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Defense Construction Canada issues a Request for

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Expressions of Interest for energy performance contract

Defense Construction Canada (DCC) has issued a Request for Expressions of Interest, dated December 20, 2016, for improvements in energy efficiency contracts covering nine military facilities across Canada (Québec, Ontario, Alberta, Nova Scotia and New Brunswick).

The services required include preparation of a feasibility study, financing, performance guarantees, and construction and project management. The payment mechanism, financial structure and energy-saving targets would be specific to each project.

The approximate value of the contract would be $52 million, on the basis of a 10-15% reduction in service costs and a maximum amortization of 15 years from the beginning of work.

Responses to the Request for Expressions of Interest had to be submitted February 1, 2017. DCC plans to finalize the process by March 31, 2018.

Boralex completes financing of the Yellow Falls hydro project in Ontario

On December 16, 2016, Boralex announced that it had closed a $74.3 million financing for its Yellow Falls hydro project in Ontario.

The 16MW Yellow Falls hydroelectric power station is on the Mattagami River, near the town of Smooth Rock Falls. The total project cost is approximately $91.7 million.

Financing was structured on the basis of a hybrid model and includes a short-term tranche of $9.1 million fully amortized over 10 years, and a long-term (39-year) tranche of US$65.2 million which will begin amortizing over 29 years after repayment of the shorter tranche, the balance being due at maturity. Together, both tranches will bear a fixed average interest rate of approximately 5% over the life of the loans.

The lenders are Canada Life, The Great West Life Assurance Company and London Life.

Construction of the Yellow Falls hydroelectric site has already begun, with commissioning planned for the end of the 2nd quarter of 2017. The plant will operate under a 39-year power purchase agreement with IESO.

The Yellow Falls project was developed jointly with First Nation partners, the Taykwa Tagamou Nation and the Mattagami First Nation. The two First Nations, as well as the initial project proponent, Canadian Hydro Developers, hold options allowing them to acquire a participation of up to 31.25% of the project.

Boralex and AWEC announce a new partnership

On December 15, 2016 Boralex and the Alberta Wind Energy Corporation (AWEC) announced the creation of the *Alberta Renewable Power Limited Partnership*, owned respectively 52% and 48% by the two entities. This collaboration will allow Boralex and AWEC to pool their mutual expertise in developing and implementing wind and solar projects in Alberta and in Saskatchewan.

This new joint venture marks Boralex's entry into Alberta's renewable energy market.

The partnership will focus primarily on public utility wind farms with capacities greater than 5 MW

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and will also seek sites for potential solar projects.

The partnership expects to prepare tenders for the Windy Point and Old-Elm/Pothole projects in Alberta, and for a portfolio of other projects in Alberta and in Saskatchewan.

CC&L and Desjardins acquire a majority interest in the South Fraser Road project

Connor, Clark & Lunn Infrastructure ("CC&L") and the Desjardins Group Pension Plan acquired a majority interest in the South Fraser Perimeter Road project in British Columbia, a public-private partnership (PPP) project.

ACS (50%), Star America Infrastructure Fund (25%) and Ledcor Infrastructure Investments (25%) were the project's initial shareholders. ACS sold 37.5% of the total project for $24.7 million, and will retain a 12.5% minority interest in the project.

The transaction closed on December 9, 2016.

The project was refinanced in October 2015 for $228 million.

Boralex purchases Enercon's interest in the Niagara Region Wind Farm in Ontario

In a media release dated December 8, 2016, Boralex announced its acquisition of Enercon's 50% interest in the 230 MW Niagara Region Wind Farm in Ontario for a total cash consideration of $238.5 million.

The Wind Farm, which extends over the Regional Municipality of Niagara, the Township of West Lincoln, the Town of Wellfleet and Haldimand County in Ontario, was commissioned on November 2, 2016 and comprises 77 Enercon E-101 turbines. The Wind Farm has a 20-year power purchase agreement with IESO.

In October 2016, Enercon and its partner, Grand River Development Corporation, secured a $828.3 million non-recourse financing for the project. Grand River Development Corporation financed its capital investment in the project by way of a non-recourse loan from Enercon that will be transferred to Boralex.

