

▶ INVEST IN THE FUTURE

“ This goodly frame, the Earth, seems to
me a sterile promontory; this most
excellent canopy, the air, look you, this
brave o’er hanging firmament, this
majestic roof fretted with golden fire,
why it appears no other thing to me
than a foul and pestilent congregation
of vapours”

Hamlet (II, ii), William Shakespeare



CARBON CREDIT NOTES

(CERTIFIED EMISSION REDUCTION NOTES)
LIMITED OFFER FOR USD INVESTORS

ISSUE 1



INTRODUCTION

Investment opportunities come and go.

Everyday we are faced with literally hundreds of different investment vehicles all promising fantastic financial returns.

Often we let potentially lucrative opportunities pass us by for fear of losing money, only to regret the decision when we see how well the investment has performed. Naturally some vehicles perform better than others, and hindsight usually always offers 20/20 vision when it comes to reviewing investment opportunities.

Generally, investment products need to satisfy potential customers on at least 5 levels:

1) Is it easy to understand & does it make sense?

Is it easy to see how & why my money will grow in the investment vehicle?

2) Credibility & Security

Is my money safe and secure in the investment? Does the investment provider make me feel secure?

3) Risk/Return ratio

Does the return warrant the risk...and vice versa?

4) The Investment Period

How long will I need to wait to see or realise my return?

5) Is it an ethical investment ?

More and more people are wanting to invest not only in growth but investments that do not negatively impact the environment or harm other individuals.

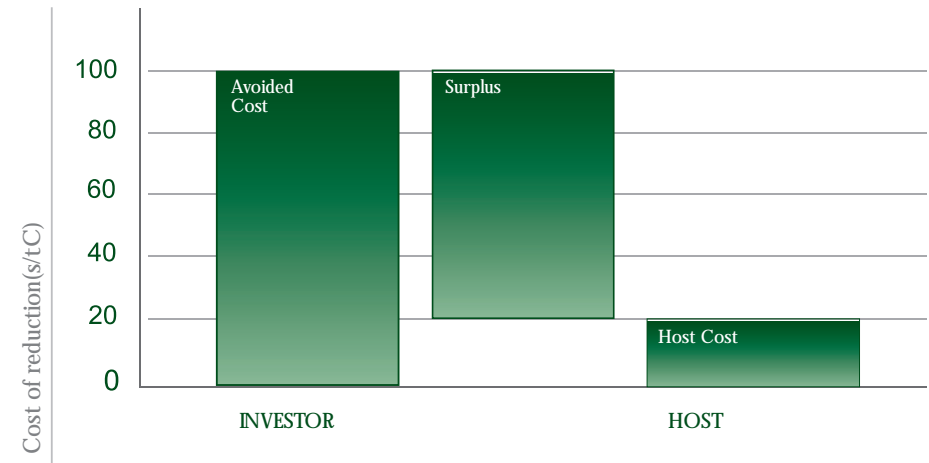
While the ideal investment does not exist in reality, there is a market and a financial instrument that meets these criteria – the market is the Greenhouse Gas Emissions market and the product is the Carbon Credit (or Certified Emission Reduction – CER). It involves investing in reductions in greenhouse gas emissions.

In order to understand how one can benefit from a carbon credit note investment, a bit of background is necessary.

The 1997 Kyoto Protocol, a milestone in global efforts to protect the environment and achieve sustainable development, marked the first time that governments accepted legally-binding constraints on their greenhouse gas emissions. The Protocol also broke new ground with its innovative “cooperative mechanisms” aimed at cutting the cost of curbing these emissions. As it does not matter to the climate where emission reductions are achieved, sound economics argues for achieving them where they are least costly. The Protocol therefore includes three market - based mechanisms aimed at achieving cost-effective reductions - International Emissions Trading (IET), Joint Implementation (JI), and the CDM.

The CDM, contained in Article 12 of the Kyoto Protocol, allows governments or private entities in industrialized countries to implement emission reduction projects in developing countries and receive credit in the form of “certified emission reductions,” or CERs, which they may count against their national reduction targets. Once registered these CERs or carbon credits have a tradable value and can be bought or sold.

