are from institutions with very good credit ratings that are absorbing any risks. This is the classic, low-risk start to a new market. Separately, in a report for HSBC (http://go.nature.com/jGUBXg), the Climate Bonds Initiative found that 'unlabelled' climate bonds (bonds linked to climate action but not labelled as such) amounted to US\$346 billion outstanding in 2013, with nearly 90% of that investment grade (that is, tradable and big enough to be taken up in market indices). Most of the unlabelled bonds are in transport, mainly rail, whereas labelled bonds are spread across renewables, efficiency and adaptation.

pollution laws and a patchwork of climate policies to the substitution of oil by gas and the rise of electrical power for transport. Analysts worry that the future oil price may not be high enough to keep drilling profitable^{5,6}. The industry therefore faces a pincer movement, with a potent combo of weak demand and expensive supply starting to rattle at least some investors. In response, oil and gas companies are pointing the finger at coal⁷.

These issues present a predicament for the mainstream investment community, quite separate from any moral desire to combat climate change. There is no easy way out for the companies being targeted by Ceres. They are being asked both how they believe they would fare in a low-carbon economy and, especially if this does not match their vision of the future, how they will deal with the physical impacts of climate change. "What does four degrees look like and can they [oil firms, utilities and so on] operate?" says Salmon, to illustrate the latter.

Certainly, awareness of the physical impacts of climate change is on the rise and a new report from the World Council

for Sustainable Development gives recommendations for a more resilient power sector. Utilities believe adaptation is as important as mitigation and are starting to include climate modelling in investment decisions, adjust designs to cope with more severe, frequent extreme weather events, and prepare for changes in demand.

Some experts are convinced that investors are waking up to environment- and climate-related risks and as they start to understand them, want to manage their exposure. This may include divesting, from coal stocks for example. Leading development banks such as the World Bank announced an end to lending to new coal plants last year. But there is no reason per se why ex-coal money should go to renewables or energy efficiency projects. It could leave the energy sector altogether and this, some fear, is what will happen without adequate policy support to create new, green investment opportunities.

The International Energy Agency estimates that the world needs to spend about US\$1 trillion per year from now to 2050 to transform the energy system and avoid dangerous climate change¹⁰. In practice, less than one-third of that was spent on clean energy in 2012, reports Ceres.

Sean Kidney, CEO of the Climate Bonds Initiative, which seeks to mobilize bond markets for the low-carbon economy, argues that there has been insufficient emphasis on the opportunities of green investment. "The political selling has been unbelievably bad," Kidney says. "It's been a narrative about cost, which makes sense from a science perspective but not for [driving green] investment." Yet in the past year, the market for climate bonds has skyrocketed (Fig. 1; ref. 11) and Kidney believes it could reach US\$100 billion by 2015. He does not fail to note that this is what developed countries have committed to raising in climate finance in 2020.

Long-term investors such as pension funds and insurers are projected to play a growing role in financing the low-carbon energy transition in the aftermath of the financial crisis and its impact on private banks and governments. These institutional investors believe there is big potential in climate, or green bonds — in practice, these usually amount to pretty much the same thing, Kidney says. Today, bonds are the single largest pool of capital (US\$80 trillion versus US\$53 trillon in equities¹¹) and they can be directly linked to low-carbon infrastructure projects.

Development banks such as the World Bank and European Investment Bank have got the ball rolling on green bonds, although they have since been followed by corporations such as French energy giant EDF. Crucially, buyers with some sort of a sustainability mandate made up just 58–80% of demand in 2013, showing that "bond yields alone are attractive to entice mainstream investors", reports the Climate Bonds Initiative¹¹. Green-washing is an ever-present danger, but the Initiative already offers a Climate Bonds Standard and banks are calling for transparency¹².

The message that green investments are fully competitive with mainstream investments is also one carried by Green Century Capital Management, which is introducing the US's third fossil-fuel-free diversified (that is, not sector-specific) mutual fund in April 2014. It already offers one of two that currently exist — the Green Century Balanced Fund — which had outperformed the mainstream market over five years at the end of 201313. "You do not automatically under- or overperform [with a green fund]", explains Erin Gray from Green Century. "But there is no reason to underperform because of sustainability criteria."

