

NEW FRONTIERS IN EUROPEAN SECURITISATION: OPPORTUNITIES IN TROUBLED TIMES

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CHAPTER 06 CAN ENVIRONMENTAL CONTROL BONDS EMERGE IN EUROPE?

By Joseph S Fichera, Senior Managing Director and CEO, Saber Partners LLC, New York

In recent years a number of new environmental laws in Europe and in the US have forced many industries to change their standards on air pollution control. To comply with the new measures, including greenhouse gases and other climate initiatives, many utility companies expect to adopt technology and install equipment that will reduce air pollution. In the US, utilities and regulators have struggled with the growing costs associated with new environmental control standards. According to estimates from the US Environmental Protection Agency, the cost of compliance between 2005 and 2007 is expected to total US\$47.8bn. It also estimated that meeting government air pollution standards for power plants and other corporate entities in Europe will cost billions.

One financing option currently available to utility companies operating in the US is a new type of 'Ratepayer Green Bond' called Environmental Control Bonds (ECBs), which have proven to be among the lowest-cost structured financing tools available to corporations – even as the global credit crunch persists. Those types of utility fee bonds have not yet been taken up by European utilities, but are an innovative solution that should be explored as a viable financing option to comply with the evolving environmental control standards on the continent.

Benefits of ECBs

The ongoing debt crisis and credit crunch in the international capital markets have caused lenders to demand higher interest rates for certain bonds, including those classified as 'securitisations'. However, ratepayer green bonds and some other utility fee-based bonds have different structural features and have indeed been described by issuers in public filings to the US Securities and Exchange Commission (SEC) as "eliminating for all practical purposes and circumstances any credit risk associated with the [related] bonds".

The estimated size of the credit shock in 2007 has climbed from US\$50bn in losses on sub-prime securities to a potential US\$500bn in sub-prime related losses, according to disclosures from the main investment banks. Capital infusions into the market by the US Federal government, the European Central Bank and other central banks, along with a cut of 75 basis points in the Federal Funds rate by the Federal government have failed to resolve this international crisis, particularly in Europe and the US.

But in spite of the credit crunch, ratepayer securitisations – including ECBs – are continuing to become increasingly popular among US state regulators as a lower-cost means of paying for capital-intensive infrastructure investments. Ratepayer-backed bonds were initially issued in the US primarily for the recovery of stranded costs in states that had deregulated their electricity markets.

Since 1994, ratepayer securitisation (also known as ratepayer obligation bonds, securitisation bonds and utility tariff bonds) has been used by many state utility commissions to pay for large investments necessary to finance plants, transmission and distribution, and even 'rainy day' funds (also known as reserve funds) for unforeseeable energy 'events'. Ratepayer securitisation is also used to fund energy conservation programmes, environmental control facilities, electric power purchase costs, hurricane-related damage, and stranded costs arising from deregulation.

In addition, ratepayer green bonds generally carry lower interest rates than traditional utility financings. The financing technique requires regulators and utilities to collaborate on enabling legislation that will authorise their usage. The bonds can be used for environmental control, as well as to finance renewable energy projects in furtherance of renewable portfolio requirements and greenhouse gas initiatives. The ratepayer green bond financing tool is set to help fund rising environmental compliance costs and purchases of renewable energy, while reducing the burdens on electricity consumers.

Since 1994, there have been 40 securitised utility bonds worth a total of approximately US\$40bn issued in the US. In none of these instances, has the utility or its owners been responsible for any portion of the costs or charges associated with securitised bonds.

Exemption from risks for ratepayer green bonds

Ratepayer green bonds benefit from a protected stream of cash in a similar way to a securitisation, but do not have the complexities and risks associated with securitisations. Accordingly, the credit risk on a tariff levy is significantly lower than that of a granular pool of tens of thousands of loans, because the tariff has an adjustment mechanism to cater for a crisis.

To that end, ratepayer green bonds are accompanied by a 'true-up' mechanism guarantee that adjusts the tariff rates to the levels required to ensure that timely payment of interest and principal on the bonds continues without any interruption. This adjustment mechanism will reconcile any shortfall caused by adverse conditions. By comparison, the static pool of assets in a typical securitisation will have a fixed cash flow but, in an economic crisis, no such 'true-up' mechanism to adjust and guarantee rates to ensure full compensation for bondholders.

