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**"GREEN COMMERCIAL REAL ESTATE:
STAYING ON TOP OF THE LATEST TRENDS
AND REQUIREMENTS "**

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**Green Commercial Real Estate:
Staying on Top of the Latest Trends and Requirements**

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The paper will deal with government and industry concerns related to greenhouse gas emissions (GHGs), renewable energy source initiatives, and energy and environmental conservation issues which must be responded to in the leases of commercial space entered into between landlords and tenants of retail, office and industrial space. The first part of the paper will deal with the background and context, and the second part will deal with specific lease drafting concerns.

PART I

BACKGROUND AND CURRENT CONTEXT

Concern over global warming caused by greenhouse gas emissions (GHGs) from the burning of fossil fuels such as coal, gasoline, diesel fuel, and natural gas is heightening internationally. The Kyoto Accord which several progressive developed countries (including Canada) signed involved the reduction of GHGs and, the recent Copenhagen Conference was intended to enhance and expand international commitments to the reduction of GHGs.

President Obama has stated that the United States is committed, federally, to reducing GHGs produced by energy generating facilities and to instituting various initiatives to encourage the use of renewable energy and the development of renewable energy facilities such as wind power, solar power, biomass, and similar forms of renewable energy production.

The Western Climate Initiative is an accord involving seven states of the United States as well as the provinces of British Columbia, Manitoba, Ontario and Quebec. The members of the Western Climate Initiative are all committed to the reduction of GHGs and the encouragement of renewable energy sources.

A similar initiative includes 10 northeastern and mid-Atlantic states. It is referred to as the Regional Greenhouse Gas Initiative (RGGI). Ontario, Quebec and New Brunswick are included in the RGGI as official observers.

The Government of Canada has also stated that it is committed to the reduction of greenhouse gases and the encouragement of renewable energy sources, and each of the provinces has also developed strategies toward that end.

Carbon Taxes

Finland was the first country to enact a carbon tax. It did so in 1990. Sweden enacted a tax on carbon emissions in 1991. Great Britain introduced a "climate change levy" in 2001 on the use of energy in the industry, commerce and public sectors. These carbon taxes yield funds that can be used for the support of energy efficiency and renewable energy. In 2005, New Zealand made plans to enact a carbon tax that would have been

revenue neutral with proceeds used to reduce other taxes. However, a new government determined that the carbon tax would not cut emissions enough to justify the costs and the tax was abandoned.

Quebec was the first North American state or province to charge a carbon tax. The Quebec tax, introduced in October of 2007, is relatively low. British Columbia inaugurated a revenue neutral carbon tax in 2008. The tax started on July 1, 2008 at a rate of \$10.00 per metric tonne of carbon dioxide, and that rate was set to rise by \$5.00 per tonne annually to reach \$30.00 per tonne of CO₂ in 2012. The B.C. carbon tax is intended to be revenue neutral. The carbon tax revenue would, in effect, be returned to tax payers through personal income and business income tax cuts.

In 2007, the Canadian Green Party leader, Elizabeth May, called for a nation-wide carbon tax of \$50.00 per tonne of carbon (not carbon dioxide) with the levy doubling in 2020.

Environmental Attributes

Key factors in the efforts to reduce GHGs are systems such as the "cap and trade" systems, offset credit systems, and renewable energy certificate (REC) systems described below.

Cap and Trade Systems

A key component of the Canadian federal strategy is the development and implementation of a North American cap and trade system for GHGs. That strategy is in line with the commitment which the United States federal government has made to establish a cap and trade system on a federal level, and is also consistent with the cap and trade systems being implemented by the members of the Western Climate Initiative and the RGGI. It appears, as well, that the governments of Nova Scotia and New Brunswick

intend to implement GHG reduction strategies that involve capping of GHG emissions by power generators and other sectors of industry within those provinces.

Under a “cap and trade” system, when a facility exceeds its annual allotment of permitted tonnes of GHG emissions, it is required to pay a penalty measured on a per tonne basis. The amounts paid can be used by the government to encourage energy reduction, the development of renewable energy facilities, and the development of GHG reduction facilities. Tax incentives and grants can be funded by the penalties collected from enterprises that exceed their permitted allotments. Regulated enterprises that manage to stay below their allowable targets (established normally on an annual basis), obtain the benefit of credits which can be sold to enterprises that exceed their allowable emissions thereby enabling them to meet emissions reduction targets.

Cap and trade systems have been functioning in Europe for several years. Typically, the credits are bought and sold on a carbon market which operates like a commodities market. The commodity in the cap and trade system that is bought and sold is permissions to pollute measured in tonnes of GHGs. Carbon credits that are bought and sold within a regulatory framework that controls the method by which GHGs are measured and reported and controls the procedures for trading carbon credits, form part of a regulatory market.

There are also voluntary markets such as the Chicago Climate Exchange and the Montreal Climate Exchange in which voluntary carbon credits are bought and sold. Voluntary carbon credits arise when a facility can demonstrate a reduction in GHG

emissions in accordance with a protocol and system of measuring and reporting that is recognized on a voluntary exchange. Depending on the rigour of the protocol and the diligence with which it is monitored, the value of voluntary credits will vary. Voluntary credits tend to be less valuable than credits bought and sold in a regulatory market.

The carbon cap and trade system of most jurisdictions will also include carbon offsets. A carbon offset is created when a reduction or removal of a GHG emission takes place because of a specific project undertaken with that expressed purpose. The avoided GHG emissions can be turned into a credit available for trade on a voluntary or regulated GHG market. In most case, the credit is equivalent to the avoided GHG emissions as a result of the project (emissions that would have otherwise been generated from traditional fossil fuel based electricity production). For example, the system proposed by Environment Canada will issue offset credits for incremental real, verified domestic reductions or removals of GHG emissions generated by projects undertaken by non-regulated industrial entities. Regulated industrial facilities can purchase offset credits to enable them to be in compliance with their regulated emission reduction targets. Examples of projects that might give rise to offset credits are: reforestation schemes, solar power facilities, wind power facilities, wave and tidal power facilities, and biomass facilities.

RECs

Another important initiative in the battle against GHGs is the renewable energy certificate system.

Renewable energy certificates ("REC") are a well established environment market in the United States, with sales of 12 billion kilowatts in 2006. RECs quantify the benefits from generating renewable energy by calculating the reduction of air pollutant and GHG emissions, as well as other benefits, as one commodity. RECs are tradable environmental commodities that represent that one megawatt hour of electricity was generated from an eligible renewable energy resource such as wind, solar, geothermal and biomass projects.

Renewable Portfolio Standards ("RPS") can have an effect on the pricing of RECs because each jurisdiction has a unique mix of energy resources and sets its own requirements in terms of renewable sources and time frames for compliance. Over 29 states in the United States and the majority of provinces in Canada have a form of RPS.

