

Opportunity India

Why Alberta's future wealth will be made in India

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Introduction and Background

The two great movements nurtured by Mahatma Gandhi won resounding electoral victories this spring, proving the durability of a political philosophy rooted in dignity, self-reliance, pluralism, diversity and inclusion. While there was little surprise in the overwhelming mandate South Africans handed to the African National Congress; the startling ascendance of the Indian National Congress and its allies defied opinion polls as Indians forsook decades of minority parliaments for majority government.

This is great news for Alberta, which is uniquely suited to ride the "Indian Express" as India accelerates to the front ranks of the global economy. Already the world's fourth-largest economy as measured by purchasing power (behind the U.S., China and Japan), India is poised for a strong recovery as its economy rebounds from the current "recession" growth rate of seven per cent per annum.

The advent of political stability at the centre will make India an even more formidable force in the world in the coming years. In Manmohan Singh's first five years as Prime Minister in the Congress-led minority government, economic reforms were impeded by Communist parties in the coalition. That impediment will be gone as Singh becomes the first Indian PM in 50 years to win back-to-back five-year mandates, and acts on his party's belief that "economic growth and social justice are two sides of the same coin and must always go hand-in-hand."¹

Singh unleashed India's economy as Finance Minister in 1991, finally breaking the grip of the stifling policies established by India's post-independence leadership. As a last cruel joke of Empire, India's first Prime Minister Jawaharlal Nehru imbibed an arcane Utopia called Fabian socialism while studying at Cambridge in the 1930s. It aimed to create social justice through incremental measures rather than revolutionary means, much like the socialism preached in Canada by Tommy Douglas and M.J. Coldwell. In consequence, Nehru set up a centrally-planned economy and picked a handful of "winners" among established industrial families, thus enabling a private sector monopoly in some areas and rigid state control in all others. Competition, enterprise and innovation occurred only at the micro level, where India's inventive poor made the most of meagre resources with much more efficiency and productivity than the top-down enterprises and institutions sanctioned by the state. (Even today, the Mumbai slums

¹ <http://www.congress.org.in/>

shown in the film *Slumdog Millionaire* produce a billion-dollar economy inside those scrap-yard hovels and tin-shed factories).

By the time Singh took the Adam Smith Memorial Prize in Economics during his time at Cambridge in the mid-1950s, a much more balanced and sophisticated economics was there to be learned. Those lessons were wisely applied when Singh took control of India's economy, a decade after China launched its own economic reforms.

By dismantling a maze of licensing and bureaucratic controls developed over decades of state-planned economics, Singh provided ample room for his country's innate entrepreneurial talents to flourish. Even though the first Singh government was hobbled by its Communist allies, India continued to build a robust economic foundation and opened up its oil and gas industry to foreign participation. Some Alberta firms responded, particularly as it became clear that offshore natural gas, and onshore oil, could take India closer towards meeting its energy needs from domestic sources. Now, the discovery and development of heavy oil in the Rajasthan desert opens a new chapter in India's energy growth, and another horizon of opportunity for Alberta.

India's Prime Minister Knows Alberta

With a clear political mandate, Singh now has room to take India further in its journey to global economic power. In India's pragmatic division of responsibilities, the machinations of partisan politics are handled with considerable aplomb by Nehru's Italian-born granddaughter-in-law Sonia Gandhi (part of the 1960s generation at Cambridge) as president and party leader of the Indian National Congress. Her flair for navigating intrigue both empowers and enables Singh to deal with the day to day challenges of policymaking and governance. In practical terms, Singh's second term opens the door even wider for Alberta in key areas: clean coal technology, carbon capture, near-zero-emission power plants, wastewater management, heavy oil production, natural gas production, and attracting skilled migration from India to fill Alberta's needs.

As the Government of Alberta's international policy continues to evolve (in the interests of disclosure please note my firm has provided strategic advice and guidance to the provincial government in this area) a robust India strategy should be front and centre. This is because we do not need a branding campaign or a marketing campaign to establish Alberta in the consciousness of India's senior leadership. Because of the oil sands alone, Alberta is not just on India's map, but the world's. Despite the relatively high production costs, Indians with power, influence and capital know that the oil sands offer the promise of stable, long-term oil supply.

Alberta is especially well known to Prime Minister Singh, who received an honorary Doctor of Laws degree from the University of Alberta in 1997, principally for his leading role in opening up the Indian economy. Singh counts Edmontonians among his friends and acquaintances. And Edmonton has been well-served by "ambassadors" who have pursued interests in India: Jim Edwards, who led Economic Development Edmonton and the University of Alberta's board of governors after his federal political career, even learned to pronounce Hindi with a native speaker's intonation; Alberta cabinet minister Gene Zwozdesky, similarly gifted in pronouncing Indian names and phrases, declares a visceral connection with the people of Punjab.