GHGs mix uniformly in the earth’s atmosphere. Unlike sulphur dioxide or low-level ozone, carbon dioxide and other GHGs have the same impact on climate everywhere in the world. It does not matter, therefore, where we begin to reduce net emissions. This fact provides the economic justification for international co-operation on climate change projects and project based emissions trading. International co-operation makes economic sense because emissions reduction in developing countries generally cost less than in industrialised countries. In the graphic, the difference between the marginal reduction cost for the investor (industrialized country) and the host (developing country) is shown by the amount marked ‘Surplus’. The host country and investor country can share the surplus so that both benefit. Hence the ability to create a financial instrument that facilitates the ‘monetisation’ of this surplus.



Source: EDRC 2003



INVESTING IN THE CARBON CREDIT MARKET

Currently, in order to invest in the CDM mechanism, the investor is required to invest directly in Emission Reduction projects in a developing country.

The investor is also required to **wait until the project delivers those emission reductions before** the investor can realize profit and sell the Carbon Credits on the open market. The knowledge, costs and administration procedure before the investor can take ownership of the credits and trade is onerous. The risk for any individual or company without substantial experience in the market, knowledge of the industry, or serious corporate size administration back-up can be substantial. Below is an example of the process required to successfully become a registered owner of Carbon Credits under the Clean Development Mechanism.

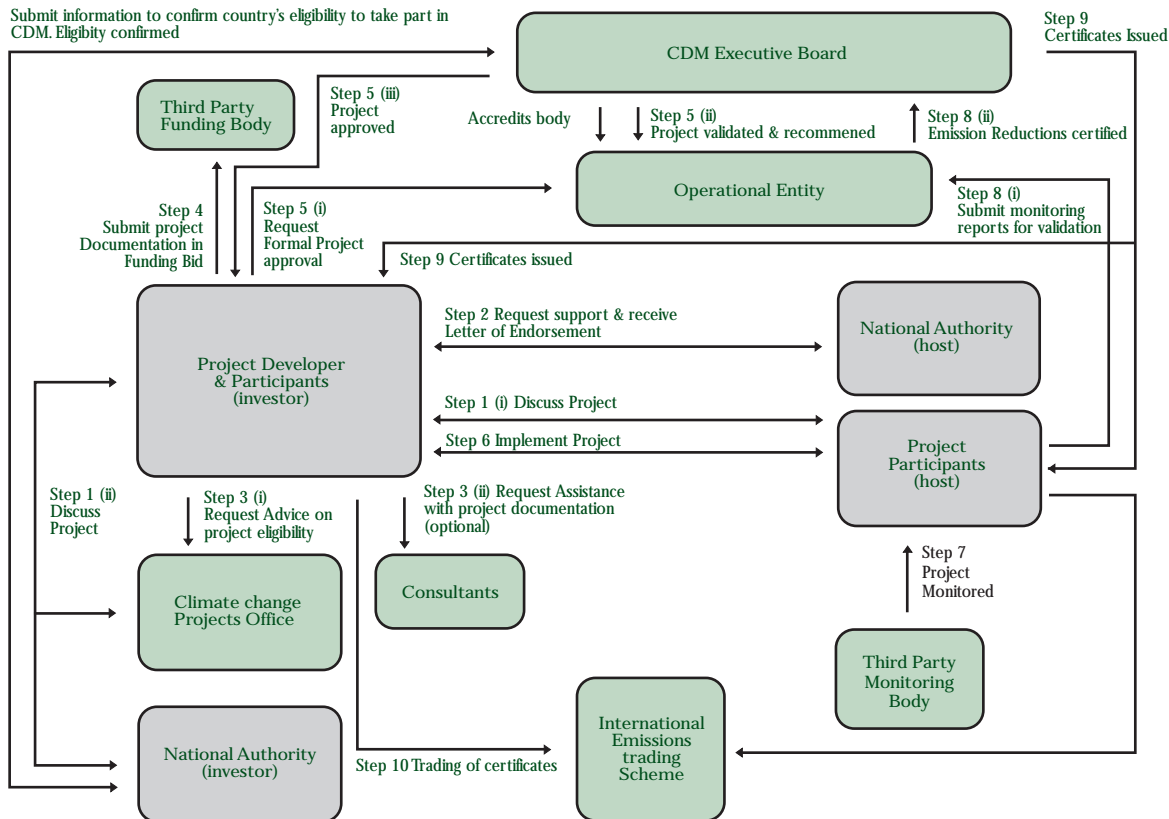
Recognising the many parties and processes involved in a CDM project and the specialist knowledge and oversight required, Sterling Waterford have created the Carbon Credit Promissory Note.

