



Creating Wealth Worth Having[®]

ThinkTank Thought Pieces

Autumn 2011

Below is a selection of articles recently published by the CCC **ThinkTank**. **ThinkTank** Thought Pieces are papers that our experts write over the normal course of business to offer food for thought and to encourage dialogue and discussion. If you would like to sign up to the CCC **ThinkTank** mailing list, please visit the website at www.climatechangeandcapital.com/thinktank.

Ben Caldecott, Head of European Policy

1. Hope for Durban: concrete progress on innovative climate finance mechanisms

Despite the pessimism in Durban, some meaningful progress can be made in the area with perhaps the greatest tangible effect on the real economy: climate finance for developing countries. Two climate finance innovations in particular should be given the go-ahead and taken forward by the international community. The first is a new way of deploying concessional climate finance to enhance its impact, while the second can cost-effectively generate the real cash-flows needed to make pro-environmental and pro-developmental projects viable.

[Read full article on page 4](#)

Ben Caldecott, Head of European Policy

2. Financing forest conservation

To make REDD+ operational at scale we need to address a number of outstanding issues, particularly around the best way to actually pay and finance REDD+ activities, as well as how to mobilise wide-spread support for such activities. These are important questions that have yet to be satisfactorily answered.

[Read full article on page 7](#)

Steven Gray, Vice President, Carbon Finance

3. Cards on the table

Last year's climate negotiations in Cancun may have breathed new life into the UN process by establishing important structural elements on adaptation, technology and finance, but key questions remain unanswered including, a timeframe for peaking emissions, the identification of a global goal for reducing emission and the fate of the Kyoto Protocol. The article outlines what's at stake in Durban and what the repercussions are for investors.

[Read full article on page 10](#)

Ben Caldecott, Head of European Policy

4. Energy intensive industries and the transition to a low carbon economy

The UK Treasury and Business Department are busying themselves with the preparation of a package of measures to support energy intensive industries. Details of the package are to be announced soon, but its objectives are already clear: to reduce the impact of the government's new carbon tax, which was introduced to make polluters pay for a greater proportion of the pollution they create. But this package shouldn't be a crude tax rebate for the very worst polluters. Instead it must be designed to support the transformation of energy intensive industries, so they can become part of the solution to climate change and the other environmental challenges we face.

[Read full article on page 13](#)

Ben Caldecott, Head of European Policy

5. We need a Green Deal Mutual, not a Green Deal Finance Company

Creating a Green Deal Mutual would be the best way to protect Green Deal households and attract the scale of low capital required for the scheme to work. All Green Deal households would automatically become a member of the Green Deal Mutual and thus have rights to profits and control. A mutual structure would protect the interests of society members and return value to them, in a way that a company completely owned and operated by other companies might find challenging, such as the recently proposed Green Deal Finance Company.

[Read full article on page 15](#)

Article 1 **Ben Caldecott**, Head of European Policy

Hope for Durban: concrete progress on innovative climate finance mechanisms

Expectations at the UN climate change talks in Durban are low and rightly so.

But meaningful progress could be made. Particularly in the area with perhaps the greatest tangible effect on the real economy: climate finance for developing countries. This is where innovation and concrete action can be advanced via the new multilateral Green Climate Fund (GCF) and through bilateral initiatives, such as the UK government's £2.9bn International Climate Fund (ICF).

At Durban two climate finance innovations in particular should be given the go-ahead. The first is a new way of deploying low interest rate climate finance to enhance its impact, while the second can cost effectively generate the real cashflows needed to make environmental and developmental projects viable.

Loans with reduced interest rates can help address the serious problems developing countries face in getting affordable funding, in particular for climate projects. Without lower cost capital and more of it, countries will not be able to develop in clean and sustainable ways.

Unfortunately, traditional mechanisms for providing capital below market rates of interest, particularly via institutions such as the World Bank, are often treated

with cynicism in developing countries. Could there be a better way of structuring concessional finance to better support the long-term aims of developing countries to curb greenhouse gas emissions and build resilience to a changing climate?

