

## The Patagonia problem

How 17 million working Canadians may fund the destruction of Chile's Patagonian wilderness.

by Mike Crane



According to the United States Energy Information Agency (EIA), world energy consumption is projected to increase by fifty percent from 2005 to 2030 and as a result governments from around the globe are searching for new energy reserves of various forms within their borders. The goal is to remain as self-reliant as possible, ensuring continued growth within their economies.

Chile, home to roughly 17 million residents and one of South America's most stable and prosperous economies while boasting more free trade agreements than any other country in the world, is no different. Maintaining the highest nominal GDP per capita in Latin America and a healthy five to seven per cent annual growth rate, the Chilean economy is ever expanding.

With mining as the cornerstone to its economy (being the world's largest producer of copper and possessing vast reserves of lithium for use in batteries, aircraft manufacturer and

heat-resistant glass), Chile has also been focusing on diversifying its offerings. Chile has been greatly increasing its agricultural exports and, unbeknownst to many, is soon to overtake Norway as the world's largest exporter of salmon.

Relying heavily on natural gas imports for its economic activities, Chile remains in an awkward spot as neighbouring Bolivia, rich in natural gas, refuses to export directly to Chile until Bolivian sovereign access to the sea, taken during the War of the Pacific from 1879 to 1883, is returned. Until that highly unlikely scenario is realized Chile will continue to rely on Argentina to the right, which is already strapped for energy and has seen its share of financial crises in recent history. As a result Argentina can only offer Chile an unstable and inadequate supply of gas, which Chile cannot rely on.

A slender nation averaging only 175 kilometres in width while stretching 4,300 km from tip to tail, Chile is home to an immensely diverse and

unique landscape with everything from the world's driest desert to its own Antarctic claims and every type of micro climate in between. The vast majority of the population inhabits the Middle Chile region, host to its capital city, Santiago. Including suburbs, Santiago makes up one third of the total Chilean population.

With the mines to the north in a mostly arid landscape offering few resources other than the minerals and metals themselves and middle Chile being the most populated area of the country supporting the majority of its agricultural exports, the Chilean government and eager Chilean and foreign corporations are looking to the relatively uninhabited southern half of the country for Chile's current and future power woes.

Home to some of the world's largest fresh water reserves and one of the planet's few remaining truly unspoiled wilderness areas, Chile's Patagonia is now facing a potentially rapid industrialization with plans for a massive scale hydroelectric project that would see both the Pascua and Baker rivers with a total of five dams. Transmission lines will be clearcut through over 2,300 km of wilderness paralleled by a new highway. Together these would pass through 14 legally protected natural areas spanning half the length of the country.

Ironically Patagonia would see all of the impact and almost none of the proposed benefits. Activist and third generation Patagonian farmer Segundo Cardenas equates it to repairing one part of the country by destroying the other half.

"When you build a house, would you take a board from one wall to patch another? That's what Chile is doing!"

The proposed HidroAysen project would be a joint venture between the private Chilean electric utility company Colbun S.A. and Spanish energy conglomerate Endesa which currently owns water rights in Chile. Chile, it's worth noting, is the only country in South America to have completely privatized its entire urban water supply and sanitation sector.

With Chile being over 8,000 km away and in a completely different hemisphere, you may be asking yourself how does this affect Canada and what, if any, role do I have in this?

The answer is "a lot." In 2006, the Canadian Pension Plan Investment Board and British Columbia Investment Management Corporation (who both invest on behalf of the CPP and B.C.

pension corporation respectively) have together invested \$500 million through Canadian asset management company Brookfield in the power utility Transelec. Those groups are becoming co-owners in the company that will be responsible for constructing the proposed power corridor, essentially building the world's longest transmission line through pristine wilderness and ecologically sensitive areas while making 17 million working Canadians involuntary investors in this highly controversial scheme.

With an aging Canadian population, CPP has in recent years taken on a different approach to its investment activities. Going back to 1966 there were 6.5 workers per retiree to support pension funds but by 2025 there will only be three workers per retiree.

There is no doubt the Canadian demographic is changing. Looking to make up the predicted shortfall in pension earning payouts, the Canadian Pension Plan Investment Board has pushed aside the traditional moderate return/low controversy investment model for what they call a "value added" approach in the hopes of higher risk adjusted gains. In the last five years they have increased their full-time employee base by over 500 per cent, opening offices in Hong Kong and London.

Summing up their investment policy their web-site states, "While we do not use positive or negative screens in our investing, we do take into account many of the issues that concern Canadians to determine the potential impact of environmental, social and governance (ESG) factors on the company's long-term performance. We look at ESG factors only as investment criteria from a risk/return point of view and we integrate these factors into our investment process."