There are currently no national programs to monitor non-encumbered (regulatory surplus) RECs, but there are several regional registries that track renewable energy generation in participating states and provinces. For example, the Mid-West Renewable Energy Tracking System tracks renewable energy generation in Illinois, Iowa, Manitoba, Minnesota, Montana, North Dakota, South Dakota and Wisconsin. There are similar systems in New England, the mid-Atlantic, western states and Texas. There are ongoing efforts to harmonize these registries in order to develop a national and North American registry.

Generators of renewable energy provide two distinct benefits. The first benefit is the energy which is sold into a grid or purchased by a user of the energy. The second is the unbundled REC component. The RECs have a separate value which is tradable.

Assessing the Value of Environmental Attributes

Unfortunately carbon credits within a regulatory market, at this point, do not have a large value. They may range anywhere from \$5.00 to perhaps \$16.00 per tonne. In a voluntary market, the value is substantially less. It is expected, however, that as international, federal, state and provincial targets for greenhouse gas emissions reductions are increased and, as regulatory schemes continue to spread from jurisdiction to jurisdiction and become integrated, the value of carbon credits may increase dramatically over the next 10 to 20 years and the volume of trading will escalate. The same comment applies to carbon credits.

RECs have the potential of becoming very valuable. At this point the market for renewable energy certificates in Canada is voluntary but 29 U.S. states and the District of Columbia have “Renewable Energy Portfolio Standards”. By a given date, a certain percentage of the states’ energy production must be from renewable energy. There is an initiative for United States federal legislation to establish a federal mandatory budget. This would result in a national “Renewable Energy Portfolio Standard”. Canada, would certainly wish to integrate with the United States markets and that would create a major opportunity for Canadian commercial building owners with large amounts of rooftop space.

Fixed Input Tariff ("FIT") Programs

Certain provinces have introduced fixed input tariff (FIT) programs. Ontario's program was introduced last May with the enactment of the *Green Energy Act*. Under these programs, the power authority (in the case of Ontario, the Ontario Power Authority) is

required to purchase at very favourable rates all electricity produced by renewable energy sources such as wind generating facilities, solar power facilities and other renewable energy facilities. As the result, in Ontario, solar power company are approaching building owners to lease rooftops for the installation of solar panels. Attached as Exhibit 1 to this paper is an article entitled "Commentary and Checklist Pertaining to Leases of Rooftop Space for the Installation and Operation of Solar Power Facilities". It explains some of the benefits and drawbacks of these arrangements. There are, in fact, definite advantages to building owners in either installing directly their own solar power facilities or leasing their rooftops to solar power companies to enable them to sell energy to the Ontario Power Authority.

NEW BUILDING CODE AND BYLAW REQUIREMENTS AFFECTING COMMERCIAL BUILDINGS

Although provincial governments have jurisdiction over building codes, the National Building Code is the model upon which the provinces base their codes. The model National Energy Code of Canada for Buildings 1997 is in the process of being updated. The project, which is being completed in collaboration with the provinces and territories, will include provisions reflecting the fact that energy efficiency and the environment have become an important priority for Canadians. There is a very strong impetus for the National Building Code of Canada to include objectives pertaining to energy, pollution and global warming, water, waste and pollution, health, toxics and clean water, waste construction and operation, and resource consumption.

Several of the provinces have already announced an intention to include in their building codes requirements that respond to those concerns. Examples of what is to come are noted below. Nova Scotia's Climate Change Action Plan issued in January of 2009 contains, as action #8, the requirement that effective in 2011 the Nova Scotia *Building Code Act* will be amended to require all new commercial buildings of more than 600 square meters to exceed the 1997 Model National Energy Code for Buildings by at least 25%, or to adopt the updated version of the 1997 Model National Energy Code for Buildings expected in 2011. The plan indicates that this is just a start and that the province intends to work with its partners to strengthen standards on a continuing basis.

Prince Edward Island's action plan for managing climate change sets out as a proposed government action, the adoption of new energy efficient standards and implement codes and practices in line with providing unified energy efficient building standards across the province that match or better the current best standards for energy efficient buildings construction in Canada.

In 2007, the Province of Ontario amended its 2006 Building Code to increase energy efficiency requirements.

The City of Toronto has passed a Green Roof Bylaw requiring that all new multi-occupant buildings within the City of Toronto have roofs with green features (vegetation, solar panels, etc.).

The March 2009 discussion paper issued by the Alberta Energy Efficiency Alliance states the following conclusion: "Given the clear economic and environmental return on investment, it is in the public's interest for the Government of Alberta to ensure new buildings in the province maximize energy efficiency. This includes short term advancements in insulation, air tightness and equipment requirements, investments in overcoming potential barriers to the short and long term advancement of the building code, and clarity on future changes expected to the building code to facilitate industry adaption." The conclusion also notes that for commercial buildings, both the Model National Energy Code for Buildings and ASHRAE 90.1, an industry standard for energy efficient buildings, appear to be the most common standard that provinces are instituting.

It notes, also, that governments are also advancing the concepts of water efficiency and energy labeling.

There is also a very strong impetus toward the adoption of energy and environmental rating systems as the private, non-regulated level. The prevalent system in North System is the LEED building rating system described below.

LEED (Leadership in Energy and Environmental Design) AND OTHER BUILDING RATING SYSTEMS

The prevalent building rating system in Canada is the system endorsed by the Canadian Green Building Council, the goal of which is to deliver healthy, productive environments that reduce the environmental impact of buildings. That rating system is the Leadership in Energy and Environmental Design ("LEED") system (based on the U.S. LEED

System) which rates the design, construction, and operations of buildings which assigns points having regard to six topic areas. Each topic area deals with associated goals. They are as follows:

1. **Site Development:** The minimization of storm water runoff, encouraging car pooling and bicycling, and increasing urban density and green space.
2. **Water Efficiency:** Elimination of site irrigation, reduction of water consumption, and minimization of waste water or the treatment of waste water.
3. **Energy Efficiency:** The reduction of building energy consumption, maximization of renewable energy usage, elimination of ozone depleting chemicals and reduction of greenhouse gases.
4. **Material Selection:** Minimization of construction waste, encouraging the reuse of existing building façades, encouraging the use of recycled and salvage materials, and the use of renewable construction materials as well as the construction of more durable buildings.
5. **Indoor Environmental Quality:** Incorporation of daylighting, the use of low emitting materials, providing operable windows and occupant control of workspace, and the improvement of ventilation.
6. **Innovation and Design:** The use of innovative environmental features not covered in other areas.