The Perpetuity Fund concept could be part of the answer. In these funds, all returns from investments are reinvested back into each fund, together with compounded interest, so the fund's value would steadily build up, like a pension pot.

In a similar way to a pension, there would also be an end beneficiary – for example, the communities or country that hosted the financed projects. The beneficiaries would receive the money when a fund completed its mission. Moreover, because each fund would be established with donated money, its required rate of return for projects in developing countries would be relatively low, so projects not able to achieve the returns required by the market could still attract funding.

To take an example: a series of perpetuity funds could be created by the UK's ICF. One could have a mission to successfully finance decentralised renewable energy projects in Kenya over a 20-year period. If seeded with \$100m of gifted aid money, this fund could then start to provide capital – debt and equity – for viable projects below market rates.

The fund would still be required to make an average annual return on its investments, so that it could grow over time. If its target return was, say, 7% after costs and inflation – low and achievable in many developing countries – and this was achieved, then the real value of the \$100m fund would grow to \$197m after 10 years, to \$276m after 15 years and to a final value of \$387m after 20 years. Over this period it would also have catalysed many more millions of private investment into the decentralised renewable energy projects it had supported.

At the 20-year point the assets of the fund would be wound up, with beneficiaries required to spend this windfall on things that further supported sustainable development and climate change objectives.

Under this model the end beneficiaries in Kenya not only benefit from having cheaply financed renewable energy projects contributing to clean development, but gain a significant stake in the future success and value of each project. This ensures properly aligned interests between those that lend money, the organisations that develop projects and the communities and governments that host them.

Through such fund structures, donors – in this example the UK – are making a meaningful contribution to their climate finance commitments and are doing so in a way that delivers ongoing value-for-money and high levels of leverage over many years. Donors can also top up successful funds in the future and could potentially mobilise co-investment into perpetuity funds from other donors, philanthropists and even private investors.

To deliver the 2020 commitment of \$100bn a year in climate finance for developing countries, creating visible cash-flows for cutting emissions and adaptation actions is essential to attract investment. Another financial innovation, Emission Reduction Underwriting Mechanisms (ERUMs) would be a highly effective way of creating these income streams.

ERUMs would provide payments for emission reductions achieved in developing countries – conditional on results. Creating guaranteed revenue streams for projects and programmes that delivered verifiable emissions reductions would enable public and private actors in developing countries to raise capital against future income.

These mechanisms would be tailored to the needs of countries, technologies or sectors. ERUMs could be offered for themes throughout the developing world (eg decentralised energy), or for specific countries or regions (eg Kenya or Sub-Saharan Africa), or for sectors in countries or regions (eg forestry in Indonesia or south-east Asia).

For example: the GCF could offer an ERUM for 100Mt of reduced emissions from forestry (REDD+) in Indonesia. Different public and private partnerships would bid to win the ERUM as part of a tendering process. The lowest and best bid was at, say, \$5 per tonne of CO₂e abated. This is for a number of small REDD+ projects throughout Indonesia. As this programme delivers verifiable emissions reductions it will receive a contractual payment from the GCF of \$5 per tonne. This suddenly creates

Climate Change Capital

a visible, predictable and long-term revenue stream that can be invested against.

As a result, public money and private risk capital can be deployed today, knowing that it will be remunerated on performance in the future. All this has been achieved through a transparent tendering process, ensuring that emissions reductions are secured by the GCF at the lowest possible cost, which is absolutely essential given the state of public finances in developed countries and the need for value-for-money.

Both of these innovations – results-based payments and perpetuity funds – could be transformative and would be catalytic for capital flows. At Durban there is an opportunity to agree on and kickstart new and innovative climate finance mechanisms based on these ideas. Together this would make a significant contribution to mobilising investment into climate mitigation and adaptation actions in developing countries. This would be a much needed success for the Durban summit and the international climate negotiations overall.