Clearly hoping to capitalize on the proposed HidroAysen project as a reason for their largest infrastructure investment to date, you have to wonder how reflective they were on "issues that concern Canadians" or if they simply felt the return would be far greater than the risk and controversy associated with such an investment. But would the vast majority of Canadians really support such a profit-before-common sense investment that goes against the will of the majority of an entire foreign country's indigenous population?

After reviewing grossly deficient environmental assessments that don't even take into consideration the impact of the transmission lines, Chile's

current government and president have made the HidroAysen project a national priority to fill the country's energy needs, paving the way for the framework that could ultimately give the project the green light to flood over 12,000 acres of rare temperate rainforest - in the process further threatening already endangered species, submerging traditional burial grounds and displacing communities that ironically were offered incentives generations ago to populate the very same areas.

In the current age where concerns of our planet's environmental wellbeing are no longer on the backburner but in the forethoughts of citizens of all nations of the world, it seems almost inconceivable that such an environmentally damaging project even remains on the table as an option when there are so many far less invasive new technologies coming online to help meet global energy demands.

Looking back to Chile's mining resource rich north - with its every-increasing appetite for energy as it intensifies output to meet the ferocious demands for copper and other precious metals in rapidly emerging markets such as China - some answers may lie in the vast barren deserts making up one of the driest climates in the world.

Boasting over 300 days of bluebird skies per annum some areas in the north, closer to the equator, possess limitless solar potential and would be an ideal location for solar electric projects on a grand scale that could even allow Chile to become a world leader in the field - especially given their vast reserves of lithium, which is now being used in the production of modern day solar cells.

Taking matters into their own hands, a small community in Chile's Elqui Valley have been utilizing the sun for years to cook their food. The restaurant Villaseca became the first solar restaurant in the world to cook its meals in simply-constructed solar ovens, utilizing completely emission-free energy from the sun's rays to make everything from bread to braised goat without even lighting a burner. Their dedication to conservation has inspired people around the globe while also offering a safe cooking method to those in some of the poorest regions of the world that do not have access to electricity or fuel to cook with. Solar cookers, interestingly, can be made from two cardboard boxes, black paint, foil and clear plastic, offering an inexpensive and sustainable alternative to some of the estimated two billion people who

still rely on firewood for cooking (still a major contributor to global deforestation).

With a coastline spanning 4,265 km, Chile essentially makes up over half of South America's western coastline, offering tremendous tidal and wind power potential. And with large cities now possessing the renewable energy technologies to produce energy from sewage, even Santiago has resources to put a dent in its energy needs. With so many alternative options available that can each in their own way help meet demands, it almost seems inconceivable to go ahead with such an irreversible project that stands to cause great damage to Patagonia's pristine landscape and ever-important tourism industry, all the while creating divisive issues for a country that has seen its fair share of hardships in modern history.

American multimillionaire and founder of the North Face and Esprit clothing brands, Douglas Tompkins, has become a predominant figure for the awareness and protection of the Patagonian region. Mentally devastated by a flight over our very own British Columbia in the early '90s where he witnessed firsthand some of the province's extensive clearcuts, Tompkins began buying vast acreage of temperate rainforest in Chile. He purchased over 700,000 acres of land and created what is now known as Pumalin Park, a dedicated nature reserve drawing thousands of visitors every year. With his park essentially geographically dividing Chile's north from Patagonia, Tompkins is continuously fighting off attempts to forever alter the landscape and has devoted his remaining time on this planet to Patagonian conservation.

Visiting the town of Pucon, north of Patagonia, we also witnessed a similar success story where activists got together and purchased land containing ancient old growth forest that was slated for extensive logging and had already been affected from the draining of a lake to graze livestock. Now protecting over 1,200 acres and run by the Cane Guides Association, the El Cani Nature Sanctuary showcases what can happen when people get together, standing as a great victory for environmental preservation and also as an inspiration to those who are fighting to protect Patagonia from the proposed hydroelectric project.

Throughout my three weeks in Chile, in the majority of the places we visited Chileans were passionate but pessimistic about the plans for Patagonia. When they head to the polls

on December 13 the fate of one of the planet's last true great wildernesses will ultimately be decided by the country's new president and political leaders sometime in 2010.

planet and we as humankind currently face, is our unhealthy fixation and utter obsession on non-stop, never ending growth eventually going to be the end of us all?

You really have to wonder, that with all of the environmental issues that our

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