During Singh's first term as prime minister, India's public-sector energy firms won approval to invest more than \$2 billion in the Alberta oil sands, but have yet to consummate a deal. The large Indian Diaspora puts Canada on the radar screen of the Indian leadership, and Alberta's oil wealth puts our province front and centre. Formerly the state-

owned Industrial Credit and Investment Corporation of India, the now-privatized ICICI Bank recently opened a Calgary branch and are looking to expand its commercial portfolio.

Serious Indians already have seen the scenery featured in the province's branding campaign, and they all know about Alberta's potential. Now, it's time to nail down opportunities.

Clean Coal Technology a Good Fit

India's approach to climate change amounts to an open invitation to Alberta to collaborate on green technology.² It foresees a "collaborative R&D effort among developed and major developing countries, to bring about cost-effective technological innovations and transformational technologies, which can put the world on the road to a carbon-free economy."

Given this invitation, Alberta should begin with clean-coal technology, and its applications to both steel production (India is the world's third largest steelmaker, and Indian firms own two of the largest steel manufacturers outside India) and to power generation.

India intends to add 12,000 to 15,000 megawatts of generating capacity every year for the foreseeable future. To put this into perspective, Alberta's entire installed generating capacity is 12,555 megawatts. By adding another Alberta grid to its electrical generation, India will turn more and more to nuclear power – thanks to the landmark treaty with the U.S. removing the fetters on India's development of nuclear fuel for civilian uses. Yet nuclear capacity will take years to build, and even as it expands, the bulk of India's power generation will come from coal.

This is where Alberta comes in. The Alberta company Sherritt has significant expertise in manufacturing gas from coal, giving the province a talent base that can be readily applied to India's needs. If clean coal technology can be applied to India's coal-fired power generation, there will be significant benefit to the planet. India at present produces only four per cent of the world's greenhouse gas emissions. Canada produces two per cent, but India is forty times more populous. As India's energy production ramps up to meet both its economic potential and its population's demands, this is a signal opportunity to "get it right," in increasing electricity generation while restraining greenhouse gas emissions.

Edmonton's public sector energy company, EPCOR, is building a near-zero-emission power plant using the latest in clean coal technology. By turning coal into a synthesis gas that's engineered to be burnt in an oxygen-rich chamber, the EPCOR process produces carbon dioxide emissions concentrated enough to be readily captured in a closed system. Hydrogen is a by-product of this process, which leaves near-zero smokestack emissions. Further, it enables the captured carbon to be stored underground or used in enhanced oil recovery. Emerging technologies enable the captured carbon to be digested by microbes to produce methane or digested by algae which can be harvested to produce bio-fuels.

This is a "ground floor" opening to combat climate change. China, which emits more than a fifth of greenhouse gases, has already gone down the road of burning coal in a highly polluting manner; it now is investing heavily in expensive retrofits and carbon capture technologies. Alberta-India collaboration, on the other hand, can prevent Indian

² http://pmindia.nic.in/Climate%20Change_16.03.09.pdf

emissions growth right from the design stage. India's coal deposits are notable for quantity rather than quality: you need to burn a lot to generate heat. The energy locked in coal is expressed as "gross calorific value" or GCV. Right now, India imports high-GCV coal from Australia, Indonesia and elsewhere to blend with domestic coal, to fuel both steel-making and power generation. With gasification technology, the quality of the coal doesn't matter: even the lowest grades of solid fossil fuels, such as brown coal and anthracite, can be rendered into synthesis gas.

An Oil Sands Partnership

Alberta's oil sands resource and India's quest for energy security open up another range of opportunity. Thus far, India has been unsuccessful in finding the right oil sands investment. Its petroleum ministers have visited Alberta to push the message that India wants to invest here. Its motivation is clear: India and China are in a global competition to lock up secure, long-term supplies of oil for their economies. China has nipped India in just about every African jurisdiction where the two countries have competed for oil; while India is negotiating long-term supply contracts with Venezuela's nationalizing president, Hugo Chavez.