United States: State officials seek abolition of the *Clean Power Plan*

A coalition of attorney generals and government agency representatives of 24 U.S. states have urged the Trump administration to issue an executive order declaring the *Clean Power Plan* unlawful.

In a letter dated December 14, 2016 to Vice-President Mike Pence, House Leader Paul Ryan and Senate Majority Leader Mitch McConnell, the signatories contend that the *Clean Power Plan* contradicts section 111 of the *Clean Air Act*, maintaining that the section does not give the EPA power to regulate emissions from a source that is already regulated. They also claim that the rules subvert each state's authority over its own sources of electricity generation.

The *Clean Power Plan*, widely regarded as draft environmental legislation bearing President

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Obama's stamp, fixes carbon emission reduction objectives applicable to power plants. One of the aims of the draft legislation was to accelerate the shutdown of coal-fired plants while increasing the share of renewal energy projects. The legislation remains suspended further to the Supreme Court's February 2016 decision delaying implementation.

In his campaign, President Donald Trump stated that he opposed the *Clean Power Plan*. The signatories of the letter noted that an order would not formally cancel the plan, but would however assure States that it would not be applied.

The groups also suggested that Congress and the administration work together on legislation that would prevent the EPA from drafting regulations similar to the *Clean Power Plan* in the future.

The letter was also signed by the representatives of West Virginia, Wyoming and Kentucky, the three largest coal-producing states in 2014.

Industry participants stated they do not expect any significant changes in the short term if the *Clean Power Plan* is cancelled and noted that the growth in renewable energy production was largely stimulated by state initiatives rather than by federal mandates.

The sale of TerraForm Power moves forward

TerraForm Power, the yieldCo created by the US developper Sun Edison, is currently assessing preliminary offers from various strategic buyers and investors, in preparation for the next phase of the sale process, namely committed offers, which had to be submitted mid-January 2017.

Pattern Energy Group, Brookfield Asset Management, a Texas-based renewable energy company and other entities established in Asia, are among the potential bidders.

TerraForm Power, with a market capitalization of US$1.9 billion, manages US$3 billion in solar and wind assets in North America and in the UK. The energy company SunEdison, currently under bankruptcy legislation protection, remains the largest shareholder of TerraForm Power.

CDPQ and DP World launch a US$3.7 billion port assets fund

Caisse de dépôt et placement du Québec (CDPQ) and Dubai-based DP World have created a $5 billion (approximately US$3.7 billion) fund, to be used as a platform for investing in ports and terminals around the world (excluding the United Arab Emirates). DP World holds a 55% interest in this investment vehicle, and CDPQ holds the remaining 45%.

This new vehicle will invest directly in equity, primarily in existing infrastructure assets, but will also invest up to 25% in projects under development.

The fund has invested $865 million in two of DP World's Canadian container terminals, located in Vancouver and Prince Rupert. CDPQ has acquired a 45% interest in the combined assets.

CDPQ Infra, the infrastructure division of Caisse de dépôt et placement du Québec, currently has $13 billion in assets under management, 25% of which is invested in the United States, and 10% in Canada.

In November 2013, CDPQ acquired a 26.67% interest in Global Infrastructure Partners in the Port of Brisbane in Australia.

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The Canadian government approves two pipeline projects

According to a November 29, 2016 statement, the federal government has approved two major oil pipeline projects: the Kinder Morgan's Trans Mountain Expansion Project and the Enbridge Line 3 replacement project.

The Trans Mountain pipeline has been in existence for 63 years. It transports crude and refined oil between Alberta and British Columbia. The expansion project will increase the pipeline's nominal capacity from 300,000 to 890,000 barrels a day. Construction of the Trans Mountain project is scheduled to begin in September 2017, with a commissioning date planned for the end of 2019. The cost of the project would be approximately $7 billion.

Calgary-based Enbridge's Line 3 Replacement Project involves replacing a 50-year old pipeline from Alberta to Wisconsin that would double its original capacity to 760,000 barrels a day. Project completion is planned for 2019.