Buildings designed to respond to LEED factors would include features such as:

- The use of recycled material,
- Recycling of construction waste during construction,
- The recycling of rainwater into water efficient toilets,
- The collection of storm water in natural soils or wet lands so that it can seep back into the earth,
- The provision of less parking, and providing facilities for cyclists, and locating the building near transit stops,
- Less lighting into the night sky,
- Natural ventilation wherever possible,
- Natural daylighting,
- The use of non-toxic building materials,
- The use of less energy and water through such features as solar panels, solar hot water and green roofs.

The Canadian version of LEED (unlike the U.S. version) contains an additional requirement that the stringent requirements of Natural Resources Canada's Commercial

Building Incentive Program have to be complied with. These involve reducing energy consumption by at least 25% relative to the model energy code for buildings.

There are four performance ratings under LEED:

1. 26 to 32 points: Certified
2. 33 to 38 points: Silver
3. 39 to 51 points: Gold
4. 52 or more points: Platinum

Points are earned in the valuation process and are awarded by LEED accredited professional experts.

There are also different versions of LEED certification. They include:

- New commercial and major renovation projects (LEED NC)
- Commercial interior projects (tenant improvements for new or existing office space) (LEED CI)
- Existing building operations and maintenance (LEED EB)
- Core and shell development projects (LEED CORE)

There are major benefits to building owners in having their buildings certified under programs such as LEED. A LEED certified building will generally sell for at least 10% more than an uncertified building, and a LEED certified building will generally higher

rents as well as enjoying a much higher occupancy rate than uncertified buildings. The costs of achieving certification under LEED standards is, in relation to the benefits, very low.

There are also substantial advantages from a reputational point of view in demonstrating leadership. "Green branding" has a real marketing impact. Portfolio owners that fail to respond to the new reality of "green buildings" are likely to regret their lack of involvement to an increasing degree as time passes.

PART II

Commercial leases need to be drafted to respond to increasing government regulation and to the substantial benefits in owning and operating green buildings. The elements of a fully responsive lease ("green lease") would include provisions to deal with the following matters:

1. Waste production by the tenant both in initial fit-out and ongoing operations must be limited.
2. Obligations to cooperate and implement multiple waste streams for recycling would be imposed.
3. Repair and maintenance standards would be matched to environmental standards (not simply "base building" standards, "prudent tenant" or "comparable buildings" standards).
4. Building maintenance standards would be targetted to a green lease standard (LEED existing building or equivalent).

5. New tenant improvement standards would need to be imposed (LEED CI or equivalent to allow use of recycled materials, etc.). Tenant construction manuals need to be revised accordingly.
6. Volatile, organic compounds, etc. would be prohibited.
7. Capital and operating costs associated with retrofits to achieve government sustainability guidelines or to achieve LEED, existing building (EB) or equivalent standards would need to be passed through in operating costs.
8. Certification costs paid to independent "Green Building" certifiers and costs of establishing and reporting GHG emission footprints of the building should be dealt with in the operating costs definition.
9. Allocation of carbon credits, if the building can generate them, must be dealt with.
10. The recovery of carbon taxes as operating cost recharges should be addressed.
11. Landlord inspections and testing to determine breach of environmental objectives need to be provided for. Tenants may seek reciprocal rights.
12. Provision should be made for use of rooftop space for solar panels, and both the installation costs and environmental attributes and revenues from use of rooftop space should be addressed.

A good example of a green lease is the Real Property Association of Canada national standard green office lease for single building project – 1.02-209 which was released as of March 30, 2009 and can be readily obtained by Googling "realpac national standard

green office lease" and clicking on "National Standard Green Office Lease for Single Building".

As with any other standard lease provisions, negotiations will be required. Some of the specific concerns pertaining to green leases are identified below under the heading "Landlord/Tenant Issues Related to Green Buildings":

Landlord / Tenant Issues Related to Green Buildings:

- | | |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Relocation | Tenant should require that relocated space is comparable having regard to environmental and energy efficient criteria. |
| 2. Operating Costs | |
| (i) Special Insurance Endorsements | To repair, replace and recommission the shopping centre to Green Globe CIEB, LEED or other rating systems. |
| (ii) Obtaining and Maintaining LEED, Energy Star or Green Globe, etc. | Reporting, applying for certification and commissioning. (These costs could be amortized.)

Landlord could absorb cost of certification and only pass through reporting and compliance costs.

(Note: Landlord uses Green Designation to market, however, Tenant benefits from lower operating costs.) |
| (iii) Renewable Energy | Extra costs of purchasing renewable energy (or installing solar panels, etc.) |
| (iv) Energy Credits | Costs of exceeding energy/carbon allocations, costs of purchasing credits, benefits of sale of credits, costs of compliance with carbon reduction requirements imposed by |

governments.

- (v) Benefits Tenant
Reductions in
Carbon and Energy

Tenants will want to credit against their operating costs the benefits of energy reductions resulting from Tenant initiatives such as achieving LEED CI and will want to exclude from Operating Costs excess costs attributable to other tenants failing to achieve standards or failing to comply with energy/carbon reduction initiatives and will want audit rights related to building operations
- 3. Use

Require Tenant to use premises consistent with Green Certification and sustainability requirements and standards. (Implication of extra criterion on Tenant's assignment or subleasing.)
- 4. Sustainable Building
Operations

Tenant to comply with "Green Building" sustainable practices including chemical use, indoor air quality, energy efficiency, water efficiency recycling, lighting performance standards (including exterior lighting pollution), and Tenant must report in format prescribed by Landlord.
- 5. Maintenance & Repairs
& Tenant Improvements

Must comply with applicable third party (i.e., LEED) rating requirements
- 6. Janitor & Cleaning
Services

During business hours (to save energy)
- 7. Reduced Hours

Limit hours of operation to reduce energy
- 8. Work Letters

Contractors' choice of materials, construction methods, etc. to comply with Green Building sustainability standards,

including Indoor Air Quality during construction.

9. Gross and Semi-Gross Lease Concerns Carbon Taxes, costs of exceeding Cap-and-Trade Thresholds, benefits of tenant initiatives, enhanced need for Tenants to cooperate with Landlord energy and carbon reduction initiatives.

Conclusion

It should be apparent from what is set out above that important changes with far reaching implications are taking place worldwide, nationally, provincially and locally, and it is critical for property leasing lawyers to be fully aware of the developments in order to ensure that commercial leases respond appropriately. The commercial real estate sector cannot simply continue "business as usual". Commercial leases that fail to address environmental concerns relating to GHGs and energy conservation and environmental issues are, quite simply, deficient.

EXHIBIT 1

COMMENTARY AND CHECKLIST PERTAINING TO LEASES OF ROOFTOP SPACE FOR THE INSTALLATION AND OPERATION OF SOLAR POWER FACILITIES

Pros and Cons of Rooftop Solar Power Facility Leases

For a renewable energy project to qualify for the FIT Program, an application meeting the requirements of the program will need to be submitted, reviewed and approved by the OPA. Once approved, the applicant must sign a contract with the OPA for a term of 20 years. An important component of that contract is the transfer to the OPA of all of the environmental attributes associated with the project. That means that any carbon credits, renewable energy certificates, offsets and other attributes belong to the OPA and not to the installer of the solar power facility or the landlord, or owner, of the property on which the solar power facility is installed.