The Carbon Credit Note **allows the retail and institutional investor exposure to the upside without having to** participate directly in a project and its associated project administration and management.

The Carbon Credit Note therefore offers the investor the ability to benefit from the developing market in emission reductions, by offsetting the risk of delivery and direct project participation.

The page overleaf describes how the Carbon Credit Note works.

PROCESSES AND PARTIES INVOLVED IN A CDM PROJECT

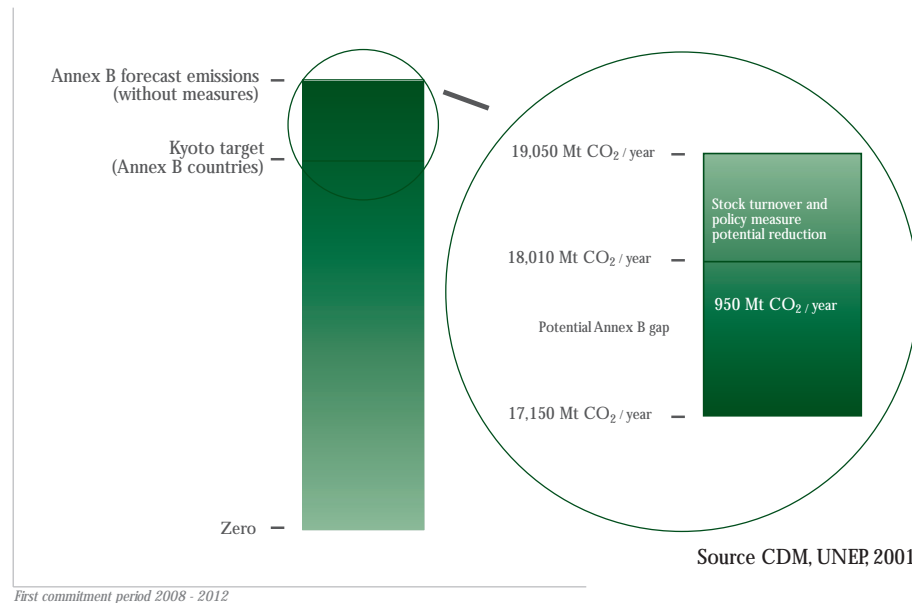


THE CARBON CREDIT NOTE

A carbon credit note is a fully underwritten obligation to deliver a carbon credit (a CDM registered Certified Emission Reduction) to the purchaser, at a date in the future (in this case three years). Sterling Waterford in turn hedges the delivery of the Carbon Credit by contracting with individual projects in a variety of countries through established intermediaries in the emission reduction market for the delivery of an amount of CER's corresponding to the notes issued. Sterling Waterford's counterparty risk is managed through a variety of individual project insurance policies in order to ensure full delivery of the CER on the effective date.

The Carbon Credit Market

For example the market for CER's is in the early stages of development indications are that prices will increase substantially once more liquidity is realised. The market for Annex B Emissions during the first commitment period is estimated to be close to 20 billion tonnes of CO₂.



Vrolijk and Grubb have estimated that the trading of CDM carbon credits could top \$26 billion per annum. That is more than half of the volume all stocks traded on the JSE Securities Exchange, the 11th largest Stock Exchange worldwide by market capitalization.