The Canadian government rejected a third pipeline project, the Northern Gateway project, also proposed by Enbridge. The project was envisaged as a twin pipeline system that would have exported bitumen and imported natural gas condensate.

TerraForm Power successfully refinances its solar power portfolio in Canada

TerraForm Power recently contracted a $120 million 7-year loan with Deutsche Bank to refinance its Canadian solar power portfolio. The loan bears interest at an average interest rate of 3.7%.

TerraForm Power's solar power portfolio includes the following projects:

SunE Perpetual Lindsay (15.5MW)
March Hill (18.5 MW)
Woodville (12.6 MW)
Sandringham (13.1 MW)

The four projects have 20-year power purchase agreements with IESO.

The financing terms and conditions give TerraForm Power the possibility of expanding the loan principal by an additional $123 million ("accordion feature").

The Northwest Territories are seeking financial consulting services for PPPs

The Government of the Northwest Territories has launched a call for tenders for financial consultancy services for future PPP projects.

The selected firm's mandate would be to assist the government in developing and evaluating the call for tender process. It will also contribute to the creation of appropriate administrative structures and training programs.

The province contemplates at least three potential projects being carried out in PPP mode. A first project, estimated at $700 million would to construct a section of highway in the Mackenzie Valley from Wrigley to Normal Wells. A second project involves construction of the All Season road (approximately $150 million). The third project is also a highway, extending to the Arctic Coast as far

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as a deep water port in western Nunavut.

To date, the province has been involved in two PPPs: the Stanton Territorial Hospital which completed its financial close in August 2015, and the Mackenzie Valley fibre optic line, which finalized its closing in November 2014.

Crown corporations concerned over the market's ability to deliver all the infrastructure projects currently planned in Canada

A number of Canada's main PPP agencies appear to be concerned over the market's ability to deliver the increasingly high number of projects that are planned across the country.

Some agencies, such as Partnership BC or Infrastructure Ontario, try to structure their procurement process to maintain market competitiveness, for example by giving companies more time to assess their needs, or by saturating the market with a large number of requests over a short period of time.

Public sector agencies that must manage a growing number of projects in development must also deal with this problem.

Québec considering a PPP for the Louis-Hippolyte-LaFontaine Tunnel rehabilitation project

In the early part of 2017, Transports Québec will assess private-sector interest in the Louis-Hippolyte-LaFontaine Tunnel rehabilitation project.

The government agency is planning a major rehabilitation of the tunnel as well as related work on Highway 25. A traditional procurement model will be assessed alongside Design – Build – Finance and Design – Build – Finance – Operate options.

Transports Québec will conduct a market survey of potential privatesector partners (engineering consulting firms, general contractors, investors) regarding the commercial structure, allocation of risk, and terms of remuneration for the project.

The various aspects of the project include replacement of the concrete screed and installation of a surface protective coating. The project cost and project schedule have not yet been determined. However preliminary work the project is underway, and the second phase of the project is slated to begin after 2018.

Consortiums pre-qualified for the Montréal LRT contracts

CDPQ Infra, a subsidiary of the CDPQ, conducted a pre-selection of consortiums for the Réseau Électrique Métropolitain ("REM") project, the cost of which is estimated at $5.9 billion.

In June 2016, the CDPQ published two requests for qualification: one for the infrastructure engineering, procurement and construction (EPC) contract and the other for the rolling stock, systems and operation and maintenance services (RSSOM) contract.

The cost of the EPC contract will be approximately $4.4 billion and the RSSOM contract will be approximately $1.5 billion.

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The following consortiums and companies were pre-selected:

For the EPC contract:

Groupe NouvLR:
SNC Lavalin, Dragados, Aecon, Pomerleau, EBC, Aecom
Kiewit-Eurovia, a partnership:
Construction Kiewit, Eurovia Québec, WSP, Parsons

For the RSSOM contract:

Alliance Montréal Mobilité (AMM):
Parsons, Hyundai Rotem Company, RATP Dev Canada and Thales
Bombardier Transportation Canada Inc.
Groupe des Partners pour la Mobilité des Montréalais (PMM):
Alstom, SNC-Lavalin

The pre-selected teams each have six months to submit a final proposal.