As indicated above, at this point, generally, environmental attributes do not have a large value. It is anticipated however, that the value of environmental attributes will increase (perhaps very dramatically) within the not too distant future. Accordingly, before leasing out a roof for the purpose of the installation of solar panels where a power purchase contract with the OPA is to be entered into, consideration should be given to the potential value of those environmental attributes. At this point, in the absence of tax incentives, government grants or other forms of incentive, the cost of constructing and installing a solar power facility on a roof, might make the investment unfeasible. Typically, a building, even one with a large roof, would find that it is unable to provide more than approximately 20% of its energy consumption through solar panels that it installs on the roof and, the cost of the electricity purchased from the grid is relatively low. It can be expected however that as the volume of production of solar power facilities increases and anticipated developments in technology in this area occur, the cost of installing solar panels may be reduced substantially. It may be in the interest of the building owner to hold off signing away the ability to install its own solar panels and to use its own electricity.

On the other hand, at this stage, the timeframe during which environmental attributes are likely to become valuable and the extent to which they become valuable is uncertain. It may take several years before the markets mature and trading begins producing substantial benefits. Also, at the end of the term of the rooftop lease (typically a 20 year period), a building owner may find that the ownership of a solar power facility that still functions effectively is a substantial benefit particularly when the building owner has not itself been required to contribute to the cost of the construction and installation. Solar power facilities will normally have a useful life well in excess of 20 years. The building owner will be able to deal with the environmental attributes in whatever way it wishes at

the end of the lease while at the same time enjoying the benefit of an essentially free form of renewable energy on its roof. Alternatively the building owner may choose to itself enter into a power purchase agreement with the OPA at the end of the term of the rooftop lease.

Another benefit flows from the fact that the solar panels will normally have the effect of reducing energy costs in the building due to the shading effect of the panels. Also, depending on the type of installation, the panels can also extend the useful life of a roof by serving as a buffer from the elements.

Assuming a building owner, having considered the matters noted above, has elected to lease its roof to a company that wishes to install a solar power facility so that it can feed electricity into the provincial power grid, it will be useful to give consideration to factors such as those noted below in the “Checklist”.

CHECKLIST

The Parties

The Landlord

The Landlord should be that entity that has the right to use the roof and to alter it for the full duration of the lease. Usually, that entity would be the owner of the building but, it could be a ground tenant under a ground lease who has constructed the building or, even a tenant of the building whose lease permits it to make structural alterations and to use the roof.

The Tenant

Normally the tenant would be an entity that has expertise in installing solar panels and that has entered into a power purchase agreement with the OPA. It could, however, theoretically at least be an entity that leases rooftop spaces from various building owners for the purposes of subleasing them to solar energy providers.

Third Party Approvals, Consents and Acknowledgements

In addition to governmental permits and approvals, for the installation and operation of the solar power facility the following types of approval will need to be obtained:

- (i) If the landlord is not the building owner, then the building owner should sign a consent and preferably in the form of a non-disturbance agreement that would allow the tenant to do the installation and lease the roof in accordance with the terms of the lease. The building owner would want an attornment in return pursuant to which the tenant acknowledges that the owner of the building will enjoy all of the benefits and all of the covenants included in the lease if the lease between the owner of the building and the landlord under the rooftop lease is terminated. The owner of the building would also normally seek to have the

- benefit of all the releases, indemnities, and other risk transfer clauses in the rooftop lease to avoid any claims being brought against it should anything happen to the roof or the solar power facility.
- (ii) If there are any mortgagees or holders of encumbrances on the building, then a non-disturbance agreement from each of them would also be required and, an attornment agreement in favour of the mortgagee or other encumbrance holder would be needed.
 - (iii) The equipment that is installed (the solar panel equipment) would in many cases be the subject of a personal property security interest in favour of an equipment lender/financier. The PPSA security holder would need some kind of acknowledgement or agreement from the landlord and the owner of the building that the solar power facility will not be treated as a fixture and will remain the property of the tenant as though it were a chattel or other item of personal property. The PPSA lender would also want notices of any defaults and an opportunity to cure defaults under the rooftop lease. Some other form of accommodation such as a forbearance commitment and an opportunity to assign or transfer the rooftop lease to the purchaser of the solar power facility where the PPSA security lender realizes on its security would also be needed. It is to be expected that the PPSA lender would want an assignment or charge of the rooftop lease as well as a security interest in the solar power facility).

Adjacent Property Owners

If there are adjacent property owners that may construct buildings, signs, or other edifices that will have a shading effect on the roof, the tenant may need to obtain some form of commitment or restriction from them not to build structures that would have such an effect. (Obviously there would be a cost to obtain the benefit of those restrictions).

Representations and Warranties

The landlord would want representations and warranties that the tenant has the necessary expertise to install the solar power facility and to operate it without damaging the structure of the building or the roof. Engineers' reports and studies would be required before the work could proceed, but the representations and warranties should also be included.

A representation and warranty that no contaminates or hazardous substances will be installed on or brought upon the property by the tenant or its contractors without the landlord's consent is also important. (Semi-hazardous substances are in fact used in solar power installations and, accordingly, detailed warranties regarding the need to strictly adhere to all environmental related procedures, safeguards, codes, etc., should be included.

The tenant would seek representations and warranties regarding the absence of hazardous substances in the building and on the roof and regarding the structural integrity of the building and the roof.

The Leased Premises and Appurtenant Rights

The premises leased to the tenant would include all or a portion of the roof. It would be necessary to exclude areas occupied by rooftop heating, ventilating and air conditioning units, penthouses for elevators, and possibly also antennae or even signs. In addition, the tenant may need the use of an equipment room and would also need rights of access to the roof, rights to utilize parking facilities and access roads to the property, and the right to attach the solar power facility to the roof. There might also be a need for a space to store or house batteries. The right to connect the solar power facility to the provincial power grid by means of wires would also be needed.

Easements to protect sunlight would be required. They may restrict the landlord's right to construct additional improvements on its land and to install or expand existing facilities on the roof or adjacent to the roof.

Term

The term of the lease would need to be at least 20 years from the date on which the solar power facility begins feeding electricity into the grid pursuant to the OPA power purchase agreement. A construction and installation period would also be normal.

Rent

The annual basic rent would need to be stipulated and typically, it would be payable monthly in advance.

The date upon which rent begins to be payable may be the subject of negotiation because the tenant would not normally want to begin paying rent until it is able to generate income from the facility by selling its electricity to the OPA.

