



## ***Green Investment Bank***

Green Party policy paper

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## Summary

*The potential economic gains from low carbon development are too significant to be ignored... with the right policies, the **clean** technology sector in New Zealand could be worth between NZ\$7.5 billion and NZ\$22 billion to the economy by 2015.*

- PricewaterhouseCoopers



**1**

**Establish a government-owned for-profit** Green Investment Bank to act as an independent and expert facilitator of private sector capital to help lead the transition to a smarter, greener economy.

**2**

**Cost: \$120 million over three years** to be paid for by raising oil royalty rates to international averages and reprioritising government spending.

**3**

**In time, see billions of dollars of (mainly) private sector finance funding new renewable energy plants**, solar panel installations, energy efficiency retrofits, the development and production of significant volumes of biofuels, and clean technology projects.

The Green Investment Bank is one of a number of initiatives that will support the rapid and successful transition of the New Zealand economy onto a more sustainable footing, lowering our carbon emissions, and creating clean, well-paying jobs.

Decoupling our economic prosperity from environmental damage and resource depletion is the single largest economic and environmental challenge of our time. Countries around the world have responded to this challenge with policies and pricing mechanisms that nudge their economies towards a smarter, greener pathway.

*Institutional investors  
have an important role  
in **decarbonising** and  
**transforming** our  
global economy.*

- UN Secretary-General,  
Ban Ki-Moon



A handwritten signature in black ink that reads "Russel".

**Russel Norman**

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The cleantech sector has been taking off internationally. The global market for clean technology is forecast to reach NZ\$8.8 trillion by 2015. Forecast compound annual growth rates are as high as 84 percent for clean road transport and 28 percent for building efficiency materials. Geothermal energy has a projected compound annual growth rate of 18 percent to become a NZ\$5.8 billion market by 2015.<sup>1</sup>

Here at home, the National Government has neglected the potential of this sector in favour of the oil and gas industry. Without the right policies, price signals, and supportive partner institutions in place, private capital has continued to fund carbon and resource intense investments in New Zealand while starving the emerging cleantech sector of the capital it needs to take off. This is not a smart or sustainable way to run our economy for the long term.

To achieve a step-change towards our smarter, greener future – and the job rich opportunities that a clean economy delivers – our capital markets need revitalising to create the right incentives to redirect capital into the sustainable economy.

The Green Party has already proposed a suite of measures to help lead this redirection of capital and put our economy on a low-carbon pathway and will announce further measures throughout the year. The key policies announced to date include establishing a fair price on carbon and a comprehensive tax on capital gains (excluding the family home).

To further nudge the flow of private capital investment into green infrastructure and industry, the Green Party will establish a Green Investment Bank that specialises in the financing of new, currently unfunded opportunities in the green economy.

*Development banks have proven that **smart** public financing can spur... private sector investments and meet the growing demand for energy and climate **resilience**.*

- UN Secretary-General,  
Ban Ki-Moon



## **What is the Green Investment Bank?**

The Green Investment Bank is one of a number of initiatives that will support the rapid and successful transition of the New Zealand economy onto a more sustainable footing, lowering our carbon emissions, and creating clean, well-paying jobs.

Billions of dollars need to be invested into New Zealand's cleantech sector over the next decade if we are to meet our greenhouse gas reduction targets and decouple our economy from oil and coal.

The Green Investment Bank (the Bank) will primarily act as an independent and expert facilitator of green capital. It will match funders to projects that produce financial *and* environmental dividends providing additional capital, where needed, and cleantech investment expertise.

The Bank will specialise solely in sustainable investment, attracting capital to projects that need the specialist financial knowledge to succeed and that are not currently being funded.

The Bank will start with an initial line of government credit and deploy a majority of its capital in the priority areas of carbon reduction and energy and resource efficiency. Qualifying projects must be on the cusp of being mainstream investible.

The Bank will be run as a for-profit investment bank, acting as a catalyst for private sector investment into the green economy – not a competitor. It will seek private sector capital for cleantech investments until a time when these investments become mainstream commercial.

## Case Study: BioJoule

BioJoule was a New Zealand hi-tech company developing technology to convert shrubby willow grown in the Taupo area into ethanol for transport fuel and lignin for high-value plastics applications.

BioJoule was unable to raise sufficient capital in New Zealand to take the patented technology to market. In 2007, the intellectual property was sold to Vertichem – an overseas-based company. BioJoule CEO Stephen Hall said at the time: “It has been difficult to raise capital or grant funding in New Zealand so international involvement is required.”

The Green Investment Bank will apply a commercial filter to investment decisions. It will focus on projects and technologies at the later stages of development. It will invest responsibly and manage risk so it is financially self-sufficient and achieves a target rate of return at or above the government’s bond rate. The filter will be more flexible than the private sector equivalent, as the Bank has a public policy purpose and values any positive externalities being generated.

It will be vital for the Bank to be seen making good returns to ensure an enduring shift of private sector capital into the cleantech economy.

Like the New Zealand Superannuation Fund, the Bank will be entirely independent of government, partnering with private sector lenders and investors aiming to “crowd-in” capital, rather than crowd it out. Any lending will be new money not otherwise able to be raised from the traditional capital markets.

The Bank complements Green Party measures already announced, like a capital gains tax and a fair price on carbon, which will make available increasing amounts of private sector capital seeking more productive investment outcomes.

The Bank will be required to run in a transparent and responsible manner, committing to the United Nations Principles of Responsible Investment, which embed best practice environmental, social, and governance concerns into investment decision-making. To promote best practice reporting, the Bank will produce a full set of environmental reports alongside its financial statements.

