

STRUCTURING LARGE-SCALE PROJECT FINANCING

Canadian projects, particularly in the Energy and Public-private Partnerships (P3) sectors, are increasingly relying on attracting foreign capital as well as other international participants

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A significant part of the Canadian cross-border practice involves the structuring and preparation of the legal documentation for large-scale project financing. Many Canadian projects are financed by traditional sources and, to some extent, through Canadian capital markets, both debt and equity.

However, as the size and scope of these projects have grown significantly over the past few years, Canadian projects, particularly in the Energy and Public-private Partnerships (P3) sectors, are increasingly relying on attracting foreign capital as well as other international participants.

Power

Canada is endowed with large reserves of conventional and non-conventional oil and gas, coal and uranium and has significant capacity for generating hydro-electric power. It is among the world's largest producers of most types of energy and one of the largest energy exporters, principally to its neighbor, the United States. Worldwide growth in demand, increasing fuel costs and concerns about climate change are driving a tremendous boom in the development of projects in Canada's energy sector.

Historically, most of the electricity industry in Canada has been publicly owned through provincial "Crown corporations." However, recent deregulation created many opportunities for project financing of independent power projects in Canada, both from conventional and emerging renewable sources.

Power projects typically require significant funding and entail risks, often in excess of what the sponsors may be willing or able to assume. The project finance structure may be appealing to sponsors because it:

- provides financing that is legally non-recourse to the sponsors;
- achieves "off balance sheet" accounting treatment of project debt, as such debts are not included in the sponsor's financial statements;
- allows highly leveraged structures, often in the form of a reduction in the cost of capital by substituting lower cost, tax deductible interest for higher cost and taxable returns on equity; and
- allocates project risks among participants, thereby reducing each participant's risk of loss.

Canadian Electricity Market

Growth in electricity demand in Canada and the United States, together with the retirement of environmentally challenged facilities, will require increases in generation capacity in both countries by approximately 25 percent by 2025.

Electricity usage in the United States is projected to grow more than twice as fast as committed resources over the next 10 years and in parts of Western Canada, demand is projected to outpace resource growth within about two years.

With respect to policy and regulatory oversight, the federal government has jurisdiction over electricity exports and international and designated inter-provincial transmission lines. The provinces and territories have jurisdiction over generation, transmission and distribution of electricity within their boundaries, including restructuring initiatives and pricing.

In Canada, hydro-electric power is the dominant generation technology (followed by coal-fired and nuclear) but interest in wind power, biomass, small hydro, geothermal energy, fuel cells, solar cells, ocean energy and clean coal as credible sources continues to grow. This heightened interest reflects concerns about supply adequacy, air quality and climate change and the interest in energy supply diversification.

Market assessments suggest that wind power, small hydro and biomass technologies are well established and have good growth potential in both near and longer term. Wind and solar, in particular, are increasingly attractive resources that provide multiple benefits including fuel mix diversification and greenhouse gas emission reductions. For most other technologies, further cost reductions and better access to markets are required to improve relative competitiveness.

Over the past decade, many North American jurisdictions have restructured their electricity markets. In the traditional market structure, vertically integrated utilities provide generation, transmission and distribution services to a given area only. Prices are regulated and based on the cost of service.

Restructuring aims to promote competition in the generation, wholesale and retail sectors by unbundling the three functions. Competition is expected to increase efficiencies and decrease costs. Both wholesale and retail access to transmission grids aim to benefit buyers by increasing competition and efficiency.

The extent of restructuring in Canada varies among provinces, with Alberta and Ontario furthest in such efforts. British Columbia, Saskatchewan, Québec and New Brunswick have wholesale access and retail access to large industrial users, while Manitoba allows wholesale access only. Several provinces have introduced competition in the generation sector and provided open access transmission tariffs. Independent power producers (IPPs) may

bid on new generation development and use the transmission system to access wholesale markets.

Provinces that seek electricity generated by IPPs are increasingly pursuing environmentally responsible policies by awarding power generation contracts to IPPs that produce energy from renewable sources. Many provinces, including Manitoba, Québec and New Brunswick, have recently attempted to supplement conventional energy sources by requesting proposals from IPPs to build, and sell energy from, wind power generation facilities. In 2007, under its Renewable Energy Standard Offer Program, Ontario's power authority entered into 241 contracts with developers to generate electricity from small-scale power projects using wind, solar, water and biomass resources. However, among Canadian provinces, British Columbia is setting the most ambitious targets with respect to renewable power generation. British Columbia's 2007 Energy Plan outlines the

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province's intention to promote the generation of its energy from renewable sources. In accordance with this policy, BC Hydro, the province's sole energy purchaser, is expected to award power generation contracts exclusively to IPPs that produce "clean power" in their upcoming 2008 call for tenders.