Consideration should be given to whether the tenant is also required to pay additional rent because the installation of the solar power facility and the rooftop lease will have an affect on the assessment of the building and therefore may result in incremental real property taxes. The tenant may also be asked to pay a share of operating costs associated with the external common areas that it uses and the cost of insurance, maintenance and repairs of the building (particularly the roof and its structure). Since the solar power facility will be selling its electricity to the OPA, it may be that a contribution to heating and lighting costs for any equipment rooms, etc. should be paid.

Consideration might be given to requiring the tenant to pay a percentage of the income that it earns from the sale of electricity to the OPA. This may help to compensate the building owner to some extent for the loss of the value of the environmental attributes

that it might otherwise have enjoyed. It should be noted that any GHG reductions in respect of the building attributable to the existence of the solar power facility may be lost. Further analysis of the power purchase agreement may be required in this regard to determine whether the building owner or landlord is also required to give up the benefit of the GHG reductions associated with the existence of the solar power facility. As mentioned above, the existence of the solar panels on the roof would have a shading effect that may reduce energy costs within the building. That would have the effect of reducing the GHG footprint of the building and would potentially make carbon offsets available to the building.

Construction and Installation

The tenant should provide detailed engineering drawings for approval by the landlord's consultants and the cost of review should be paid by the tenant. Consideration should be given to applying an administration fee since the landlord will need to liaise with the consultants in connection with the review process. The work would need to be done by a qualified contractor approved by the landlord and the landlord would need the right to supervise the work. The cost of supervision should also be paid by the tenant. The tenant should be required to provide evidence that it has obtained all government permits required in connection with the work and should provide evidence that the OPA has approved the installation and given whatever approvals are required to enable the solar power facility to connect to the provincial grid. As built drawings should be provided.

Alterations

No alterations of the solar power facility should be permitted without the landlord's approval and the same requirements relating to the initial construction (i.e., governmental approvals, approval of plans, supervision, etc.) would apply to any alterations.

It is important to note that the plans and specifications would apply to not only the solar power facility but also, and of particular importance, to the interface with the structure and roof of the building. It is critical that no unacceptable structural stress be placed on the building and that the roof membrane and roof system are not compromised.

Also, the installation should not interfere with the landlord's ability to service, and if necessary add to, relocate, or supplement rooftop heating, ventilating and air conditioning and other equipment. There should be no adverse impact on the base building systems.

Use

The use of the roof by the tenant should be restricted to the installation of the solar power facility and the operation of the solar power facility to feed electricity into the provincial grid pursuant to the OPA power purchase agreement.

Environmental Attributes

The tenant would want an acknowledgement on the part of the landlord that any environmental attributes associated with the installation of and the use of the solar power facility will be assigned to and owned by the OPA during the currency of the power purchase agreement (which would normally continue during the entire term of the lease).

Maintenance and Repair

The tenant should covenant to maintain and repair the solar power facility in first class condition. From the landlord's point of view, it is important that at the end of the term of the lease, it will have a functioning, well maintained and serviceable solar power facility. Inspection rights for the landlord would be needed.

Deposit

A substantial deposit should be obtained from the tenant to ensure that the solar power facility is properly maintained at all times and to ensure that at the end of the term, it is functioning in a manner consistent with proper maintenance and repair throughout the term. The deposit should also provide for the cost of removing the solar power facility at the end of the term and restoring any damage to the building caused by the installation and removal. It should be noted that the landlord may, at the end of the term prefer to have the solar power facility removed so that it can proceed with redevelopment of the building or property adjacent to the building.

Insurance

The tenant must covenant to maintain at least the following insurance:

- (i) all risks property insurance in respect of the solar power facility with the landlord added as an insured and containing the landlord's mortgagee's standard mortgage clause;
- (ii) boiler and machinery insurance in respect of the solar power equipment (because it may be that the solar power equipment is not insurable under a normal all risks policy but has to be insured instead under a boiler and machinery policy);
- (iii) business interruption insurance to ensure the rent flow continues even if the solar power equipment is damaged by a peril;
- (iv) liability insurance (commercial general liability) with the landlord added as an additional insured, containing cross-liability and severability of interest endorsements, Owner's and Contractor's protective coverage, and contractual liability coverage;
- (v) automobile liability insurance to protect against damage to the landlord's property by the tenant's vehicles; and

- (vi) environmental damage insurance or environmental impairment insurance may be required if the solar power facility contains any hazardous substances.

The property insurance policy must contain a waiver or subrogation in favour of the landlord, its officers, directors, affiliates and respective employees, agents and contractors.

Releases and Indemnities

There needs to be a release in favour of the landlord in respect of any loss, cost or expense suffered by the tenant in connection with any damage to the solar power facility and, the tenant should indemnify the landlord in respect of any claims by third parties and any damages losses or other expenses incurred by the landlord in connection with the installation and operation of the solar power facility and operation of the solar power facility.

Relocation – Termination

The landlord may wish to have the right to relocate the solar power facility, or components of it, where necessary in order to enable it to make alterations to the roof or, on a temporary basis, enable it to make repairs to the roof preferable from a landlord's point of view, the cost of the relocation would be paid by the tenant particularly where the relocation is needed to repair the roof.

The landlord may also want a right to relocate the solar power facility to another building owned or controlled by the landlord in situations where it wishes to redevelop the building or its property. In that case, the cost would probably be borne by the owner and might include lost revenue and planning and design costs. This same situation might apply where the landlord wishes to demolish the building.

Where a suitable alternative location for the solar power facility is not available and the landlord wishes to redevelop the building, a termination right may be provided for. In that case, there may be some form of compensation payment related to the unamortized balance of the cost of installing the solar power facility. If there are any penalties under the OPA power purchase agreement, they would also need to be taken into consideration.

Option to Purchase

The landlord may wish to have an option to purchase the solar power facility after a period of time based on a formula that would take into consideration the costs of installation and operation, the unamortized balance, the revenue stream, and other factors.

Liens and Third Party Claims

The landlord would want assurance that no construction liens will affect the land or building in connection with the installation of the solar power facility and, will need to obtain assurances from any PPSA security holder or other lien holder in respect of the

solar power facility that on expiry or termination of the lease, the claims of the PPSA creditor or other lien holder will be released.

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A protocol for restricting and controlling access to the roof by a tenant and by other representatives requiring access for the purpose of maintenance, repair, inspection of the solar power facility would need to be put in place to ensure that the roof is not compromised and that there is a proper record of all construction, maintenance, repair and inspection activity. The costs of providing supervision in relation to roof access would normally be included as an additional rent item.

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A typical commercial lease default article should be included but there should also be a provision under any PPSA security agreement or the power purchase agreement with the OPA.