Article 2 by **Ben Caldecott**, Head of European Policy

Financing forest conservation

REDD+ type projects to protect rainforests face many obstacles but we should not give up on market-based solutions, says Ben Caldecott from the investment bank Climate Change Capital.

We can't possibly tackle climate change or many of the other environmental challenges we face without halting deforestation. At the heart of making this a reality is ensuring that forests are worth more alive than dead. While it's impossible to place a simple monetary value on things of such significance, to permanently shift preferences toward forest conservation, this is exactly what we must do.

The framework that policy makers are creating to ensure that forests are better valued is called REDD+, or reducing emissions from deforestation and forest degradation, plus enhancing forest carbon stocks. REDD+ will allow for emission reductions from activities that conserve and restore forests to be authenticated and then paid-for by countries, companies and individuals. The promise of future cash-flows means that capital can be raised and then front-loaded into REDD+ activities today.

But to make REDD+ operational at scale we need to address a number of outstanding issues, particularly around the best way to actually pay and finance REDD+ activities, as well as how to mobilise wide-spread support

for such activities. These are important questions that have yet to be satisfactorily answered.

Who pays?

The costs of forest conservation and restoration must be borne by all those that benefit: everyone on the planet. Socialising these costs should be done in a way that takes account of means, so that richer regions will pay for the bulk of the investment required. The revenues to pay for REDD+ will have to be generated via tax systems, philanthropic contributions and cap-and-trade schemes. The latter can and should play the largest role because it makes polluters pay and can achieve scale in a way that grants funded through general taxation or philanthropy cannot.

We are, unfortunately, far from achieving any of this. While an international carbon market able to drive REDD+ is essential, in the near term direct payments from developed countries and multilateral funds will dominate. Ultimately this means that we'll probably fail to raise the quantum of capital required to deal with the problem.

This limited pot of public money can, however, achieve a great deal if it's deployed effectively. Funds such as the UK's £2.9bn International Climate Fund (ICF) and the proposed Green Climate Fund (GCF) can

Climate Change Capital

lay the ground work for REDD+ to scale up rapidly when there is an international carbon market able to do the financial heavy lifting.

Results-based payments for REDD+

In the absence of an international carbon market for REDD+, other mechanisms supported by public money can start to catalyse investment into forest conservation and restoration. These can be established quickly and the first made available in early 2012. There is no excuse for delay as money has already been pledged and needs to be spent.

So-called Emission Reduction Underwriting Mechanisms (ERUMs) would be a highly effective way of creating the income streams needed to make REDD+ projects and programmes economic, and therefore financeable. ERUMs guarantee payments for emission reductions from REDD+ activities authenticated using a UN-based monitoring, verification and reporting (MRV) system. By creating guaranteed revenue streams for projects and programmes that delivered verifiable emission reductions they would enable public and private actors in developing countries to raise capital against future income.

To take an example, the UK climate fund could offer an ERUM for 10Mt of reduced emissions from REDD+ activities in Papua, Indonesia. Different public and private partnerships would bid to win the ERUM as part of a tendering process. The lowest and best bid was at, say, \$5 per tonne of CO₂e abated and this is for a number of small REDD+ projects throughout Papua. As this programme delivers verifiable

emissions reductions it will receive a contractual payment from the UK climate fund of \$5 per tonne of CO₂e abated. This suddenly creates a visible, predictable and long term revenue stream that can be invested against. As a result, public money and private risk capital can be deployed today, knowing that it will be remunerated on performance in the future. All this has been achieved through a transparent tendering process, ensuring that emission reductions are secured by the UK ICF at the lowest possible cost.

Role of the private sector

The list of interests that have a stake in whether a forest is protected or felled is a long one. Getting REDD+ activities right involves trying to permanently align an ecosystem of often conflicting interests: the individuals that interact with the forest; the communities that live within or around them; the local and provincial governments that might lack enthusiasm or capacity; and the central government looking for economic growth at almost any cost.