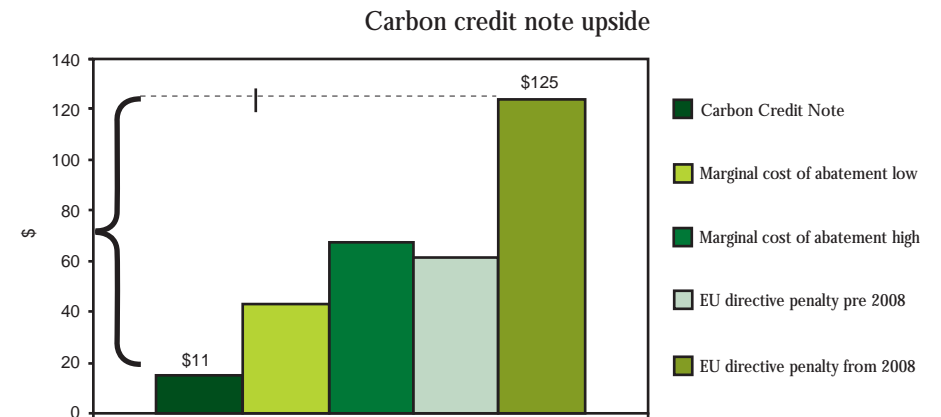
<i>Vrolijk and Grubb, 2000 Quantifying Kyoto</i>	<i>\$500 million low estimate \$15,000 million high estimate</i>
<i>Vrolijk, 1999, Potential Size of the CDM</i>	<i>\$5 200 million low estimate \$21,000 million high estimate</i>
<i>WRI, 2000, Financing SD with the CDM</i>	<i>\$5 200 million low estimate \$26,000 million high estimate</i>

Source CDM Handbook, EDRC, 2003



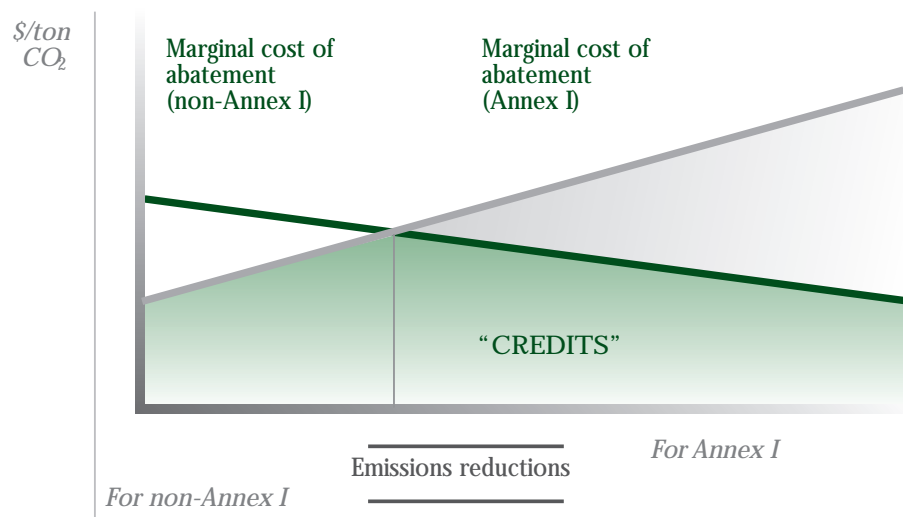
PRICING CERTIFIED EMISSION REDUCTIONS

Using a forecast based on a combination of forward pricing estimates from the most eminent environmental economists, penalties for failure to reduce emissions and the marginal cost of changing from high emission energy production to low emission energy production, *carbon credits have the potential to rise in value as much as five fold to 2008.*



Source: DKNW Estimates 2003, Viguier, Babiker and Reilly 2001, Hendriks, de Jager et al 2001

Because of the early stage of the implementation of the EU directives on emission reduction as a result of the Kyoto protocol and the few international emission reduction projects in relation to actual requirements, there is currently no established price discovery mechanism for Carbon Credits, which brings both opportunity and risk. Sound economics dictates that pricing for the Carbon Credit should reach equilibrium when the marginal cost of abatement (i.e. reduction of baseline emissions) is equal to the market price for credits.



Source: EDRC 2003

Firms will trade such that their marginal cost of abatement is equal to the market price for credits

However, pricing is not entirely determined in this market by the forces of supply and demand, given that carbon emissions are legislated and specific penalties apply to failure to reduce carbon emissions. In addition, in most cases companies (and governments for that matter) will not be able to reach emission allowance targets automatically by investing in least cost energy production change as the level of allowance to be made up will seldom equal the actual emission reduction delivered by the new project. This should necessarily have the effect of creating liquidity in the secondary credit market to either fund the entire allowance shortfall or to fund the 'odd lot' allowance shortfalls that are the difference between the actual reductions achieved and the remainder.

Again, the baseline emission rate varies enormously between sources of energy and more so from country to country and modeling the price based on this economic principle is not necessarily an effective way of ascertaining future price curves for the unit.

