



INCOME TAX ISSUES RELATED TO ENERGY PERFORMANCE CONTRACTING



An Understanding of Tax Rules Could Help With Your Energy Efficiency Initiatives

The Government of Canada has worked with industry for more than 25 years to promote energy-efficient industrial practices. Building on the success of this partnership, Natural Resources Canada's (NRCan's) Office of Energy Efficiency has developed this document that deals with tax issues that could affect businesses that enter into an energy performance contract (EPC). Note that this review is intended as an overview only. It is not to be considered as advice. Readers must consult their tax advisors to obtain such advice.

The taxes that must be considered in a discussion of EPCs include:

- federal and provincial income tax
- federal and provincial taxes on capital

• federal and provincial sales taxes (federal "GST" and provincial "PST")

This document applies to businesses subject to regular federal and provincial taxes. Governments, MUSH (municipal, university, school and hospital) and "not for profit" organizations have a unique status under federal and provincial tax law. Accordingly, although such organizations often enter into EPCs, their taxation issues are not considered here as this document was written for an industrial audience. However, the portions of this document that deal with non-tax commercial issues are applicable to these organizations.



Improving energy efficiency reduces greenhouse gas emissions that contribute to climate change.





This document is also limited to tax issues as they relate to the user of the equipment for which the EPC is designed. It is not aimed at suppliers of EPC equipment or at lenders.

Income tax matters

The income tax consequences to businesses that enter into energy saving expenditures flow from the form of the EPC agreement. The central income tax issue relates to the amount of, and the timing of, tax deductions for payments under an EPC agreement.

The system for claiming the cost of equipment – the CCA system

If the user of the equipment related to an EPC decides to purchase that equipment, then that

user can generally claim capital cost allowance (CCA) on the capital cost of the property. CCA is the Canadian tax system's equivalent to accounting depreciation, which is specifically prohibited as a deduction under the *Income* Tax Act (Canada), referred to here as the "Act." Various classes of property are defined in Schedule II of the regulations made under the Act. The rates at which assets can be written off for tax purposes are in Part XI of these regulations. Some provinces have their own CCA rules, while others use the federal rules. Although federal and provincial taxes are levied under different statutes, the CCA rules for computing income for federal and provincial tax purposes are normally the same. Nevertheless there are differences in some instances, and businesses should consider both federal and provincial CCA rules before entering into an EPC.



By taking advantage of energy performance contracting, DuPont Canada Inc. is able to benefit from over \$23 million worth of energy efficiency upgrades and operational improvements with no up-front investment or assumption of debt. Understanding accounting rules allowed DuPont to go ahead with this major energy efficiency project without incurring debt to the company. This way DuPont can maintain an attractive return on equity, by paying back this investment over the next 10 years with the resulting energy savings.

The Act permits a taxpayer to deduct, over time, the cost of an asset (e.g., equipment) at various rates, as explained later. From time to time, various federal and provincial incentives permit an accelerated write off of the cost of certain equipment, which creates a tax incentive to acquire this equipment.

The CCA system is complex, but the basic principles can be summarized fairly easily. All of a business's equipment with the same CCA classification is included in a single CCA pool. When a taxpayer acquires new equipment, its cost is added to the appropriate pool. As equipment is sold or otherwise disposed of, the lesser of either the cost of the asset or the proceeds of disposing of it is deducted from the pool. The unamortized balance of the pool is referred to as the "undepreciated capital cost" (UCC). A taxpayer, e.g., a company, at its discretion, can deduct from income a prescribed percentage (up to a maximum) of the pool's UCC in any year in which it uses equipment in that pool to earn income. However, the amount of CCA a taxpayer may claim in a year is reduced by 50 percent of the net additions to the CCA class in a year. (This reduction is referred to as the "half-year" rule). After the final item of property in a CCA pool is sold or otherwise disposed of, the taxpayer can claim the remaining UCC as a "terminal loss." If the amount deducted from the pool on the sale of an asset (the lesser of cost or proceeds) exceeds the UCC of the pool, this excess amount is added to income as a recapture of depreciation. If the asset is sold for more than its original cost, the difference

between the proceeds and the original cost is a capital gain, only one-half of which is currently included in income.

As an example, consider equipment in a CCA pool with a 30 percent rate. If a taxpayer acquires an asset for \$100, which is the first piece included in the 30 percent pool, the taxpayer may deduct \$15 in the year of acquisition [$$100 \times 30$ percent imes 1/2 (due to the half-year rule)]. If the taxpayer claims the full \$15 of CCA in the first year, the UCC of the pool at year's end will be \$85. Therefore the taxpayer may claim up to \$25.50 of CCA in the next year (30 percent of \$85). In general, a taxpayer may claim up to the maximum CCA in each year. So, if the taxpayer wished to claim only \$10 of CCA in the first year, the UCC at year's end would be \$90. Accordingly, the claim in the second year would be limited to 30 percent of \$90 or \$27.