Construction is expected to start in the spring of 2017 and the first trains are expected to be in operation by the end of 2020.

The project will allow for the deployment of a new high-frequency light rail transit network by building and transforming close to 67 km of double tracks, 24 stations, 9 bus terminals and 13 park-and-ride facilities. The project will also include the acquisition of a fleet of over 200 cars.

Canada's Minister of Infrastructure and Communities, Amarjeet Sohi, outlines the federal government's infrastructures plan

In an interview granted to InfraAmericas, Amarjeet Sohi, Canada's Minister of Infrastructure and Communities explained the federal government's infrastructure projects and in particular the role of the future Canada Infrastructure Bank ("CIB").

The CIB's mandate will be to advise the federal government as well as provincial and municipal authorities on building infrastructure projects through public-private partnerships.

The CIB, which has received $15 billion in government funding, will review each transaction and will structure it to ensure the protection of the public interest, while seeking to attract private capital.

The relevant projects are primarily in the area of transit infrastructure: building of roads, bridges, tunnels, public transit and interprovincial transit lines. The mandate of the CIB is also to promote renewable energy projects so that ultimately the use of coal will be eliminated in Canada, in furtherance of the COP21 Agreement signed in Paris in 2015.

The Minister cited the REM project developed by the CDPQ in Montréal as an example of the situation where an institution dedicated to infrastructure can make a difference by mobilizing private capital for a project that would not otherwise be achievable because the investment required would be too high for government budgets.

As regards asset recycling transactions – another way to fund new projects - the government is awaiting the result of a Department of Finance Canada study, which would determine the role that the CIB could play.

PPP Canada will continue to play a role in formulating new infrastructure projects and will support the Government in creating the Infrastructure Bank.

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Alberta approves 400 MW of new renewable energy projects procurement

The Government of Alberta has authorized the Alberta Electric System Operator (AESO) to launch a call for tenders for 400 MW of renewable energy in 2017.

This call for tenders would be the first of a series that should span the next 14 years, in the knowledge that Alberta plans to add 5,000 MW of renewable generation capacity by 2030.

The AESO would accept projects that have a capacity of at least 5 MW and that would be operational by the end of 2019. The Authority will consider new projects and expansions of existing facilities.

The AESO plans to issue a Request for Expressions of Interest in the 1st quarter of 2017, a request for qualification in the 2nd quarter 2017 and a request for proposals in the 4th quarter of 2017.

Renewable energy is part of Alberta's long-term climate policy. The province plans to gradually eliminate coal-fueled electricity generation from 49% to zero by 2030.

Refinancing of Montréal Gateway Terminals partnership completed

A group of Montréal Gateway Terminals shareholders, led by Axium Infrastructure, closed the refinancing of the company's bank debt, which amounted $252 million on November 17, 2016.

in March 2015, a consortium comprised of Axium, Desjardins, Manuvie, FTQ and Industrial Alliance, acquired the company's assets from Morgan Stanley's first infrastructure fund. The transaction was initially financed by $252 million in "mini-perm" bank financing over a five-year term.

The debt was refinanced via a private bond placement in which several American and Canadian buyers, such as Prudential, Barings and Manuvie participated.

Axium acquires its first solar assets in the U.S.

Axium Infrastructure has acquired an 84-MWac (110 MWdc) portfolio of solar photovoltaic installations in the USA and Canada from Renewable Energy Trust Capital (RET Capital).

The transaction, which closed on November 17, 2016, is Axium Infrastructure's first solar investment in the US.

The portfolio includes eight solar parks in California, Georgia and Ontario. These facilities reached commercial operations between 2012 and 2015. They each have long-term fixed-price power purchase agreements with investment-grade utilities.

PPP for île d'Orléans Bridge?