REDD+ projects and programmes cannot succeed without some sort of sustained support from all of these different actors. This makes them much more complex and challenging than any other climate mitigation investment. And this is all exacerbated by the fact that many of the countries that might host REDD+ projects have insecure and poorly defined property rights, amongst many other challenges.

So while there is a significant role for the private sector in helping to deliver REDD+ activities and to raise the capital required,

it's fanciful to believe that private companies acting alone and in a vacuum will be able to secure the long term buy-in necessary for projects to succeed. As a result, REDD+ activities will only thrive as public-private partnerships with strong support from all tiers of government, as well as local communities. Private sector involvement can definitely improve outcomes, but this will only work with consent and active support.

Who gets paid?

Creating cash-flows for REDD+ activities through ERUMs and the international carbon market is only one part of the story. Getting payments to the right decision makers on the ground is essential.

In theory, REDD+ payments, together with the other benefits derived from intact forests (such as wellbeing, biodiversity, clean air, water and food), should be enough to convince local people and governments to protect forests. But, without secure property rights, how do you get the cash provided through REDD+ to those making the decision about whether to protect a habitat or not? If the cash from REDD+ goes to national governments, the only ones with clear ownership in many less developed countries, is the money likely to be passed on to those on the ground who are taking decisions? The answers to both questions are hardly satisfactory.

Although we don't know what will happen for sure – some developing country governments will be much better than others – the evidence suggests that in areas without secure and devolved property rights, REDD+ cash will fail to get to those it needs

to influence. Ensuring that the individuals and communities that matter actually receive payments and other incentives to protect forests will be a critical part of any successful REDD+ projects. So will structuring some payments based on measurable performance, for example via "bonus pool" type incentives, so that the communities that do the most are appropriately rewarded.

Conclusion

Although an international carbon market able to finance the scale of REDD+ activity necessary is still way off, the limited public funds that have been committed already can build momentum and get successful projects and programmes going in the interim.

The key prerequisite is providing visible cash-flows for REDD+ projects that perform, so that capital can then be front-loaded into forest conservation and restoration. This can be done quickly and easily, whether bilaterally or multilaterally.

In addition, we need to work hard to create the right public-private partnership models that can allow REDD+ activities to succeed. This means bringing people, communities and governments together with private actors in a way that benefits all, while delivering value-for-money and the outcome we desperately need – an end to deforestation itself.

Article 3 by **Steven Gray**, Vice President, Carbon Finance

Cards on the table

Last year's climate negotiations in Cancún may have breathed new life into the UN process, but a post-2012 agreement remains out of reach. Steven Gray spells out what's at stake in Durban and what the repercussions are for investors.

After the Copenhagen climate negotiations in 2009 fell short of reaching a post-2012 agreement, the processes of the international climate talks were called into question. At the time, critics stressed the inefficiencies of the UN process and its inability to deliver an agreed outcome. Observers pointed towards other arenas as possible alternatives to the UN Framework Convention on Climate Change (UNFCCC), such as the Major Economies' Forum. The only problem is that all the possible forums have no processes in place to deliver outcomes. An alternative international process would need to be designed, which would be a negotiation in itself and, as UNFCCC negotiators know from past experiences, the battle for control is a barrier for designing effective and efficient processes and institutions.

The shortcoming of the Conference of the Parties (COP) in Copenhagen helped highlight the limitations of the process. However, the outcome of the 16th COP a year later in Cancún draws attention to fact that, even within the constraints of the UN system, a differently-managed process can deliver very different outcomes. Cancún presented

both a challenge and an opportunity to the multilateral system, with scarce political capital, countries had to secure tangible progress, build trust and build a pathway forward.