In order to evaluate the realistic price that can be reached in the Carbon

Credit market, one has also to examine forecasts by eminent players in the current emission reduction market.

A number of researchers and environmental economists have predicted future Carbon Credit prices:

- Fugueres (Centre for Sustainable Development in the Americas) quotes the World Bank study figure which projected they could be worth around \$36 / t CO₂ in 2008.
- Irving Minzter of Global Business Network has suggested offset prices of between \$20 and \$60 during the first commitment period.
- Trexler and Associates quote a range of up to \$60 / t CO₂ depending on the stage in the certification process and the volumes available for trading.
- According to a 2001 review by the MIT Joint Program, to achieve the required level of reduction, projects costing up to about €50 -55/tonne of CO₂ (\$60-\$67) would have to be pursued.

Since CER's are fungible (interchangeable) with other credits (i.e. Emission Reduction Units – ERU's generated through Joint Implementation Project or Removal Units – RMUs generated through carbon sequestration activities) it must be recognized that the overall number of available credits within the market at any period in time will influence the market price. This supply will be influenced by a number of factors including how Eastern Europe's "hot air" is managed, how local, national and international emission trading regimes are rolled-out and integrated and incentives (and barriers) to CDM project development. Demand side forces will also impact the future price of credits. For example, US participation in Kyoto (or their level of activity in buying and trading of credits), the pace of action taken by countries and companies to reduce GHGs, overall economic growth and future GHG reduction commitments taken on could significantly impact the future market price for credits. Other issues that will play an important role will include market conditions, trading parameters and associated CDM transactional costs (e.g. establishing a baseline, adaptation levy, etc.).

What is clear is that the price curve will likely be driven up as the first commitment period approaches and the demand for carbon credits potentially outstrips supply.

WHY YOU SHOULD CARE? ⁽¹⁾

“(In the 20th century) the global economy expanded 14 fold, energy use increased 16 fold, and industrial output expanded by a factor of 40. But carbon dioxide emissions also went up 13 fold, and water use rose 9 times.”
(Environmental history of the 20th Century, John McNeill, 2003)

The sun's energy falls continuously on the earth. Some of this energy is reflected back into space by the earth's atmosphere, but most of it passes through the atmosphere to warm the earth's surface. The energy from the earth's warming is emitted as infra-red radiation, and is absorbed by water vapour, carbon dioxide, and other naturally occurring GHGs that hold heat in the atmosphere. All life depends on this natural greenhouse effect. If the GHGs did not slow down the release of the infra-red radiation back into space, the earth would be too cold to support life.

Since the industrial revolution, humans have been adding huge quantities of GHGs to those naturally in the atmosphere. As the concentration of these gases increases, they retain more heat energy. This has led to increases in average global temperature – widely known as global warming – and other major changes in the climate system. The Intergovernmental Panel on Climate Change (IPCC), a body of over 3000 leading scientists working in climate change research, stated in its 2001 report that ‘there is new and stronger evidence that most of the warming observed over the last 50 years is attributable to human activities’. These changes are happening faster than any purely natural process, and the impacts are expected to be unprecedented. Higher temperatures combined with changes in rainfall and water run-off will profoundly affect both natural and human systems. Some of the changes predicted are reduced food security, loss of life due to catastrophic floods, homelessness, submerging of land due to sea-level rise, and increased deaths from diseases such as malaria. Countries with few resources will have the least capacity to adapt, and are the most vulnerable.

In March 2004, a report prepared by the Pentagon warned that climate change may lead to global catastrophe costing millions of lives and is a far greater threat than terrorism, was leaked to the UK broadsheet, The Observer. The report was ordered by an influential US Pentagon advisor but was covered up by "US defense chiefs" for four months, until it was “obtained” by the British paper.

The Pentagon report, commissioned by Andrew Marshall, predicts that "abrupt climate change could bring the planet to the edge of anarchy as countries develop a nuclear threat to defend and secure dwindling food, water and energy supplies," The Observer reported.

Its authors -- Peter Schwartz, a CIA consultant and former head of planning at Royal Dutch/Shell Group, and Doug Randall of Global Business Network based in California -- said climate change should be considered "immediately" as a top political and military issue.