None of the ratepayer-backed bonds issued in the US have ever been downgraded or even been considered for a downgrading. The bonds have three key characteristics:

- ▶ They are not supported by a pool of receivables, but are supported by a set of protected cash flows from a broad and diverse consumer base that serves to guarantee payment of the bonds;
- ▶ They are enabled by specific state laws and are backed by the state government's regulatory authority, which has jurisdiction over electricity rates;
- ▶ They do not involve the credit of the state or any new taxes.

Because of their extraordinary safety and security, ratepayer green bonds can command the lowest interest rates available to US utilities, municipalities and states in today's market to finance critical environmental projects or programmes and purchases of renewable and clean energy. With lower interest rates and the ability to replace highly expensive equity, these utility fee-based bonds can help protect consumers against large increases in their electricity bills.

European electricity consumers have seen rising rates in the past few years, as power companies in Europe have funded the 'cap and trade' approach to emissions reduction – following the ratification of the Kyoto Treaty – by burdening ratepayers with new costs. A reduction in this 'rate shock' should smooth the progress of vital public environmental initiatives in Europe and is one of the main benefits of ratepayer green bonds. They represent a low-cost opportunity for European utility companies. Many may now be with cash from the recent hikes in power prices, but they may also want to explore this low-cost method of financing to fund growing environmental-related costs.

European environmental legislation

One of the most significant pieces of European legislation that has caused utility companies and generators to look at low-cost financing options is the Large Combustion Plant Directive (LCP Directive), which aims to reduce emissions of acidifying pollutants, particles, and ozone precursors. Under the directive, the European Commission has embarked on programmes to reduce the emissions from large combustion power plants – those with a rated thermal input of equal to or greater than 50MW – in order to combat acidification, eutrophication and ground-level ozone as part of its overall strategy to reduce air pollution.

According to the LCP Directive, plants licensed after 27 November 2002 will have to comply with new emission limit values for sulphur dioxide (SO₂) and nitrogen oxide (NO_x).

The LCP Directive also requires significant emission reductions from "existing plants" (that were licensed before 1 July 1987) to be achieved by 1 January 2008 by either:

- ▶ Individual compliance with the emission-limit values established for new plants; or
- ▶ A national emission-reduction plan that achieves overall reductions calculated by using the emission-limit values.

The LCP Directive allows existing combustion plants to be exempted from compliance with emission limit values and from inclusion in a national emission reduction plan, if the operator will not operate the plant for more than 20,000 hours after 1 January 2008 and close it down no later than 31 December 2015. Coal-fired plants that produce all the three

main pollutants – SO₂, NO_x and carbon dioxide (CO₂) – in large volumes are required to fit pollution reduction technologies such as Flue Gas Desulphurisation (FGD) by the start of 2008 or else operate for no more than 20,000 hours up to the mandated deadline in 2015. Gas-fired plants are less affected by the restrictions as they create lower levels of pollution (and do not emit SO₂), but measures that will come into force in 2016 will require many plants to invest in pollution control technologies or face fines and closure, according to a report from consultants Frost & Sullivan.

Estimated costs of air pollution control equipment

Western Europe

As a result of the new legislative mandates, there has been rising demand for environmental control equipment. According to Frost & Sullivan, the market for equipment to control air pollution in power plants markets in Western Europe has endured a tough time recently, but the passage of the LCP Directive in 2001 has helped to revive it.

The directive has forced generators to decide whether they want to invest in APC technologies by the 2008 deadline – and keep plants running in the long term – or opt out of the directive and close their plants by 2016. The first LCP Directive compliance deadline came in at the beginning of 2008, and generators who wanted to keep plants operational in the longer term had no option but to invest in FGD technology by this date, the report pointed out.

While some countries have already made the investment necessary to ensure compliance, others are working to meet the deadline. To that end, ratepayer securitisations – like those that have been used in the US – can be explored as a viable financial solution for European generators. Electricity rates in Europe have sky-rocketed in recent years as costs to comply with the ‘cap and trade’ approach of new greenhouse gas legislation have been passed on to the consumers. Consumers in certain parts of Europe have paid roughly 25% more for electricity due to the implementation of such programmes, and many would be opposed to raising rates further to fund additional environmental costs. Ratepayer-backed bonds would be a safe and secure option and would carry low costs for the issuers, and avoid rate shock to the consumers.