The fact is that COP16 demonstrated a new way of working within the UNFCCC. The host government was willing to invest political capital into the process; the return was the Cancún Agreements and a renewed momentum of the UNFCCC process. Thus far it is not clear how much political capital the South African government will invest in this process. The Mexicans were ready to hand over the presidency at the end of the Cancún meeting, but the South Africans were not ready yet. The start of their tenure has been slow. The last meeting before COP17 will happen at the beginning of October, where the South African team will have to reinvigorate a strong spirit of cooperation needed for any substantive decisions to be taken in Durban at the end of the year.

The Cancún Agreements establish important structural elements on adaptation, technology and finance. The structures and the design of these are to be developed in Durban and subsequent meetings. However, given the interdependency of the different elements of a comprehensive response to climate change, more progress needs to be done on mitigation. For all that was achieved, the Cancún Agreements failed to advance

on mitigation. Key questions still remain unanswered in relation to a shared vision, the timeframe for peaking emissions, the identification of a global goal for reducing emissions and the fate of the Kyoto Protocol after its first commitment period ends next year.

Thus far, stalemate in the negotiations on a second commitment period or clarity on what will happen to the Kyoto Protocol after 2012 is a barrier to progress in negotiations of all other elements of the climate regime. For all its perceived faults, the Kyoto Protocol incorporates some fundamental elements. What is at stake is considerable when thinking that we can potentially abandon a structure that establishes an accounting system that provides clear metrics for the comparability of objectives and actions, that creates a fungible unit of carbon, a compliance mechanism (that requires a second commitment period for it to be fully tested), flexible mechanisms (emissions trading, Joint Implementation, the Clean Development Mechanism), and reporting and review procedures, among other things. Most of these elements are not part of the Cancún Agreements, making more urgent a resolution on the future of the Kyoto Protocol and its 10 years of institutional memory. This is to some extent what will be at stake in Durban.

Clear objectives and metrics are very important to the question of finance and the possible structures that can be developed. The lack of clarity of these important questions has a material impact on the negotiations. However, some say that the Kyoto Protocol is dead. Russia, Canada and Japan have said that they will not sign a

second commitment period. Japan has clearly stated that the Kyoto Protocol does not represent a global solution to the challenge of climate change and is instead pursuing bilateral agreements with countries; however, this approach is incoherent with the argument of solving a global problem. How serious are governments about avoiding dangerous climate change? It's hard to say, but so far they seem pretty serious about avoiding ambitions and comparable targets, whilst the tragedy of the commons advances.

So what needs to happen this year? First, governments have either to agree to an extension of the current commitment period or a second commitment period, or agree on how to safeguard some of the elements of the Kyoto Protocol that are needed for private sector investment. If there are no fungible units of carbon and no accounting system, it is difficult to see how governments are going to incentivise private financial flows. The message has been clear and continues to be the same: without a carbon price, the transition to a low-carbon economy will not happen.

If governments abandon the approach of having bankable units of carbon, which are ultimately bankable units of finance, it will be difficult for governments to stimulate private financial flows towards clean technology. If governments do not opt for policies that create revenue streams that address the incremental cost of financing low-carbon technologies, investment will continue to follow into brown technologies.

The EU will have to play a critical role in Durban. The Polish, current holders of the

Climate Change Capital

EU presidency, are extremely able negotiators. Hopefully they will show their commitment to the union and the common objective of addressing climate change. Possibly, given their function as the presidency, their role should be more facilitative than contentious. The EU has to exercise leadership and commitment towards a rule based regime. The US is to some extent marginalised in these negotiations given their lack of domestic policy and reduced financial strength. It is therefore the EU, South Africa and the large developing countries that hold the key for a successful outcome in Durban.

Agreeing on how to mitigate and adapt to climate change entails trade-offs at every step of the way. Yet the desire to reach an agreement can produce results if parties are committed to reaching positive outcomes. Success in Durban will be to define a pathway to a high-ambition, multilateral rules-based regime that builds on the progress made in the past two decades.