All projects over a certain size are subject to the provincial environmental assessment (EA) process and must obtain an EA certificate before proceeding. In addition, projects with significant impacts

on First Nations' lands, or on birds, wildlife, national parks, waterways, fisheries, telecommunications transmission and/or aviation, or which are located on federal land or receive federal funding (other than tax relief) are also likely to be subject to a federal EA as well as other environmental and regulatory laws.

Most projects require further provincial statutory permits or authorizations associated with project design, construction, operation and land use. Projects on Crown land or which make use of Crown resources, such as a hydropower project's use of Crown water, must also secure the rights in same.

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other bylaws. Finally, the Supreme Court of Canada has recognized a duty for the government to consult and, in certain cases, accommodate First Nations when the project is located in an area subject to claims of Aboriginal title or rights.

Over the last few years, the federal and provincial

governments have adopted a variety of policies and incentive programs to encourage the development of renewable energy, including direct subsidies, tax measures and renewable energy content targets. There continues to be significant debate over policy and implementation of legislation concerning climate change.

Project Finance Considerations

The continuing growth of energy demand in Canada is expected to fuel innovation and growth in the project financing of power generation from both conventional and non-conventional sources. In the case of project finance debt, lenders look for their loans to be repaid from the revenues generated by the operation of the project. Whether or not a particular project's structure forms an acceptable basis for project financing is a question of art rather than science. The bankability or financeability of a project is a fluid concept and tends to be project-specific. Nevertheless, in all project financings the primary objective is to allocate project risks to parties best able to assume them.

Lenders will take security over all the project assets, with focus on the cash flow generated and the project contracts rather than the net realizable value of the secured assets. Typically, the project will be legally and economically self-contained or "ring-fenced" through a special purpose vehicle whose only business is the project. As financing is raised for specific projects, and not for an established business, lenders rely on the project's anticipated cash flow. This is in contrast to corporate debt provided against a company's financial statement. The main security for the lenders consists of the project, the project entity's contracts, licenses and property rights.

The extent to which lenders will require guarantees from sponsors will depend on the latter's obligation to contribute equity and risk allocation. Generally, recourse to the sponsors will be limited to the required equity contribution; hence the terms "limited-recourse" or "non recourse" are often used to describe project financings. Repayment terms longer than those on corporate facilities are common, depending on the term of the project contracts and risk allocation.

The project must have a sound business rationale, should make fundamental business sense and should have a long-term power purchasing agreement (or similar agreement) with a highly creditworthy counterpart. The commercial arrangements of a project will

vary depending on its specific nature, but the project entity will invariably be the central figure.

The project documents aim to allocate the risks and to create a structure to support the leveraged capital structure necessary for project finance. Typically, equity agreements will govern the relationship as amongst sponsors as well as *vis-à-vis* the project entity (the most important issue here is the sponsors' obligation to contribute equity funding). Credit and security documents will govern the relationship between the lenders and the project entity.

Commercial arrangements for the construction and operation of the project will seek to allocate construction risk (the risk that the project will not reach commercial operation as scheduled and budgeted) and operational risk (the risk that the project will not perform as projected and budgeted). For independent power projects, there will typically be a long-term power purchase agreement underpinning the revenues required to service the project debt, and fuel supply agreements (or rights to use renewable fuel resources) to secure reliable sources of fuel for the project. Further, all required authorizations and licenses, a suitable site (usually through freehold ownership or leasehold arrangements), arrangements for any ancillary goods or services and a comprehensive insurance package must also be procured.

Project risks that must be considered and allocated include:

- Commercial risk (market and price risk for power offtake — merchant or contracted; spot market or guaranteed price; fuel commodity market and price risk and “spark spread”).
- Currency risk (matching of project costs and revenues) and interest rate risk (floating interest rates on project debt).
- Legal risk (lender's remedies on default, choice of jurisdiction, dispute resolution mechanisms).
- Regulatory and political risk (regulatory delay, changes in regulatory structure, change in costs and tariffs, taxation, environmental legislation).
- Construction risk (on time and on budget, allocation of risk between the contractor and the owner, consideration of the critical path and key milestones).
- Operating risk (performance of the generator as projected, certainty of maintenance

costs, risk associated with the choice and operation of the operator).

The project's financing structure will vary but

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typically involve a combination of sponsor's equity and senior debt (in the form of commercial bank debt or capital markets debt, or both). The sizing of the senior debt is largely dependent on the projected cash flow of the project, so an 80:20 debt to equity ratio (or higher) is not uncommon.

The structure will be agreed upon and often set forth in a commitment letter from the arranging financiers, attached to a financing term sheet specifying the scope of the commitment, loan amount and term, use of proceeds, repayment terms and an outline of the principal terms of the deal. Once agreed upon, the lenders will conduct their detailed due diligence on the project and proceed to negotiate the credit and security documents.