Central and Eastern Europe

Frost & Sullivan’s recent analysis concluded that the market for air pollution control equipment in power plants markets across Central and Eastern Europe (CEE) was worth €407m (US\$844.42m) in 2006. It is expected to reach €785m (US\$1.63bn) in 2013.

The CEE region has a large number of coal-fired plants and many states are committed to retaining coal as a key part of the fuel mix in the future, according to Frost & Sullivan. High gas prices have made it economically expedient to invest in overhaul programmes, and the result has been an improvement in plant efficiencies across the region.

However, among the major fuel sources, coal is by far the most polluting in terms of emissions, releasing high levels of dust, CO₂, SO₂ and NO_x. The emergence of technologies such as fabric filters, electrostatic precipitators, FGD and selective catalytic reduction (SCR) are all likely to help reduce these emissions significantly. Buyers of this air pollution control equipment and technology will constantly be seeking innovative ways to fund the purchases, and the ECBs offer a viable alternative. Those US issuers who have used them to finance the purchase of equipment to control air pollution have achieved unprecedented credit spreads (interest rates) on the debt.

Legislative framework in the US

In the US, the Wall Street-based financial consulting firm Saber Partners LLC is working to encourage the passage of a legislative framework that will make ECBs available to more state regulators and their utilities and power providers. A defining and common feature of these securitisation transactions is that they all have been made possible by specific enabling state legislation, which establishes a legal framework for the creation of a new type of intangible property right under state law. That law includes an irrevocable regulatory guarantee to always adjust rates to whatever level is necessary to ensure timely payment of debt service on the bonds known as the ‘true-up’ adjustment process.

In general, this new, intangible property will initially be owned by the utility. Like any other property owned by the utility, it can be pledged as collateral in a financing. In this case, the property created is the right to bill, charge, and collect a specific charge on some or all retail electricity consumers in a given electricity transmission and distribution area.

New US template

In the US, the Public Service Commission of West Virginia and two units of incumbent electric utility Allegheny Energy (Monongahela Power and Potomac Edison), closely collaborated to complete the first ratepayer green bond offering that sold in April 2007. Saber Partners served as the chief advisor to the commission as it oversaw the structure, marketing and pricing of the triple-A financing, which secured the lowest credit spreads ever from investors for such a bond, reflecting their safety and security versus other investments.

These ratepayer green bonds are projected to save West Virginia ratepayers about US\$130m in the environmental programme costs related to a single coal-fired plant. The transaction's success, which could be replicated in Europe, demonstrated that the unique safety and security of this type of bond could significantly reduce the burden to ratepayers throughout the country of funding billions of dollars of environmental compliance costs and purchases of renewable energy throughout the country.

That SEC-registered offering created a template that can be adopted by other utilities and generation owners, under the supervision of regulators across the country. To move forward and to achieve similar success in Europe, regulators, environmental advocates, consumer representatives and utilities will need to work together on special enabling legislation to authorise these types of bonds tailored to the specific requirements of each European state and the market.

In recent years, there has been a gradual shift among European utilities from public power entities to privately owned companies, and the consequent limit on government funding for the expenditure means more opportunity to employ other low-cost financing methods of accessing capital.

Utility fee securitisation

A utility fee securitisation is a unique form of utility corporate debt financing. In the US, a significant advantage of securitisation is that the credit quality of the future revenue stream will be much higher (generally triple-A) than that of parties associated with the transaction, thereby obtaining significantly lower interest rates than would otherwise be available because of the better credit rating.

Another significant advantage of securitisation is that it is non-recourse to the parent and protects the credit quality of the parent. Shareholders get an improved balance sheet and more headroom in rates for other financings that may earn an equity return. Thus, securitisation offers an efficient form of off-balance sheet financing that has the potential of gaining the most favourable cost of funding from the capital markets with benefits for both electricity consumers and shareholders. Fundamentally, a utility tariff bond programme in the US does the following:

- ▶ Imposes a non-bypassable charge (based on electricity consumption) on the electricity bill of all retail electric consumers in a utility's transmission and distribution area;
- ▶ Collects the charge and turns it over to a special purpose, bankruptcy-remote entity to pay principal and interest on the bonds;
- ▶ Guarantees that the government will adjust the charge at least annually to guarantee sufficient funds are available to pay principal and interest and all expenses of the transaction on time.