In practice, the fund, which is a mix of equity and bonds, tracks the mainstream market very closely and differences can often be attributed to the price of oil (if high, the mainstream market does better)¹⁴. Green Century was involved in the successful anti-apartheid divestment campaign back in the 1980s and is today plugged into the 350.org divestment movement. Divested funds do not necessarily stay in energy, Gray warns — the whole sector has been among the most risky since 2005 — but smart metering and grid projects can provide more stable returns than many renewables projects.

Not all investors see divestment as an obvious way forward. One big investor based in Europe, who spoke on the condition of anonymity, says: "It's pretty tricky — fossil fuels are a reality and they're hard to avoid." There are low-carbon opportunities, he adds — and indeed his company's own investments include renewables — but climate change is not yet the top priority for many investors. Nor does he expect it to become so within the next five years.

Hurdles to moving from brown to green investments include a lock-in to existing market indices to create investment portfolios (which often dictate an 8–12% share to fossil fuel firms) and new financial regulations that are actually making it harder to invest directly in renewables (for example, fresh capital adequacy requirements). Nonetheless, climate bonds are "one of the most promising sectors"

because they are a scalable investment that portfolio managers know and can therefore easily include. "A high carbon price would change the [divestment] game", this investor says, "because it would be included in profit and loss statements."

Creating political, economic and social space for low-carbon legislation is exactly the aim of 350.org. "It's about clearing away the stranglehold that fossil fuel companies have on our system", explains Jay Carmona, US campaign manager for the group. After starting small, today there is a state-wide divestment bill on the table in Massachusetts. These grass-roots activists talk to pensioners who "are not comfortable making a profit off the future destruction of the world." As Ceres's letters are generating shareholder resolutions in boardrooms¹⁵, 350.org is galvanizing a generation.

All this is about more than climate change. "Climate change issues can be seen as the tip of the iceberg of a larger question relating to financing the real economy and the long term", according to a seminal report from the Paris-based think tank 2° Investing Initiative in 2012¹⁶. This is about restructuring the financial system to drive long-term infrastructure investments in line with long-term policy goals such as a low-carbon economy. At the same time, some are already calling for more complex financial instruments, such as securitization, to help leverage green capital. The financial sector will not wait for policymakers.

Sonja van Renssen is a freelance climate, energy and environment journalist based in Brussels. e-mail: svr.envi@gmail.com

Rafarancas

- Unburnable carbon 2013: Wasted capital and stranded assets (Carbon Tracker & The Grantham Research Institute, 2013).
- Leggett, J. The Energy of Nations: Risk Blindness and the Road to Renaissance (Routledge, 2014).
- Letter from Global Investor Networks to the Governments of the World's Largest Economies (2012); http://go.nature.com/N4822K
- 4. http://go.nature.com/Llr2Ri
- Global oil demand growth the end is nigh. (Citi Research, 26 March 2013); http://go.nature.com/ap9b4e
- Higher long-term prices required by a troubled industry. (Goldman Sachs, 12 April 2013); http://go.nature.com/RRfgOn
 Shell hits out at Brussels energy policy. (Financial Times,
- 23 February 2014); http://go.nature.com/Av36xI 8. Building a resilient power sector — Electric Utilities Project
- (WBCSD, in the press).

 9. University of Oxford, Smith School of Enterprise and Environment, Stranded Assets Programme;
- http://go.nature.com/1meach

 10. Energy technology perspectives 2012 pathways to a clean energy system. (IEA, June 2012).
- 11. Boulle, B. 2013 Overview: the dawn of an age of green bonds? (6 February 2014); http://go.nature.com/JhCIWo
- 12. http://go.nature.com/VORUH9
- 13. http://go.nature.com/mfiuYb
- 14. Responding to the call for fossil-fuel free portfolios. (MSCI ESG Research, December 2013); http://go.nature.com/YkkbTf
- 15. http://go.nature.com/Cw3JNj
- Dupré, S. & Chenet, H. Connecting the dots between climate goals, portfolio allocation and financial regulation. (2° Investing Initiative, 2012); http://go.nature.com/ktmn7v