Some examples given of probable scenarios in the report include:

- Britain will have winters similar to those in current-day Siberia as European temperatures drop off radically by 2020, and by 2007 violent storms will make large parts of the Netherlands uninhabitable and lead to a breach in the aqueduct system in California that supplies all water to densely populated southern California
- Europe and the United States become "virtual fortresses" trying to keep out millions of migrants whose homelands have been wiped out by rising sea levels or made unfarmable by drought and "catastrophic" shortages of potable water and energy will lead to widespread war by 2020.

Randall, one of the authors, called his findings "depressing stuff" and warned that it might even be too late to prevent future disasters. The report indicates that the threat to global stability "vastly eclipses that of terrorism". The author adds that taking environmental pollution and climate change into account in political and military strategy is a new, complicated and necessary challenge for leaders.

(1) This section has been sourced directly from four reference pieces (CDM Handbook, EDRC 2003, Environmental history of the 20th Century, John McNeill, 2003 and CDM, UNEP Collaborating Centre Denmark, 2001, The Observer, 2004)

What human activities cause GHG emissions?

Carbon dioxide (CO₂) is responsible for 70- 72% of the impact (IPCC 2001a), primarily through the burning of fossil fuels but also due to rapid deforestation. Methane (CH₄) is responsible for about 20% of the GHG impact. It is released from fossil fuels (gas pipeline leaks and coal mines), from agriculture (rice and cattle farming), and industry. Nitrous oxide (N₂O) is responsible for 6-7% of the GHG impact, through agricultural fertilisers, industrial processes and burning fossil fuels. The remaining trace gases come from industrial processes

To confront this vast global problem, therefore, we have to change one of the most fundamental activities of industrial economies – the burning of fossil fuels. This means changing many aspects of our lives: transport systems, methods of generating electricity, how efficiently we use energy of all kinds, industrial and agricultural practices. Reducing the emissions of GHGs, or promoting their increased absorption by vegetation, is called mitigation; all CDM projects are mitigation projects. The international community first acknowledged climate change as an important global issue in 1992, when it adopted the UNFCCC at the Rio de Janeiro Earth Summit. The Convention set targets for industrialised countries to stabilise their emissions, although these were not legally binding. Growing evidence of human influence on climate change and the possible irreversible nature of its impacts led the international community to adopt the Kyoto Protocol in 1997.

The Protocol contains legally binding emission targets for the industrialized countries, although widespread concern by industrialised countries over the costs led to the Protocol including a great deal of flexibility on how to meet targets. The time period for targets was stretched from one to five years, and the CDM and other mechanisms were introduced for trading emissions with other countries.

The value of CDM

The basic principle of the CDM is simple: developed countries can invest in low-cost abatement opportunities in developing countries and receive credit for the resulting emissions reductions, thus reducing the cutbacks needed within their borders. While the CDM lowers the cost of compliance with the Protocol for developed countries, developing countries will benefit as well, not just from the increased investment flows, but also from the requirement that these investments advance sustainable development goals.

The CDM encourages developing countries to participate by promising that development priorities and initiatives will be addressed as part of the package. This recognizes that only through long-term development will all countries be able to play a role in protecting the climate. From the developing country perspective, the CDM can:

- Attract capital for projects that assist in the shift to a more prosperous but less carbon-intensive economy;
- Encourage and permit the active participation of both private and public sectors;
- Provide a tool of technology transfer, if investment is channeled into projects that replace old and inefficient fossil fuel technology, or create new industries in environmentally sustainable technologies; and,
- Help define investment priorities in projects that meet sustainable development goals.
- Specifically, the CDM can contribute to a developing country's sustainable development objectives through:
 - Transfer of technology and financial resources
 - Sustainable ways of energy production
 - Increasing energy efficiency & conservation
 - Poverty alleviation through income and employment generation
 - Local environmental side benefits

Investors in Carbon Credit Notes are promoting responsible environmental management and are supporting the global reduction of harmful GHG emissions.



WHAT THE INVESTOR WANTS TO KNOW

What is the chance that the carbon credits will not be delivered?

The carbon credit note is fully underwritten through hedging contracts with projects on the ground in a number of third world countries. The basis for the underwriting agreement is that the carbon credit position is hedged 100%. The investor is effectively insured that delivery of the carbon credit or the cash equivalent will take place.