Article 4 by **Ben Caldecott**, Head of European Policy

Energy intensive industries and the transition to a low carbon economy

The Treasury and the Department for Business, Innovation and Skills (BIS) are busying themselves with the preparation of a package of measures to support energy – intensive industries affected by the tax, such as steel, aluminium, chemicals and paper. Details are due in the autumn, but its objectives are already clear: to reduce the impact of the carbon tax, which was introduced to make polluters pay for a greater proportion of the pollution they create.

Given that the tax's express purposes is to make polluters pay, it might seem odd to then reduce its impact on energy-intensive industries, which are alone responsible for 45% of total UK business and public sector emissions. But there could be logic in this counter-intuitive approach, as there is a case for governments to provide temporary, short-term support to help polluting industries evolve and succeed in the carbon and resource constrained world that we now inhabit.

If the package is actually designed to support the transformation of energy intensive industries, so they can become part of the solution to climate change and the other environmental challenges, that would be a tremendously good thing. The government could do this by providing greater financial support to cover the upfront costs of installing the greenest and

lowest-carbon production methods, working to research and deploy cleaner technologies with industry, and promoting tougher regulations in Europe and internationally.

Instead, there is a risk that the energy-intensive industries package does none of this, and that it merely becomes a crude tax rebate for the very worst polluters. It would be yet another subsidy, complementing the staggering windfall that energy-intensive industries received under the EU emissions trading scheme. If this comes to pass, it would be a missed opportunity. For it would do nothing to support the adoption of sustainable, low-carbon production methods and the retooling of industries, and by reinforcing the status quo, it would actually harm our international competitiveness in the future.

This scenario would be the result of a successful and concerted lobbying campaign. We are often told by those captured by extractive and energy-intensive industries that the polluter pays principal is too painful and that jobs will be lost or sectors will move overseas. But protecting industries from future competitive pressures, such as carbon intensity and resource efficiency, will make sectors less internationally competitive in the future, not more. And being wedded to sectors where we lack a clear comparative advantage, while simultaneously stymieing needed

Climate Change Capital

structural change, is hardly likely to improve economic performance.

The case for increasing the pressure for change becomes stronger if you look at where growth is going to come from in the future. The UK steel sector, for example, now employs just 2% of the number currently employed in the low-carbon and environmental goods and services (LCEGS) sector (18,900 v 910,000). And while the UK as a whole remains the seventh largest economy in the world, for production we are now ranked only 18th for steel, 23rd for aluminium, and 29th for cement. This follows a long-term downward trend.

In complete contrast and despite its relative immaturity, we now have the sixth largest LCEGS sector in the world and this is growing at over 4% a year – well above growth in the rest of the economy. In each LCEGS area the UK has a global share of between 3.2-3.8% and in carbon finance we have a global share of 11.7%. These are going to be increasingly important areas for us to earn our way in an increasingly competitive global economy. The future lies in the new green economy, not the old polluting one.

The other argument deployed against progress is that there are no alternatives. This is patently false. In high-carbon industries there are many credible alternatives emerging. For example, concrete can already be produced that actually captures and stores CO₂ in the built environment. There are also low-carbon steelmaking processes being developed, such as alkaline electrolysis, that with the right support could be commercialised and

deployed successfully.

The challenge is not finding low-carbon alternatives with a lower environmental impact – plenty exist and many more will be developed. The real challenge is creating a route to market for these technologies and this will never happen if incumbents are not encouraged, supported and ultimately forced to evolve, or are allowed to continually block progress. This is why policy makers must act to level the playing field through appropriate carbon pricing and regulation, while creating time-limited windows where the government and industry can work together to develop solutions.

The environmental challenges we face mean that we cannot continue to pursue two different strategies simultaneously: support for greener, low-carbon technologies, while continuing with business as usual in polluting sectors. We can't conveniently have it both ways and the sooner we realise this and act on it, the sooner a cleaner and safer future will arrive.