The Government of Québec will review all possible options for carrying out the project for a new cable-stayed bridge linking the île d'Orléans to the north shore of the St. Lawrence River. Until now, the preferred option was traditional public sector construction and operation. Two other options are

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currently under consideration: having the project carried out either in the private sector or in a private-public-partnership (PPP). The question of a bridge toll appears to be definitively ruled out.

On November 24, 2016, the ministère des Transports du Québec (MTQ) launched a call for tenders for consultants specialized in finance and economics whose mandate would be to review and analyze the various modes of delivery for the île d'Orléans Bridge project.

MTQ officials have estimated the cost of traditional construction and maintenance, i.e., fully government-funded. Although that assessment has not been disclosed, there is an unofficial estimate circulating that puts the budget at $400 million.

The current bridge dates from 1935. It must be replaced to conform to new seismic standards, and also because its piles are sinking into the soft bed of the river, on the north shore. The most recent schedule put forward by the government is that the bridge will be in operation by 2024. The new bridge, if built as a concrete structure would have a life-span of 75 years, and if built as a metal structure, would have a life-span of more than 100 years.

Global Infrastructure Partners creates the largest infrastructure fund in the world

The third fund created by Global Infrastructure Partners – baptized as Global Infrastructure Partners III ("GIP III") – was completed at US$15.8 billion.

The final amount of GIP III is bigger than that of the Brookfield Infrastructure Fund III ("BIF III"), which achieved a final closing of US$14 billion in July 2016.

The GIP III will have a 10-year mandate with two options to extend, each for one year. It is planning on making 10 to 14 equity investments of approximately US$500 million to US$1.75 billion over a five-year period.

Fiera Infrastructure acquires 50% interest in an Ontario wind farm

On January 25, 2017, Fiera Infrastructure Inc., a subsidiary of Fiera Capital Corporation, announced that it had acquired Suncor Energy's 50% interest in the 100-MW Cedar Point II wind facility in Ontario, through its Fiera Infra LP fund.

This is Fiera Infrastructure's first wind energy investment. Cedar Point II is located in the counties of Lambton and Plympton-Wyoming and has been operational since October 2015. It sells its entire output to IESO under a 20-year power purchase agreement.

NextEra Energy Canada, a subsidiary of NextEra Energy Resources, holds the remaining 50% of the project's assets.

National Bank Financial Markets acted as Fiera Infrastructure's adviser, financial arranger and lender.

Major trends in the infrastructures market for 2017

It is interesting to note the major worldwide trends in the infrastructures sector for 2017. Below is a compilation for our readers of the recurring themes gleaned from the analyses of experts in the field.

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A political commitment to reviving economic growth by means of infrastructure spending
Accepted by most economic analysts and political leaders across the spectrum, investments in public infrastructures are universally acknowledged as an effective tool for economic interventionism. Generally, such investments are accompanied by measures to stimulate private investment which in turn optimizes government expenditures.
The proliferation of infrastructure investment vehicles accompanied by competition in the fund industry over fund size
Intended to attract private capital to infrastructure projects, the number and size of investment funds should continue to grow, particularly under the influence of investors from emerging countries. In some cases, they could compete head-on with traditional developers and builders.
Growing competition in the construction industry should increase pressure on sector company margins
This phenomenon should stimulate cooperation among firms seeking synergies and economies of scale, and also promote technological innovation.
The transportation sector should play a more important role and surpass that of energy in new infrastructure investments
Growing urbanization, associated with congestion and pollution in large cities and the need to facilitate trade will push governments to prioritize urban transit projects, especially rail projects.
Economic expansion in China
China should accelerate its economic expansion in Asia due to the USA's disinvestment in the region and the failure of the TransPacific Partnership. This situation will affect North American companies and small local Asian companies that cannot compete with large Chinese companies.
The energy storage sector
The exponential growth of the energy storage sector caused by the problem of managing an increasingly complex energy mix, including renewable energy, which by its very nature is intermittent, and fossil fuels and nuclear energy, the flexibility of which remains limited. Commercially operational technological solutions are beginning to emerge and will represent opportunities for sophisticated investors.

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