What happens if the market is stagnant?

No investment is guaranteed to produce superior returns. This being said, the Kyoto Protocol forces participating countries to reduce their emissions within a given timeframe or invest in projects that do so. The market has been created out of these requirements - companies and countries that do not comply have too much to lose for the market not to develop. This simple fact bodes well for market liquidity and hence pricing of carbon credits in the future

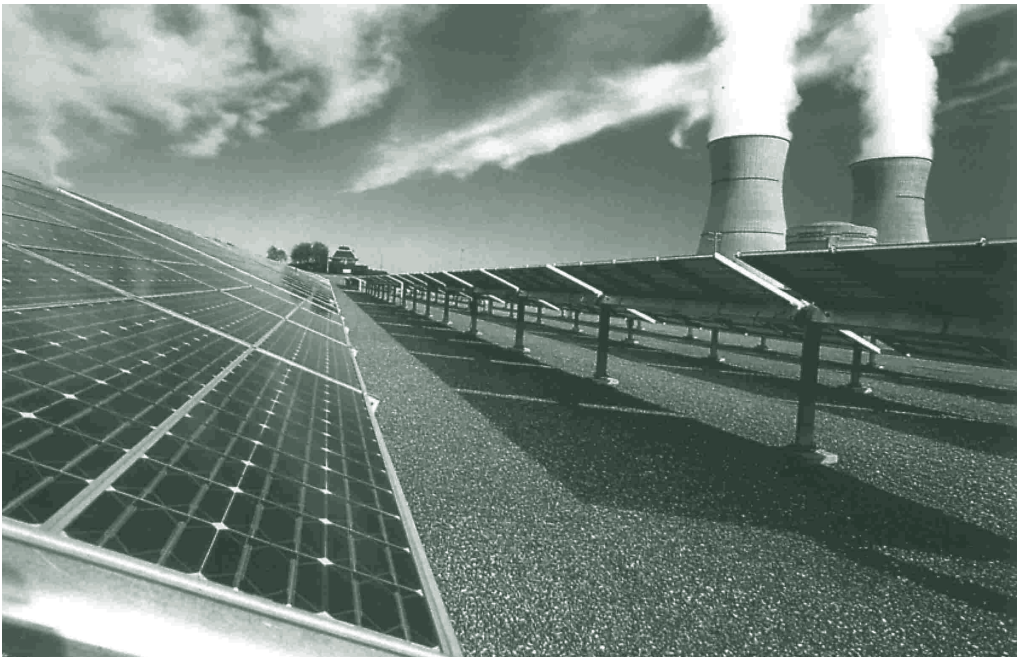
Why should I invest now?

Shouldn't I wait around and see what happens to the Greenhouse Emissions Trading marketplace? No one ever made money by sitting and waiting to see what happens. The reason for the potential upside in the current market is the fact that it is a developing market. As soon as the market is established, prices will stabilize after their initial steep rise and follow the normal cyclical behaviour that stocks and bonds do based on underlying economic fundamentals. Buying early could secure the possibility of a good profit.

Carbon credit notes are the ideal opportunity to get at ground level of a rapidly growing market. And what's more, there is nothing more satisfying than knowing that while your investment is growing, you are actually doing some good.

Why are CER prices quoted in dollars?

The currency norm for quoting of emissions products has historically been in dollars. For example, ERU's (the European equivalent of CER's - also carbon credits) are also quoted in dollars.



SUMMARY

- The Kyoto Protocol is a genuine global imperative embraced by almost every leading Industrialised Nation.
 - Each participating Nation has committed itself to reducing global gas emissions
 - Emission reduction projects are rewarded
 - These projects can be implemented in regions which are less costly – and will still allow nations to attain related credits for doing so.
 - Emission reducing credit will be highly sought after by companies and countries in highly industrialised regions
 - Through Carbon Credit notes, there exists an opportunity for the private investor to trade in carbon credits
 - The value of these Carbon Credit notes has demonstrable potential to increase as the deadline approaches for companies to comply – i.e. 2008
 - The real potential exists now to get involved in a high-return investment opportunity whose delivery is fully underwritten
- ...and most importantly to become involved in a venture that also aids the environment.