Article 5 by **Ben Caldecott**, Head of European Policy

We need a Green Deal Mutual, not a Green Deal Finance Company

Otober's announcement that a Green Deal Finance Company (GDFC) might be established could be a significant and positive development. The new company, created by an industry consortium led by PwC, is meant to help overcome the financing challenges associated with the Green Deal energy efficiency scheme. Given the financing requirements of the Green Deal and the need to keep interest rates low for consumers, anything that can help in this regard should be welcomed.

For those that need a quick reminder, the Green Deal is a transformative "pay-as-you-save" scheme being introduced by government. Households that participate can pay for a range of energy efficiency improvements over 20 years or more via a charge collected and attached to their energy bill. Front-loading these Green Deal charges to pay upfront for a vast number of disparate energy efficiency improvements is where the financing challenge lies.

If the Green Deal is as successful as the Government hopes, DECC estimates that £7bn per year will need to be raised by the private sector to finance it. But, existing players, as well as new entrants, simply don't have the capital or balance sheet capacity to do this. And if any of them did, it would create a significant competitive advantage for one or a few large players, which would undermine the Government's objectives

for plurality and competition in Green Deal provision.

The Green Deal Finance Company is meant to help overcome these problems, by creating a new vehicle able to aggregate and then securitise Green Deal cash-flows. By packaging future cash-flows together into financial products, the company can raise money from a range of investors in the capital markets.

But for this to be successful, the vehicle will need to be properly capitalised so it can secure the best credit rating possible. PwC say that the new company should be able to achieve a AA-rating. The higher the credit rating, the lower Green Deal interest rates should be for consumers and the more energy efficiency measures they can afford to have installed. This is clearly in the interests of government and consumers the like.

To make sure that the company is adequately capitalised so it can achieve its AA-rating, sufficient injections of capital will be needed from the companies that have just signed up to be part of the new consortium. How much the companies involved are willing to stump up, and whether this will be enough to properly capitalise the vehicle, looks to be an outstanding issue that will need to be resolved quickly.

Climate Change Capital

Moreover, while the new company is meant to be a “not-for-profit”, this status doesn’t actually mean that the company won’t make significant sums of money or inflate costs, nor does it mean that its interests or the interests of its owners are necessarily aligned with those of the Green Deal households themselves. For example, the company could become quite a profitable monopoly provider of finance for the Green Deal. This could reduce costs and if these cost reductions were passed onto Green Deal householders, would be a good thing. But there is also plenty of scope for these savings to actually go back to the owners of the company instead and not go back to reducing costs for Green Deal households.

To prevent any such outcome and to make sure that the company’s interests are properly aligned with Green Deal households receiving finance, a mutual society model would be much better. All Green Deal households would automatically become a member of the Green Deal Mutual and thus have rights to profits and control. A mutual structure would protect the interests of society members and return value to them, in a way that a company completely owned and operated by other companies might find challenging.

In addition, a new Green Deal Mutual could create innovative ways for Green Deal households to save – helping savings to equal investment in the economy. For example, the Mutual could create green retail bonds or ISAs for its members, with the underlying assets being the securities created by packaging Green Deal cash flows. This would be an efficient and effective symmetry.

One final element would make a Green Deal Mutual a much more effective option than a private company, though this isn’t a necessary prerequisite. This is the provision of UK Green Investment Bank (GIB) capital to seed it.

The GIB, as a public financial institution, represents the interests of government and taxpayers. More importantly, its lower cost government-backed capital could allow the Green Deal Mutual to have a AAA-rating from day one, thereby giving Green Deal householders an even lower cost of capital than the proposed company.

The Green Deal Finance Company is an important development, one grounded in elements of advice previously provided to government via the Green Investment Bank Commission and others. But, such a vehicle could give Green Deal households an even better deal if it was mutualised and if the Green Investment Bank provided seed capital.