There are many different CCA classes, some of which are quite specific. Accordingly it is necessary to check each purchase to determine the CCA class into which it falls. The various classes carry rates ranging from 4 to 100 percent. Some types of equipment, and certain taxpayers, are not necessarily subject to the half-year rule. In some cases each separate property has its own CCA class so that if an individual item is disposed of, any remaining UCC can be deducted for tax purposes. Alternatively, if the proceeds exceed the UCC, a taxable recapture will result. In this environment, the tax deductions for different equipment can vary widely.

Contractors often do not provide an explicit breakdown of the cost of goods and services invoiced in a single document. If no such breakdown is provided, a purchaser must carefully examine the invoice to split the total price in an appropriate manner. Where a number of items are grouped into a single purchase and the method of allocation has tax consequences for both the vendor and the purchaser, the Canada Customs and Revenue Agency expects the vendor and purchaser to use the same allocation.

To illustrate the importance of the allocation of costs, consider a \$10,000,000 energy-saving retrofit to a building (see table 1). The subcontractor may issue an invoice that does not allocate the \$10,000,000 cost among the various items sold. The CCA rate for a building as described in Class 1 of Schedule II to the regulations under the Act is 4 percent. Class 1 also includes component parts of a building, such as wiring. Most equipment is included in Class 8, which has a 20 percent CCA rate. But,

if the equipment fits into Class 43.1, as "heat recovery equipment" used primarily for the purpose of conserving energy, then a 30 percent rate applies. Installation costs and other miscellaneous service costs included in an invoice should be allocated to the assets acquired.

The difference between allocating the entire \$10,000,000 cost to "building," which has a CCA rate of 4 percent, as opposed to allocating the \$10,000,000 cost in a more favourable manner to take advantage of higher rates is significant. If we ignore the half-year rule, the deduction for CCA at 4 percent would give an initial CCA claim of only \$400,000. If we assume an average CCA rate of 21.8 percent for the actual split, the first year claim would be \$2,180,000.

It is the responsibility of the purchasing taxpayer, not the contractors, to keep up to date with CCA changes. So taxpayers entering into energy performance contracts need to be alert to the possible savings and should seek to have the costs allocated in any invoice in the most beneficial manner.

	CCA RATI
\$5,000,000	30 percent
\$3,000,000	20 percent
\$2,000,000	4 percent
	\$3,000,000

Taxes on capital: provincial and federal

All provinces except Alberta, Newfoundland and Labrador, and Prince Edward Island impose a tax on the capital of corporations. The provincial capital tax rates vary from 0.25 to 0.64 percent of the capital tax base, giving an annual tax of between \$2,500 to \$6,400 per million dollars of taxable base. In general, there are de minimus deductions for small companies. Provincial capital taxes are currently allowed as a deduction in computing both federal and provincial income tax.

at the fiscal year-end. Corporations can normally deduct some portion of the year-end, carrying value of shares and certain debt instruments in other corporations as an "investment allowance."

The Government of Canada imposes a capital tax on large corporations (LCT) at a rate of 0.225 percent, giving an annual tax of \$2,250 per million dollars of taxable base. The LCT base is similar to the capital tax bases used under provincial law, although corporations are entitled to deduct \$10,000,000 from the LCT base, which must be split between related corporations. Unlike provincial capital tax, LCT is not

Each province defines its own capital tax base. Generally speaking, all provincial bases include all share capital, retained earnings, liabilities (other than current accounts payable), reserves not deducted for tax and surpluses. The capital tax base is usually computed based on the numbers that appear on the right side of the balance sheet (subject to a variety of adjustments)

deductible in computing the federal or provincial income of a corporation. However, corporations pay a federal surtax imposed at a rate of 1.12 percent of taxable income. This surtax can be credited against the LCT. Corporations report LCT as a tax expense, whereas provincial tax is deducted as an expense in computing income before taxes.

Corporations that incur debt to acquire assets will increase their balance sheet liabilities, and thus their capital tax base. Similarly, corporations that sell investments that are included in the investment allowance to purchase tangible assets will reduce that deductible allowance and thus increase their capital tax base.

If a large project is contemplated, the incremental increase in capital taxes may represent a significant cost. In the previous \$10,000,000 example, let us assume that the loan to fund the project is amortized over 7 years at 7.5 percent per year.

If the loan is entered into on the last day of the fiscal year, the provincial capital tax could aggregate \$128,700 over the period (assuming a provincial capital tax of 0.3 percent). If LCT were applicable, it would aggregate \$96,400 over the term. These are substantial amounts.

