

POLITICAL RISK INSURANCE

Carbon Credit Projects



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Given the enormity of this challenge, it is going to take a sustained effort on the part of the world community and across all sectors of the economy to address this issue successfully. Technological innovation, creative financing and increased scientific research will be critical if the world community wants to significantly reduce global emissions.

Carbon credit projects generate credits by reducing greenhouse gas emissions (GHGs) such as carbon monoxide, methane and nitrous oxide. Under the Kyoto Protocol, carbon credits generated by projects in developing countries are known as Certified Emission

Reductions (CERs). Examples of carbon credit projects include renewable energy power projects, waste-to-energy plants, reforestation projects and energy efficiency projects. A robust financial market has grown from the purchase and trade of carbon credits by investors.

The carbon credit market is large and growing rapidly. The carbon market was valued at USD 31 billion in 2006 and doubled to more than USD 64 billion in 2007. This market is now conservatively projected to reach USD 200 billion by 2020. While the financial and environmental gains associated with the carbon credit market can be significant, there are a number of risk management issues that warrant consideration. Specialized insurance products that exist today and new approaches in development can help organizations address many of these risks.

Box 1

In January 2008, Zurich announced a global initiative focused on the development of products and services addressing climate change. The initiative takes a three-pillar approach:

1. Establishment of an internal Climate Office to analyze climate-related risks across Zurich's businesses.
2. Establishment of a Climate Change Advisory Council consisting of experts in the area of climate change that will directly report to Zurich's Group Management on strategic and operational issues associated with climate change.
3. Launch of a Carbon Management Strategy, including an applied research program to examine the critical economic, financial and policy issues associated with climate change, and the develop products and services that allow customers to cope with these risks.

This article was contributed by Zurich North America Surety, Political Risk and Trade Credit.

Zurich's North America Surety, Political Risk and Trade Credit group¹, one of the world's largest providers of surety, political risk and trade credit insurance, developed a product specifically designed to cover carbon credit projects. The goal is to protect investors in carbon credit projects against political risks and, in certain cases, the credit risks associated with operating in emerging markets. This will help encourage the development of more environmentally sustainable projects which, in turn, will help reduce greenhouse gases to desired

levels. This effort is part of a larger initiative within Zurich to address climate change. [See Box 1.]

In terms of carbon finance, Zurich can provide coverage for these projects to protect against the risk of a host government's actions that prevent an investor from receiving benefits associated with emission credits. This insurer can also provide coverage for political violence events, including war and terrorism, which might disrupt operations. In addition, Zurich offers comprehensive credit insurance

for carbon credit projects that protects against both commercial defaults and political risks.

As of July 2008, Zurich has provided coverage for three carbon credit projects. The first transaction involved repairs to an aging gas pipeline system in eastern Europe which significantly reduced leaks by using sophisticated monitoring equipment and the application of new materials on valves and connection points. The project is expected to generate over 29 million carbon credits (one carbon credit is the equivalent of one ton of carbon dioxide emissions) over the next five years. By stopping gas leaks along hundreds of miles of pipeline, the project will also greatly improve the reliability, safety and productivity of the system.

The second project was a five megawatt (MW) hydro power project in a Southeast Asian country. In addition to providing critically needed electricity for an underserved region of that country, the project will generate and sell carbon credits, thereby enhancing both its cash flow and economic viability.

In the third case, Zurich provided trade credit insurance to support financing enabling a USD 10.65 million investment for the construction of anaerobic digesters and a power plant in Southeast Asia. The anaerobic digesters will generate biogas, which will be used to produce electric power, heat or both. The projects will be registered with the UNFCCC to qualify for CERs under the Kyoto Protocol.

To the left is a hypothetical carbon credit project in southern India that illustrates how such a project would work. The example is a biomass power project using bagasse (waste from a sugar mill) as its primary fuel source. Since most of the electricity in this part of India comes from coal-fired power plants, any renewable power plant offers the potential to reduce the GHG emissions and generate carbon credits. By itself, the project has an IRR of eight percent. However, with the revenue stream generated by the

Case Study of a Carbon Credit Project in India

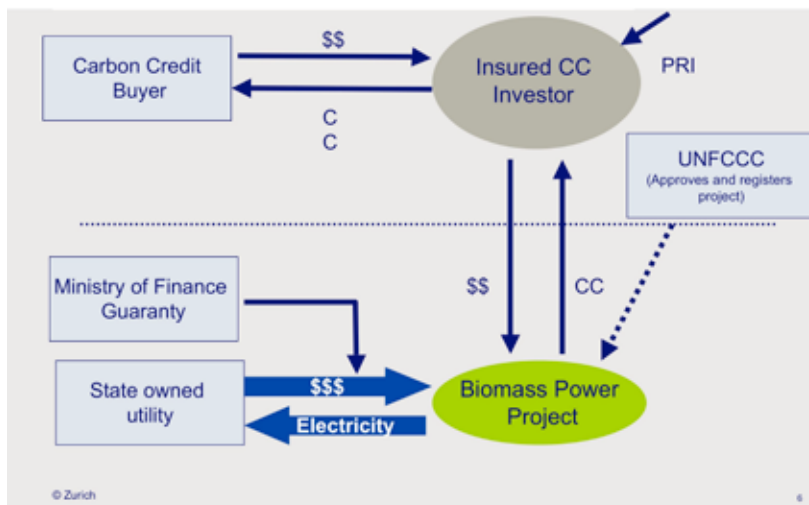


- 32 MW biomass power project in India
- Primary fuel supply: bagasse from sugar cane
- 15 year PPA with state-owned utility company
- Guaranty from Ministry of Finance
- Project cost: USD 40 million
- Project approved and registered by UNFCCC (United Nations Framework Convention on Climate Change) as a Clean Development Mechanism (CDM) project qualified to sell certified emissions reductions (CERs) under the Kyoto Protocol
- Project generates 100,000 CERs per year from 2008-2012
- Revenue from CERs = USD 2 million per year
- Project IRR 8%
- Project IRR with ERUs 12%

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Case Study of a Carbon Credit Project in India Project Structure



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sale of the carbon credits, the IRR rises to 12 percent making it much more attractive to potential investors.

In this case, political risk insurance is purchased by the insured investor – the owner of the carbon credits – to protect itself from political events in India that could result in a loss of those credits.

Given a growing sense of urgency about the need to control and reduce carbon emissions, the carbon credit market is certain to grow. Alone, the carbon trading market is not the solution to the problem of global warming. It can, however, be an important transitional component helping the world community achieve its long-term greenhouse gas emission reduc-

tion goals. As the carbon credit market grows, investors, insurers and other participants in financial markets will continue to step up with capital and new risk management solutions that will contribute to a successful and robust carbon credit marketplace for years to come.

Endnote

- ¹ *Zurich North America Surety, Political Risk and Trade Credit is a part of Zurich Financial Services Group, rated AA- by S&P (2007). Zurich North America Surety, Political Risk and Trade Credit leads the private insurance market with its ability to provide political risk limits up to \$125 million for 15 years and medium-term trade credit limits up to \$35 million for seven years.*