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A simply expropriation clause dealing with situations where the building or lands are expropriated should be included. Thought should be given, however, to the possibility that the power facility itself might be expropriated by the OPA or some other power or utility management authority.

Special Termination Rights in Favour of the Tenant

The tenant may wish to have rights of termination where the operation of the solar power facility is no longer feasible as a result of changes imposed by the OPA or other governmental authority (including reductions in the tariff) or where physical circumstances such as shade caused by adjoining construction or develops makes the solar power facility economically unviable.

Snow Removal

The lease should contain specific provisions dealing with the removal of snow from the solar power facility and the storage of snow, where it is dumped, and how it is removed from the roof.

E X H I B I T 1

COMMENTARY AND CHECKLIST PERTAINING TO LEASES OF ROOFTOP SPACE FOR THE INSTALLATION AND OPERATION OF SOLAR POWER FACILITIES

Background and Current Context

Concern over global warming caused by greenhouse gas emissions (GHGs) from the burning of fossil fuels such as coal, gasoline, diesel fuel, and fuel oil is heightening internationally. The Kyoto Accord which several progressive developed countries (including Canada) signed involved the reduction of GHGs and, the recent Copenhagen Conference was intended to enhance and expand international commitments to the reduction of GHGs.

President Obama maintains that the United States is committed, federally, to reducing GHGs produced by energy generating facilities and to instituting various initiatives to encourage the use of renewable energy and the development of renewable energy facilities such as wind power, solar power, biomass, and similar forms of renewable energy production.

The Western Climate Initiative is an accord involving seven states of the United States as well as the provinces of British Columbia, Manitoba, Ontario and Quebec. The members of the Western Climate Initiative are all committed to the reduction of GHGs and the encouragement of renewable energy sources.

A similar initiative includes 10 northeastern and mid-Atlantic states. It is referred to as the Regional Greenhouse Gas Initiative (RGGI). Ontario, Quebec and New Brunswick are included in the RGGI as official observers.

Cap and Trade Systems

All of the initiatives mentioned above involve the establishment of “cap and trade systems” which limit the amount of carbon dioxide and other greenhouse gases that can be emitted by various categories of commercial enterprises such as electricity generating plants and commercial buildings, as well as factories and other large users of energy. Under a “cap and trade” system, when a facility exceeds its annual allotment of permitted tonnes of GHG emissions, it is required to pay a penalty measured on a per tonne basis. The amounts paid can be used by the government to encourage energy reduction, the development of renewable energy facilities, and the development of GHG reduction facilities. Tax incentives and grants can be funded by the penalties collected from enterprises that exceed their permitted allotments and do not purchase carbon credits. Regulated enterprises that manage to stay below their allowable targets (established normally on an annual basis), obtain the benefit of credits which can be sold to

enterprises that exceed their allowable emissions thereby enabling them to meet emissions reduction targets.

Cap and trade systems (referred to in Europe as "Emission Trading Schemes" or "ETS") have been functioning in Europe since 2005. Typically, the credits are bought and sold on a carbon market which operates like a commodities market. The commodity in the cap and trade system that is bought and sold is permissions to pollute measured in tonnes of GHGs. Carbon credits that are bought and sold within a regulatory framework that controls the method by which GHGs are measured and reported and controls the procedures for trading carbon credits, form part of a regulatory market.

There are also voluntary markets such as the Chicago Climate Exchange and the Montreal Climate Exchange in which voluntary carbon credits are bought and sold. Voluntary carbon credits arise when a facility can demonstrate a reduction in GHG emissions in accordance with a protocol and system of measuring and reporting that is recognized on a voluntary exchange. Depending on the rigour of the protocol and the diligence with which it is monitored, the value of voluntary credits will vary. Voluntary credits tend to be less valuable than credits bought and sold in a regulatory market.

Even carbon credits within a regulatory market, at this point, do not have a large value. They may range anywhere from \$5.00 to perhaps \$16.00 per tonne. In a voluntary market, the value is substantially less. It is expected, however, that as international, federal, state and provincial targets for greenhouse gas emissions reductions are increased and, as regulatory schemes continue to spread from jurisdiction to jurisdiction, the value of carbon credits may increase dramatically over the next 10 to 20 years.

RECs

Several jurisdictions including several states in the United States enforce renewable energy certificate ("REC") or "Green Tag" schemes in which energy producers are required to purchase a minimum number of kilowatt hours of renewable energy as a percentage of their total energy consumption. The purchase of renewable energy certificates from renewable energy suppliers is a means by which these targets can be achieved. Producers of renewable energy such as the installers and operators of wind power, tidal power, water power, solar power or biomass energy facilities provide not only renewable energy, they also yield renewable energy certificates ("RECs") that have a value. RECs can be bought and sold. Energy producers that do not purchase electricity directly from a renewable energy source can, by purchasing RECs, comply with their renewable energy quota requirements. RECs have the potential of becoming very valuable. At this point the market for renewable energy certificates in Canada is voluntary but 29 U.S. states and the District of Columbia have "Renewable Energy Portfolio Standards". By a given date, a certain percentage of the states' energy production must be from renewable energy. There are no indications that United States federal legislation may establish a federal mandatory budget. This would result in a national "Renewable Energy Portfolio Standard". If that occurs, Canada would be

inclined to integrate with the United States markets and this could create a major opportunity for Canadian commercial building owners with large amounts of rooftop space.

(Realistically, however, it must be acknowledged that coordinating such a program at the federal and state, or federal and provincial, levels is a major undertaking.)

The Canadian Legislative Context

Federal

The federal government has stated that it is committed to establishing a carbon cap and trade system which it recognizes must be harmonized with the scheme which is being established in the United States. Its details have not yet been settled but the basic concept is in place and federal legislation that affects commercial building owners may be enacted.

Provincial

In Ontario, pursuant to its commitment under the Western Climate Initiative, legislation was introduced last May to set the stage for an Ontario cap and trade system. Quebec did the same and similar legislation is also expected to be introduced by Manitoba. British Columbia has opted for a carbon tax scheme instead of a cap and trade system. The BC carbon tax scheme simply taxes the energy producers that use fossil fuels and the cost of the taxes is reflected in energy costs at the consumer level.