The credit documents will typically include representations and warranties by the project entity, covenants from the project entity (to monitor and regulate the project entity), forecasting provisions (to arrive at the agreed financial model for the project), verification of the cost to complete at each drawdown (to confirm there are sufficient funds to complete), financial ratios, project account structures (secured bank accounts and a “cash flow waterfall” that regulates the inflows and priority of application

of outflows of cash to the project), conditions precedent (that must be satisfied to permit the initial advance of funds and to regulate loan drawdowns) and events of default (to permit the lenders to exercise set remedies in set circumstances).

Like other types of financings, the security package in the project finance context is intended to safeguard the borrower's assets from other creditors. However, unlike other types of financings, collateral is typically only useful to the extent it can be operated, as the lenders have little expectation of realizing the full value of the loans in a foreclosure sale. Instead, lenders would prefer to take control of the project assets, whether for operation or resale.

The following is a list of common types of security that lenders in Canada may require:

- assignment of project contracts, permits and insurance proceeds and policies;
- a general security agreement creating a security interest in all of the borrower's (or guarantor's) present and after-acquired property, assets and undertaking (including cash flows generated by the project);
- a debenture charging all present and after-acquired property, assets and undertaking of the borrower (or guarantor) and which can include a specific mortgage and charge of real property;
- a pledge of securities whereby ownership of the borrower or guarantor is taken as collateral;
- security under section 426 or 427 of the *Bank Act* (Canada) which provides for a special inventory security solely by Canadian chartered banks to secure direct indebtedness (as well as certain contingent obligations in respect of bankers' acceptances and letters of credit) from specific classes of borrowers;
- in Québec, security can also be taken on any type of asset, whether real (immovable) or personal (movable), tangible or intangible, in the form of a "hypothec"; and
- a negative pledge whereby the project entity undertakes (usually through a covenant in the credit documents) to refrain from creating any security interest, lien or encumbrance over its assets for the benefit of third parties except in limited circumstances.

In addition, lenders will seek "direct agreements" or "consents" with key project counterparties acknowledging and consenting to the lenders taking

an assignment of the project contracts as security. These are sometimes negotiated concurrently with the project contract. The purpose is to create a direct relationship between the lenders and the project contract counterparties whereby lenders can step in to preserve project contracts where necessary.

Recently, the province of Alberta has been the major recipient of energy-related project financing through the continued development of the oil sands deposits. This non-conventional resource attracted, in 2006 alone, total investments of \$14 billion according to the Canadian Association of Petroleum Producers. As well, there is a number of ongoing energy-related projects in hydro, wind and biomass that have contributed to significant investments in the provinces of British Columbia, Ontario and Québec.

The global market uncertainty resulting from the recent US sub-prime mortgage collapse may also have an impact on financing terms for projects in Canada. The fear of prolonged economic slowdown in the United States is causing many lenders to exercise increased caution prior to extending financing. The full impact of this "credit crunch" on Canadian project financing remains to be seen.

Public-private Partnerships In Canada

Much of Canada's public infrastructure is approaching the end of its useful life and needs to be modernized or replaced. New infrastructure is required to accommodate the country's steady economic and demographic growth over the past decades. Therefore, while combined (real) federal, provincial and municipal government spending has increased significantly over the past four decades, it has been insufficient to offset the effects of wear and tear and growth. As a result, Canada today finds itself in the position of having what is generally acknowledged to be a substantial infrastructure deficit, which, according to the TD Bank's May 2004 report entitled "Minding the Gap," amounts to anywhere between C\$50 and C\$125 billion. Since, as the report notes, "a deteriorating capital stock will increasingly cut into gains in productivity and living standards," it has become increasingly clear that action must be taken. The federal government also has recently committed to investing C\$33 billion through 2013 to build roads and transit lines, rehabilitate bridges and water systems and to upgrade ports and airports, at least some of which will be invested in P3 projects.

The difficulty is, of course, that as governments

face pressing demands for increased spending on the operating side – in particular, for education and health care – capital spending priorities tend to take a back seat. The money is just not available. So, somewhat grudgingly, Canadian governments (of various stripes) have been forced to consider more creative options to restore and expand the country's public infrastructure assets. One of the options gaining currency over the last few years is the adoption of public-private partnerships.

Under Canada's constitution, the responsibility for much of the country's public infrastructure rests with the provinces or with municipalities (which are creatures of the provinces and, as a result, subject to provincial regulation). Roads, highways, transit, schools, universities, hospitals, water and sewage are all subject (directly or through the municipalities) to provincial regulation. As a result, the federal share of public infrastructure is estimated by the TD Bank report to be only 7 percent, while the provincial and municipal shares account for a collective 93 percent.