There are planning opportunities to reduce capital taxes. For example, because capital taxes are imposed on year-end balances, a taxpayer can wait until after a fiscal year-end to incur a liability so it does not appear on year-end statements. Of course, this strategy will preclude a taxpayer's claiming CCA on the asset in the year. Taxpayers can also try to pay down debt just before the year-end to reduce the balance on which capital tax is calculated. In the previous example, if the corporation were to wait until just after the fiscal year-end to enter into the loan and were to pay down the principal immediately before the year-end, the corporation would save provincial capital tax of \$30,000 and LCT of \$22,500.

A reduction in capital taxes results in permanent savings, as opposed to an accelerated CCA claim, which is a timing difference. It is often possible to avoid any increase in capital taxes by properly structuring an EPC. In some instances it may even be possible to do so without forfeiting the timing differences afforded by the CCA system. These opportunities are explained later.



There can be substantial benefit to finding the right balance when applying tax rules.

Provincial sales taxes and the GST ("indirect taxes")

In terms of indirect taxes, the federal Goods and Services Tax (GST) and each of the provincial sales taxes must be considered. Among the Canadian provinces and territories, Alberta, Northwest Territories, Yukon and Nunavut do not impose a sales tax. Quebec has a Quebec Sales Tax (QST) very similar to the GST. Nova Scotia, New Brunswick and Newfoundland and Labrador have a "harmonized" tax known as the Harmonized Sales Tax (HST), which is a subset of the federal GST. The remaining provinces have a provincial retail sales tax (PST).

The rates of PST range between 6 and 10 percent and apply mainly to goods acquired in a province and some services.

GST is imposed at a rate of 7 percent on most goods and services supplied in Canada. The HST represents a partial harmonization of provincial sales taxes with the GST in the provinces of Nova Scotia, New Brunswick and Newfoundland and Labrador resulting in a combined GST/HST rate of 15 percent applying to goods and services supplied in those particular provinces. The QST is applied at a rate of 7.5 percent on essentially the same base of goods and services as the GST and HST. In most cases, GST, HST and QST payable by a business in relation to expenses it incurs in the course of commercial activities can be recovered.

Indirect taxes need to be considered as part of the cost of the project, but are not considered further in this document.

Planning for control of taxes

If the time value of money is considered, the after-tax cost of owning an asset varies inversely with the rate at which the cost of that asset is deducted for tax purposes. For a business that is currently taxable, a higher CCA rate results in a lower after-tax cost of purchasing an asset. Thus, where a taxpayer proposes to use an energy conservation asset with a high CCA rate, it may be advantageous for the taxpayer to acquire the asset to write it off for tax purposes. However, if a corporate taxpayer buys an asset, there is inevitably an increase in provincial taxes and possibly LCT as well.

If instead of acquiring an asset, an EPC transaction is structured as an operating lease or a service agreement (or a combination of both), then payments for the use of the equipment are generally deductible in full to a taxpayer. Because most contracts provide for equal periodic payments, the cost of a lease or service contract is usually deductible on a straight-line basis.



As previously noted, CCA deductions are computed on a diminishing balance basis. Thus, if the CCA rate of energy savings equipment is high, early year CCA deductions associated with acquiring the equipment may exceed the straight-line payments available under a lease or service agreement. However over time, the straight-line deduction for rental payments may exceed the deductions available under the diminishing balance CCA system. Taxpayers must perform an explicit calculation to determine the present values of deductions to determine whether acquiring an asset provides a better income tax result than entering into a lease or service agreement. Corporations should also consider that their capital taxes are likely to increase if they acquire an asset, whereas a lease or service contract generally does not result in such an increase.

For some types of high-CCA property, taxpayers may get the best of both worlds and be able to lease property, while being treated as the owner for purposes of the CCA rules. This opportunity is available in respect of "specified leasing property" and requires a joint election between the lessor and lessee. A corporate taxpayer that makes this election can avoid the capital taxes associated with borrowing to purchase an asset, yet still be able to take advantage of accelerated rates of CCA on the leased asset.

Taxpayers in a loss position should consider one additional fact. There are limitations on the carry back and forward periods for tax losses. However, because CCA is an optional claim, UCC is effectively a store of deductible costs for the future. The payments on an operating lease or service contract are generally 100 percent deductible, but must be claimed in the year incurred. They are not optional claims like CCA. A taxpayer that faces the expiration of tax losses may wish to ensure that an energy performance contract is a sale for tax purposes. Unlike payments under a lease or service agreement, the CCA system will provide the taxpayer with additional flexibility in managing income for tax purposes while preventing the expiry of losses.



Payments under purchase contracts are usually certain, not contingent. That gives a taxpayer a capital asset on which CCA may be claimed. However, one of the central purposes of EPCs is to obtain a contingent payment. The cost is incurred only if the expected energy savings are realized.

As with all taxation matters, readers should verify their tax position with their own advisors.

Leading Canadians to Energy Efficiency at Home, at Work and on the Road

The Office of Energy Efficiency of Natural Resources Canada strengthens and expands Canada's commitment to energy efficiency in order to help address the challenges of climate change.