The Province of Ontario enacted the *Green Energy Act* in May 2009. That *Act* is already an effect on the energy sector and commercial building owners and operators. The *Green Energy Act* was enacted to facilitate the development of a sustainable energy economy that protects the environment while streamlining the approvals process. Its objective is also to mitigate climate change. To achieve that objective, it has placed an obligation on the Ontario Power Authority (the "OPA") to purchase green energy under a scheme that fixes the purchase price of kilowatt hours that are fed into the provincial electricity distribution grid. The system, referred to as "feed-in tariff" program (a "FIT Program"), is modeled on German and French systems. Under this system, the amount paid by the OPA for green energy varies depending on the type of technology, resource intensity, product scale and location. The objective is to ensure that projects are economically viable in communities across the province. This means that producers of electricity generated by windmills and photovoltaic (solar power) facilities are guaranteed the ability to sell all of the electricity they produce to the OPA at very favourable rates. For example, a kilowatt hour of electricity produced by solar power cells can be sold into the grid for as much as \$0.83. This compares very favourably to the current price of a kilowatt hour of electricity which is distributed to the commercial and residential consumers at rates in the \$0.03 and \$0.04 range. In the United States, various jurisdictions encourage investment in renewable energy by means of grants and tax incentives funded largely by renewable energy certificate systems. At this point, instead

of tax incentives and grants, Ontario has chosen to encourage the development of renewable energy facilities by means of the *Green Energy Act* FIT Program. The *Green Energy Act* also sets in place other incentives designed to facilitate the development of renewable energy facilities and the enhancement of employment opportunities in the “green energy” field but, it is the FIT Program that has the most direct bearing on the phenomenon of rooftop solar power facility leases with which we are concerned. It seems that it is the Fit Program (and not renewable energy certificates) that will provide the largest incentive to solar power facility generators. However, if Canada integrates with the United States' national "Renewable Energy Portfolio Standard" mentioned above, there could be significant opportunities to sell renewable energy certificates into the integrated market and the RECs generated by a rooftop solar power facility could become valuable.

Municipal

At the municipal level, the City of Toronto has passed a “green roof” by-law which requires that the roof of each new multi-occupant building be covered by vegetation and other green features. For this purpose, portions of a roof occupied by solar power facilities are exempted.

What All This Means to the Building Industry

Statistics indicate that commercial buildings are one of the largest contributors to GHG emissions. Commercial building owners will be affected increasingly by government regulations and other initiatives involving the reduction of energy consumption and the production of GHGs. The design of new buildings, the retrofitting of existing buildings, and the operating systems and management practices associated with commercial buildings all need to be reviewed, monitored, measured, changed, and supervised to avoid costly penalties and to achieve energy savings. Lawyers are busily drafting clauses for commercial leases to enable landlords to achieve those objectives and, tenants are, or should be equally concerned and involved. The cost of making changes to buildings, the cost of reporting, auditing, certifying, and complying with energy reduction and GHG emissions controls are significant and careful drafting and negotiating of commercial leases of space and buildings is essential.

The circumstances described above, particularly Ontario's *Green Energy Act* FIT Program, have spawned a new phenomenon in the commercial building sector. Companies that have expertise in building and installing solar panel energy facilities are applying for contracts with the OPA for the supply of energy that will be fed into the provincial energy grid. Any building with a large roof is likely to be approached for a lease of roof top space which typically will have a term of 20 years, to match the term of the OPA contract, and will provide for the tenant to install rooftop solar power facilities.

Pros and Cons of Rooftop Solar Power Facility Leases

For a renewable energy project to qualify for the FIT Program, an application meeting the requirements of the program will need to be submitted, reviewed and approved by the OPA. Once approved, the applicant must sign a contract with the OPA for a term of 20 years. An important component of that contract is the transfer to the OPA of all of the environmental attributes associated with the project. That means that any carbon credits, renewable energy certificates, offsets and other attributes belong to the OPA and not to the installer of the solar power facility or the landlord, or owner, of the property on which the solar power facility is installed.

As indicated above, at this point, generally, environmental attributes do not have a large value. It is anticipated however, that the value of environment attributes will increase (perhaps very dramatically) within the not too distant future. Accordingly, before leasing out a roof for the purpose of the installation of solar panels where a power purchase contract with the OPA is to be entered into, consideration should be given to the potential value of those environment attributes. At this point, in the absence of tax incentives, government grants or other forms of incentive, the cost of constructing and installing a solar power facility on a roof, might make the investment unfeasible. Typically, a building, even one with a large roof, would find that it is unable to provide more than approximately 20% of its energy consumption through solar panels that it installs on the roof and, the cost of the electricity purchased from the grid is relatively low. It can be expected however that as the volume of production of solar power facilities increases and anticipated developments in technology in this area occur, the cost of installing solar panels may be reduced substantially. It may be in the interest of the building owner to hold off signing away the ability to install its own solar panels and to use its own electricity.

On the other hand, at this stage, the timeframe during which environmental attributes are likely to become valuable and the extent to which they become valuable is uncertain. It may take several years before the markets mature and trading begins producing substantial benefits. Also, at the end of the term of the rooftop lease (typically a 20 year period), a building owner may find that the ownership of a solar power facility that still functions effectively is a substantial benefit particularly when the building owner has not itself been required to contribute to the cost of the construction and installation. Solar power facilities will normally have a useful life well in excess of 20 years. The building owner will be able to deal with the environmental attributes in whatever way it wishes at the end of the lease while at the same time enjoying the benefit of an essentially free form of renewable energy on its roof. Alternatively the building owner may choose to itself enter into a power purchase agreement with the OPA at the end of the term of the rooftop lease.

Another benefit flows from the fact that the solar panels will normally have the effect of reducing energy costs in the building due to the shading effect of the panels. Also,

depending on the type of installation, the panels can also extend the useful life of a roof by serving as a buffer from the elements.

Assuming a building owner, having considered the matters noted above, has elected to lease its roof to a company that wishes to install a solar power facility so that it can feed electricity into the provincial power grid, it will be useful to give consideration to factors such as those noted below in the “Checklist”.

CHECKLIST

The Parties

The Landlord

The Landlord should be that entity that has the right to use the roof and to alter it for the full duration of the lease. Usually, that entity would be the owner of the building but, it could be a ground tenant under a ground lease who has constructed the building or, even a tenant of the building whose lease permits it to make structural alterations and to use the roof.

The Tenant

Normally the tenant would be an entity that has expertise in installing solar panels and that has entered into a power purchase agreement with the OPA. It could, however, theoretically at least be an entity that leases rooftop spaces from various building owners for the purposes of subleasing them to solar energy providers.

Third Party Approvals, Consents and Acknowledgements

In addition to governmental permits and approvals, for the installation and operation of the solar power facility the following types of approval will need to be obtained:

- (iv) If the landlord is not the building owner, then the building owner should sign a consent and preferably in the form of a non-disturbance agreement that would allow the tenant to do the installation and lease the roof in accordance with the terms of the lease. The building owner would want an attornment in return pursuant to which the tenant acknowledges that the owner of the building will enjoy all of the benefits and all of the covenants included in the lease if the lease between the owner of the building and the landlord under the rooftop lease is terminated. The owner of the building would also normally seek to have the benefit of all the releases, indemnities, and other risk transfer clauses in the rooftop lease to avoid any claims being brought against it should anything happen to the roof or the solar power facility.
- (v) If there are any mortgagees or holders of encumbrances on the building, then a non-disturbance agreement from each of them would also be required and, an attornment agreement in favour of the mortgagee or other encumbrance holder would be needed.