Therefore, the impetus for change must largely come from the provincial and municipal levels of government. And so it has. The election of a Liberal government in British Columbia earlier in this decade saw a pronounced commitment to infrastructure renewal in general and to P3s in particular. Prior to this, P3 had been discussed in conferences for more than a decade but had very little to show for itself in the way of tangible projects (with the exception of the quasi-P3 Highway 407 toll road project in Ontario).

The BC government demonstrated its commitment to the P3 concept by establishing Partnerships BC, a provincially owned corporation whose mandate is to analyze and recommend infrastructure projects that might be undertaken using a P3 model and then to implement them. With almost religious zeal, Partnerships BC has developed and assisted in the procurement of numerous major P3 projects including highways, bridges, transit, hospitals and water treatment facilities. Slower to follow suit were the other provinces but, haltingly and with baby steps initially, they are getting on board the P3 train.

Ontario, in particular, after an initial consultation process following the election of the current provincial government in October 2003, has established a dedicated agency, Ontario Infrastructure Projects Corporation (Infrastructure Ontario), and has developed a program known as "Alternative Financ-

ing and Procurement" involving an initial slate of more than 30 projects; a few of which are P3s while the remainder are largely build-finance projects. These Ontario projects are overwhelmingly health-care related with a few in the other sectors (such as courthouses, a detention center and a government data center). It is anticipated that additional projects will be introduced as familiarity with the approach increases and projects are closed successfully.

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with the responsibility for the development and implementation of P3s. A number of projects are currently underway in Québec including highways (Autoroutes 25 and 30), roadside rest stops and a concert hall in Montreal. As well, the two so-called "super-hospitals" in Montreal will also be procured using a P3 model.

While Alberta has been somewhat slower to embrace P3s, given its budget surpluses and lack of provincial debt, two highway projects – the Anthony Henday Drive in Edmonton and the Calgary Ring Road – have been procured using a P3 model as is a project involving a number of Calgary and Edmonton schools.

The federal government has recently indicated a growing commitment to P3s. Through various tax rebates, the federal government is providing municipalities with C\$5.8 billion through 2014 that can be used for infrastructure priorities. The federal government has committed to provide C\$25 million over five years to set up a federal P3

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office and is establishing a C\$1.26 billion National Fund for P3 projects. The federal government has committed to undertaking substantial improvements to the Windsor-Detroit border crossing using a P3 approach and has also committed to providing funding, jointly with the relevant province, in connection with the Kicking Horse Canyon highway improvement P3 project in BC and the A30 highway project in Québec.

P3 Structures

After some initial uncertainty, Canadian P3 projects are being structured using a build-operate-transfer (BOT) model very similar to that seen under the United Kingdom's Private Finance Initiative (PFI). The concession is the cornerstone of the BOT project finance model. A concession is a license, which, in the context of P3 project finance transactions, is granted by a government or quasi-governmental authority to a special-purpose project vehicle. In P3 transactions, BOT projects are commonly referred to as DBFOs (Design Build Finance Operate) or DBFMs (Design Build Finance Maintain).

DBFOs are typically structured through the granting of a concession by a governmental authority to a private-sector entity (usually a special-purpose vehicle), which is required to build the relevant infrastructure, finance it, operate and/or maintain it for a fixed period (usually 20 to 30 years) and, at the end of the period, hand it back to the authority in a condition stipulated under the concession agreement.

Typical provisions in a concession agreement include:

- an obligation on the project entity to design the facility to a stated output specification;
- an obligation to build the facility by a set date;
- an obligation to operate and/or maintain the facility to stipulated standards throughout the term of the concession agreement;
- provisions entitling the project entity to charge fees or fares to the public for usage of the facility or requiring the authority to pay a so-called unitary charge to the project entity (this latter approach is in fact the most common approach in Canadian P3 transactions to date). Where the authority pays a unitary charge to the project entity, a payment mechanism will be set out in the concession agreement based on availability and performance (typically including a demerit or failure point system leading to warning notices and ultimately to deductions from the unitary charge for sub-standard performance or unavailability of the facility);
- provisions allowing the authority to intervene and run the project or terminate the concession in the event of the project entity's failure to satisfy the requisite standards set out in the concession agreement;
- provisions for the payment of termination compensation in a variety of circumstances; and
- provisions for the transfer of the assets at the end of the concession term.

Conclusion

Although certain criticisms have been leveled against P3s, they are an undeniable trend worldwide that is gaining popularity in Canada. Ultimately, the last word on P3s goes to John Prescott who, in a speech delivered when he was the Deputy Prime Minister of the UK, said: “To me, the essence of PPPs is flexibility — finding practical solutions to problems that matter ... PPPs ... are nothing to be scared of. They are just a way of helping to provide

a better quality public service. They bring private sector benefits into the public sector. And the public sector is always the principal client for the underlying service. This means that we can harness the best of both public and private sectors.”

In other words, this is not about ideology; it’s about getting assets built quicker and more effectively than the old-fashioned way.

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