The charge is termed non-bypassable because customers cannot avoid paying it by switching service providers or through self-generation. The charge is required by law or regulation to be set and continually adjusted to a level that guarantees the payment of principal and interest on the bonds and all expenses of the transaction. The state and the commission also give bondholders a specific pledge never to interfere with their rights to receive payments on the bonds.

Ratepayer savings and shareholder benefits

There are two basic sources of economic benefit. First, significant savings occur when utilities use ratepayer-backed bonds to replace conventional utility debt and equity financing. It is effectively off-balance sheet and non-recourse to the utility. The utility and its shareholders are fully protected. This means that the utility operating in the US can finance the asset or expense in question with nearly 100% debt rather than its normal capital mix of about 50% debt and 50% equity without any impairment of its credit structure.

The savings to consumers are even greater for a utility that has a high level of equity in its capital structure. The cost of equity is much higher than the cost of debt. The annual cost of debt in today's environment is typically 5%, whereas the annual cost of equity is 11%. In addition, there are further savings from avoidance of the income tax that would otherwise be payable on the equity return. These savings accrue directly to the consumers in the form of lower overall tariffs than would otherwise be levied.

Second, these ratepayer-backed bonds offer cost savings in the capital markets commensurate with their extremely high credit quality (and rating). In general, the better the credit rating, the lower the interest cost. By separating the operating utility from the issuer of the bonds (a so-called bankruptcy-remote entity) and isolating the cash flow with the guarantee from the commission to always adjust the charge to repay the bonds, the credit-rating agencies associated with ratepayer-backed investors will evaluate the bonds as independent of the utility and its traditional debt, which has numerous risks associated with its repayment. Those risks are just not there with ratepayer-backed bonds.

Furthermore, and most importantly, the broad-based charge will be imposed on substantially all retail electricity consumers in a utility's franchise area. As has been stated before, the charge will be automatically adjusted at given periods to the level that is necessary to repay the bonds on time, over their life, as required by the enabling statute and a commission order. Thus, so long as the charge does not exceed 20% of the bundled rate to consumers, the bonds will be rated triple-A. This category is the top in the credit rating system.

The savings commensurate with this top-quality credit in the capital markets are not automatic. Not all triple-A rated bonds price or trade at the same yield. There are a number of steps that are required at the time ratepayer-backed bonds are structured, marketed, and priced. These steps will achieve the lowest cost available consistent with market conditions at the time of pricing and capture the full economic value of the unique government guarantees embodied in the legislation and the irrevocable nature of the financing order.

Because the bonds require more structuring than traditional corporate bonds, transaction costs are higher. This does not need to be an obstacle to the issuance of the bonds. Rather, it requires more diligence and work on the part of regulators and companies to identify cost savings and economies of scale during the transaction process. Regulators and companies need to think about various initiatives and co-ordination of efforts to reduce burdens on all ratepayers.

Finally, in approaching the structure, marketing, and pricing of the bonds, utilities and regulators should see it as an active partnership. Each side brings an important perspective to the negotiation and all need to be empowered to co-operate in making decisions that serve the economic interests of each of their constituencies. A joint decision-making process will preserve the integrity of the ultimate outcome for shareholders and ratepayers both in the US and in Europe.

Investment security

Utility fee bonds, including ratepayer-backed bonds and ECBs can be a safe and secure alternative investment for portfolio managers concerned about the recent turmoil in the capital markets that has stemmed from losses on sub-prime loans and other high-risk securities.

The bonds offer a greater security than other investments as their spreads are less volatile in adverse market conditions. They appeal to conservative investors, including pension funds and insurance companies. As mentioned earlier, in their public filings to the US SEC issuers have described them as "eliminating for all practical purposes and circumstances any credit risk associated with the [related] bonds." The bonds all carry a triple-A rating, and none has ever suffered a downgrade – unlike other comparable securities sold in the corporate and asset-backed securities markets.