This approach would also support new savings mechanisms and help the government’s flagging Big Society agenda – every Green Deal household would have a stake. All these are excellent reasons for a Green Deal Mutual to emerge out of the commendable efforts to create a Green Deal Finance Company.

Biographies

Ben Caldecott, Head of European Policy



Ben Caldecott is Head of European Policy at Climate Change Capital. He directs the CCC ThinkTank and advises CCC funds and clients on the development of policy-driven markets. During his time at CCC he has worked on secondment at a senior level in the Strategy Directorate of the UK's Department of Energy & Climate Change and as a Sherpa to the Green Investment Bank Commission.

In addition to his role at CCC, Ben is a Trustee of the Green Alliance and a Visiting Fellow at the Smith School of Enterprise and the Environment at Oxford University. He also has a number of other board and advisory level appointments with organisations working on environment policy.

Prior to joining CCC, Ben was a Research Director and Head of the Environment & Energy Unit at Policy Exchange, a leading UK based think tank. He has also worked for the United Nations Environment Programme and Foreign & Commonwealth Office. Ben read economics and specialised in development and China at London, Peking and Cambridge universities. He is a Fellow of the Royal Asiatic Society, Royal Geographical Society and LEAD International.

Ben is a regular commentator who has authored and edited numerous articles and publications. His media experience includes: Associated Press, BBC News, BBC Radio 4, BBC Radio 5 Live, BBC World Service, Bloomberg, Business Week, ENDS, International Herald Tribune, Investors Chronicle, ITV, Metro, Platts, Point Carbon, Press Association, Reuters, Sky News, The Economist, The Evening Standard, The Financial Times, The Guardian, The Independent, The New York Times, The Scotsman, The Telegraph and The Times.

Biographies (cont'd)

Steven Gray, Vice President, Carbon Finance



Steven leads the UN regulatory and policy stream and advises CCC's funds on policy and regulatory developments of the international carbon market and broader international climate policy developments.

In relation to CCC's research programme he focuses on financing mechanisms and financial products to support policy incentives. He is active in the discussions around new flexible mechanisms and the evolution of carbon finance under the UNFCCC (United Nations Framework Convention on Climate Change) and Kyoto Protocol. Steven leads CCC's finance pieces for the EU Commission's "Global Sectoral Approaches" project with CCAP (Centre for Clean Air Policy), focusing on Mexico and China. He Chairs the Post 2012 and Institutional Reform working group of the Carbon Markets and Investors Association. He is also involved in the creation of a new platform to facilitate a dialogue between business, decision makers and representatives from the international community around emission trading schemes and broader policies related to climate change.

Prior to joining CCC, he worked on linkages between climate change regulation and development at ODI (Overseas Development Institute). As a qualified Mexican lawyer he has experience in environmental and planning law. He has provided legal advice to international and domestic companies with regard to compliance with environmental legislation and has negotiated with Mexican environmental authorities on behalf of clients. Steven holds a law degree from Universidad Iberoamericana in Mexico City and a Master's in Law from the London School of Economics.



CCC Head Office

Climate Change Capital
3 More London Riverside
London SE1 2AQ
United Kingdom
T: +44 (0) 20 7939 5000
F: +44 (0) 20 7939 5030
www.climatechangecapital.com

Legal Information

This material was prepared by Climate Change Capital Ltd.

It is provided for informational purposes only and does not constitute an offer to sell or a solicitation to buy any security or other financial instrument.

While based on information believed to be reliable, no guarantee is given that it is accurate or complete. This material may not be copied, reproduced or redistributed without the prior consent of Climate Change Capital Ltd.

This information must be treated as a marketing communication for the purposes of Directive 2004/39/EC as it has not been prepared in accordance with legal requirements designed to promote the independence of research and it is not subject to any prohibition on dealing ahead of the dissemination of investment research.

Climate Change Capital Limited: Registered in England Number 5191608
Registered Office: 3 More London Riverside, London SE1 2AQ