## How much will it cost?

An independent working group will first be appointed to determine the final size, shape, and institutional form the Green Investment Bank takes. There will be negligible cost in year one.

In year two, we expect to set up the Bank along the lines recommended by the expert group. The Clean Energy Finance Corporation in Australia cost A\$18 million to establish while the Green Investment Bank in the UK – established by the Conservative Government led by David Cameron – cost £8.2 million to set up.

By year three, the Bank would have a government line of credit open to it to lend on an as-needed basis. We envision up to \$100 million could be lent out in its first full year of operation. By ending fossil fuel subsidies and raising the overall tax take from oil companies from 46 percent to the global average of 70 percent, we'll have more than enough to cover this initial outlay of capital.<sup>2</sup>

By 2020, the Bank could have investments valuing \$1 billion. Based on the experience of green banks in the UK and Australia, a capital outlay of \$1 billion would attract a further \$3 billion in private sector funding to secure almost \$4 billion of new capital for green investment in New Zealand within six years.<sup>3</sup>

The Bank will be expected to cover the on-going running costs from investment returns. The Clean Energy Finance Corporation in Australia currently employs 50 staff and spends \$20 million each year on running costs – equivalent to one percent of its capital deployed. The Corporation's total yield on its investment portfolio is 7.33 percent which is 4.22 percent over its cost of funds.<sup>4</sup>

The fact that the government enjoys a reduced cost of borrowing and is able to deploy 'patient' capital enables more potential green investment projects to be considered. It is expected that some investments will be sold off in time to recycle the capital into more productive uses.

### The Kiwibank story

Kiwibank was founded on November 29, 2001 with an initial capital injection of \$80 million in its first year of operation. As the bank grew, more capital was injected on an as-needed basis. Total capital injected to date stands at \$360 million of share capital, \$150 million of bond capital, and \$412 million of accumulated profits. Kiwibank today controls assets worth \$16.1 billion dollars.

Kiwibank's success benefits the wider economy. Additional competition lowers the cost of borrowing and, being New Zealand owned and controlled, means greater amounts of capital stay in New Zealand for reinvestment.



## **Not the first of its kind**

The idea for a Green Investment Bank is not new. The state-owned and self-financing KfW Development Bank in Germany has successfully operated since 1948. Since this time, KfW has grown to become one of the world's most successful development banks, financing €73 billion of investments, one-third of which involve an environmental or climate protection dimension.<sup>5</sup>

Green development banks are common through Europe and are also found in Japan, Malaysia and the United Arab Emirates. Three states of America – California, New York, and Connecticut – have newly established green banks.

Both the UK and Australia have established green banks, although the newly-elected Abbott Government has announced the imminent closure of Australia's Clean Energy Finance Corporation.

The world's major green banks are mobilising more than \$NZ450 billion of capital for investing into the green economy.<sup>6</sup>

Bonds tied to green investments are booming too. Twenty-five of the world's largest banks – including Bank of America Merrill Lynch, Citi, JPMorgan, Deutsche Bank, Goldman Sachs, HSBC, and Morgan Stanley – recently released the governance framework for a green bond market.<sup>7</sup> US\$11 billion of green bonds were issued in 2013. World Bank President, Jim Yong Kim, predicts \$50 billion of green bonds will be issued in 2015.<sup>8</sup>



## Biofuels future in a smart green economy

Ninety-nine percent of New Zealand's transport energy comes from oil. Electric cars offer some opportunities but will not replace the 206 petajoules of non-renewable energy annually used by the transport sector.<sup>9</sup> Anticipated savings from complementary energy efficiency measures, like more fuel-efficient vehicles, will only get us so far. Biofuels will be a key component of decoupling transport from carbon.

Biofuels from forestry waste products in particular offer a viable alternative to oil imports but the technology and infrastructure required is currently not being funded by the private sector. We can reduce oil use in the transport sector by up to 50 percent by 2050 by using New Zealand's vast energy resources in our exotic forests.<sup>10</sup>

The commercialisation of technology to turn forestry wood waste into biofuels for transport will have significant co-benefits for jobs and reduce our reliance on oil imports. Business and Economic Research Ltd (BERL) estimates 27,000 new jobs can be created in the bioenergy sector throughout rural New Zealand while saving more than \$7 billion in oil imports each year.<sup>11</sup>

## Priority cleantech sectors for investment

The Green Investment Bank will operate at arms-length from government but will operate under a mandate to prioritise investment in decarbonising our economy and making our economy more resource and energy efficient. This will likely include securing new investment in renewable energy plants, solar panel installations, energy efficiency retrofits, the development and production of significant volumes of biofuels, and a wide range of clean technology projects.

The National Government's weakening of the Emissions Trading Scheme and its renewed emphasis on oil and gas exploration has delayed the necessary transition our economy needs to make to achieve a low carbon/stable climate future.

In fact, the most recent report to the United Nations on climate change shows that New Zealand's emissions are set to climb steeply in the next 20 years. Under current policy settings, our net emissions are projected to rise to almost 85 Gg of CO<sub>2</sub> by 2030 which is 160 percent above 1990 levels. We are dramatically failing to step up and play our part in addressing the climate change challenge.

One of our priorities in Government will be to establish a fair price on carbon. A fair price on carbon will also support green investment.

The Bank will offer the necessary expertise to facilitate the redirection of significant amounts of private sector capital into the nascent cleantech sector in New Zealand.

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