Alberta's oil sands offer the twin virtues of long-term supply and political stability, within a development framework of environmental sustainability. The Alberta government could take a more active role. Now that Alberta has decided to take raw bitumen as in-kind royalties from producer, it needs the capacity to actually process that bitumen and upgrade it to synthetic crude oil. Given the imagination and talent in both India and Alberta, it should be possible to develop a business case whereby India and Alberta might jointly produce and process bitumen, with India buying the oil. Whether this is done as a public-public partnership, or a public-private partnership, is an area to explore in discussions and dialogue. Yet there is considerable merit in examining how to build stronger energy cooperation between Alberta and India, two robust democracies already bound by the English language and a legal and parliamentary system inherited from the days of British rule.

Moreover, India has the expertise in building, upgrading and refining capacity to the highest global standards at the least cost. In only three years, India's Reliance Group built and commissioned the world's largest refinery and petrochemical products complex in the western state of Gujarat, producing 1.2 million barrels a day of petroleum and a range of final products from petrochemicals.³ Reliance's Jamnagar complex is engineered to take virtually all grades of oil beyond raw bitumen, from heavy oil (12 API, in the viscosity scale of the American Petroleum Institute) to sour crude to the lightest of light sweet crude (50 API; for comparison purposes Alberta's synthetic crude is about 29 API). The Reliance refinery can handle the world's largest tankers, called Very Large Crude Carriers, ultimately opening the possibility of processing Alberta synthetic crude delivered to Canada's west-coast – either by conventional pipelines, or Canadian National Railway's innovation of a pipeline on rails.

Managing Water

Alberta's oil Sands technology offers significant expertise in managing water and wastewater. In using water from deep saline aquifers for oil Sands processing and upgrading, Alberta firms have a strong knowledge base in cleaning and field creation techniques for large volumes of water. India's main rivers are clogged with industrial effluent and human waste. Made in Alberta technology can be used to improve the quality of water now being discharged directly into rivers and streams. This process of wastewater management and environmental mitigation may be a decades-

³ http://www.ril.com/html/aboutus/manufact_jamnagar.html

long opportunity for collaboration between India and Alberta. In India's major cities, municipal water treatment is an area of critical infrastructure that needs upgrading and improvement. This too is an area of growth that can be pursued once Alberta and India establish a primary connection and collaboration on clean coal technology and oil sands and heavy oil development.

Free Flow of People

Finally, there is ample room to grow people to people exchanges between Alberta and India. In a 21st century economy, the free flow of people between nations is as portend a competitive advantage as the free flow of goods, services, and investment capital. The easy movement of qualified professionals between these two jurisdictions will enable both India and Alberta to benefit from each other's skills, knowledge, and abilities. While the federal government has ultimate control over immigration policy, Alberta can and should build a strong case for greater economy and control over attracting Indians to meet Alberta skill shortage and enabling Alberta professionals to live and work in India as opportunity and situations merit. Under Alberta's provincial nominee program or PNP, it can attract qualified professionals to meet defined needs in the Alberta economy. However, the big delay in processing applications from India lies in verifying the qualifications of potential migrants. Alberta can accelerate this process by adding money and expertise to the process of screening and qualifying potential migrants to Alberta. There is also room for Alberta's educational institutions to take a stronger role in delivering their educational services and knowledge in India itself. The Northern Alberta Institute of technology, for instance, is establishing equivalencies to its red seal apprenticeship certification process in agreements with Indian educational institutions. Encouraging a generation of Indians to be trained to meet Alberta's high technological standards will benefit both this province and the country. It should be noted that migration isn't simply one way. In fact many who emigrate from India to seek opportunities elsewhere retain their links with their country of origin. They often return to invest and certainly remit money to family and invest in business opportunities in their home countries. Thus, the benefits of migration really are a two-way street.

Conclusion

The economic meltdown in the United States and the colossal scale of public debt that the U.S. is amassing in order to right the ship of state and to bring its economy back on an even keel, make it all but certain that the United States will not be the dominant global economic power in decades to come. The advent of the multi-polar world, with interconnected nodes of economic and political power, is more likely to be accelerated during the Obama presidency. In this emerging reality, Alberta must expand its relationships and its partnerships beyond Fortress North America. This policy goal has been clear for some time. What we have lacked in the past is a sharply focused strategy to take advantage of emerging opportunities in the rapidly changing world.

The newfound political stability that gives India a much more robust platform for its economic growth may be the most significant opportunity Alberta has in the coming years to expand its opportunities beyond the limits of the North American economy. In this active leadership, some private-sector companies already have stepped in and shown enterprise, yet we need a united front. We need a seamless convergence of government, economy, cultural and people-to-people connections in order to fully engage the Indian opportunity and to build a win-win for both Alberta and India. It is time to leverage our old relationships, and our emerging and developing expertise, to meet India's needs as it becomes a global leader in the 21st century.