- (vi) The equipment that is installed (the solar panel equipment) would in many cases be the subject of a personal property security interest in favour of an equipment lender/financier. The PPSA security holder would need some kind of acknowledgement or agreement from the landlord and the owner of the building that the solar power facility will not be treated as a fixture and will remain the property of the tenant as though it were a chattel or other item of personal property. The PPSA lender would also want notices of any defaults and an opportunity to cure defaults under the rooftop lease. Some other form of accommodation such as a forbearance commitment and an opportunity to assign or transfer the rooftop lease to the purchaser of the solar power facility where the PPSA security lender realizes on its security would also be needed. It is to be expected that the PPSA lender would want an assignment or charge of the rooftop lease as well as a security interest in the solar power facility).

Adjacent Property Owners

If there are adjacent property owners that may construct buildings, signs, or other edifices that will have a shading effect on the roof, the tenant may need to obtain some form of commitment or restriction from them not to build structures that would have such an effect. (Obviously there would be a cost to obtain the benefit of those restrictions).

Representations and Warranties

The landlord would want representations and warranties that the tenant has the necessary expertise to install the solar power facility and to operate it without damaging the structure of the building or the roof. Engineers' reports and studies would be required before the work could proceed, but the representations and warranties should also be included.

A representation and warranty that no contaminants or hazardous substances will be installed on or brought upon the property by the tenant or its contractors without the landlord's consent is also important. (Semi-hazardous substances are in fact used in solar power installations and, accordingly, detailed warranties regarding the need to strictly adhere to all environmental related procedures, safeguards, codes, etc., should be included.

The tenant would seek representations and warranties regarding the absence of hazardous substances in the building and on the roof and regarding the structural integrity of the building and the roof.

The Leased Premises and Appurtenant Rights

The premises leased to the tenant would include all or a portion of the roof. It would be necessary to exclude areas occupied by rooftop heating, ventilating and air conditioning units, penthouses for elevators, and possibly also antennae or even signs. In addition, the tenant may need the use of an equipment room and would also need rights of access to the roof, rights to utilize parking facilities and access roads to the property, and the right

to attach the solar power facility to the roof. There might also be a need for a space to store or house batteries. The right to connect the solar power facility to the provincial power grid by means of wires would also be needed.

Easements to protect sunlight would be required. They may restrict the landlord's right to construct additional improvements on its land and to install or expand existing facilities on the roof or adjacent to the roof.

Term

The term of the lease would need to be at least 20 years from the date on which the solar power facility begins feeding electricity into the grid pursuant to the OPA power purchase agreement. A construction and installation period would also be normal.

Rent

The annual basic rent would need to be stipulated and typically, it would be payable monthly in advance.

The date upon which rent begins to be payable may be the subject of negotiation because the tenant would not normally want to begin paying rent until it is able to generate income from the facility by selling its electricity to the OPA.

Consideration should be given to whether the tenant is also required to pay additional rent because the installation of the solar power facility and the rooftop lease will have an affect on the assessment of the building and therefore may result in incremental real property taxes. The tenant may also be asked to pay a share of operating costs associated with the external common areas that it uses and the cost of insurance, maintenance and repairs of the building (particularly the roof and its structure). Since the solar power facility will be selling its electricity to the OPA, it may be that a contribution to heating and lighting costs for any equipment rooms, etc. should be paid.

Consideration might be given to requiring the tenant to pay a percentage of the income that it earns from the sale of electricity to the OPA. This may help to compensate the building owner to some extent for the loss of the value of the environmental attributes that it might otherwise have enjoyed. It should be noted that any GHG reductions in respect of the building attributable to the existence of the solar power facility may be lost. Further analysis of the power purchase agreement may be required in this regard to determine whether the building owner or landlord is also required to give up the benefit of the GHG reductions associated with the existence of the solar power facility. As mentioned above, the existence of the solar panels on the roof would have a shading effect that may reduce energy costs within the building. That would have the effect of reducing the GHG footprint of the building and would potentially make carbon offsets available to the building.

Construction and Installation

The tenant should provide detailed engineering drawings for approval by the landlord's consultants and the cost of review should be paid by the tenant. Consideration should be given to applying an administration fee since the landlord will need to liaise with the consultants in connection with the review process. The work would need to be done by a qualified contractor approved by the landlord and the landlord would need the right to supervise the work. The cost of supervision should also be paid by the tenant. The tenant should be required to provide evidence that it has obtained all government permits required in connection with the work and should provide evidence that the OPA has approved the installation and given whatever approvals are required to enable the solar power facility to connect to the provincial grid. As built drawings should be provided.

Alterations

No alterations of the solar power facility should be permitted without the landlord's approval and the same requirements relating to the initial construction (i.e., governmental approvals, approval of plans, supervision, etc.) would apply to any alterations.

It is important to note that the plans and specifications would apply to not only the solar power facility but also, and of particular importance, to the interface with the structure and roof of the building. It is critical that no unacceptable structural stress be placed on the building and that the roof membrane and roof system are not compromised.

Also, the installation should not interfere with the landlord's ability to service, and if necessary add to, relocate, or supplement rooftop heating, ventilating and air conditioning and other equipment. There should be no adverse impact on the base building systems.

Use

The use of the roof by the tenant should be restricted to the installation of the solar power facility and the operation of the solar power facility to feed electricity into the provincial grid pursuant to the OPA power purchase agreement.

Environmental Attributes

The tenant would want an acknowledgement on the part of the landlord that any environmental attributes associated with the installation of and the use of the solar power facility will be assigned to and owned by the OPA during the currency of the power purchase agreement (which would normally continue during the entire term of the lease).

Maintenance and Repair

The tenant should covenant to maintain and repair the solar power facility in first class condition. From the landlord's point of view, it is important that at the end of the term of the lease, it will have a functioning, well maintained and serviceable solar power facility. Inspection rights for the landlord would be needed.

Deposit

A substantial deposit should be obtained from the tenant to ensure that the solar power facility is properly maintained at all times and to ensure that at the end of the term, it is functioning in a manner consistent with proper maintenance and repair throughout the term. The deposit should also provide for the cost of removing the solar power facility at the end of the term and restoring any damage to the building caused by the installation and removal. It should be noted that the landlord may, at the end of the term prefer to have the solar power facility removed so that it can proceed with redevelopment of the building or property adjacent to the building.

Insurance

The tenant must covenant to maintain at least the following insurance:

- (vii) all risks property insurance in respect of the solar power facility with the landlord added as an insured and containing the landlord's mortgagee's standard mortgage clause;
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