

Patagonia: A Protected Reserve of Life or home of a Giant Aluminum Smelter?



The ancient forests surrounding the spectacular lakes Tulton and Meulin would be lost forever if Noranda's Alumysa project is approved. ©Peter Hartmann

The Aysén Region of Chile's Central Patagonia encompasses an area of nearly 11 million hectares (about 110,000 km²), an area about the size of Austria and Netherlands combined. It currently safeguards five million hectares of native forest, more than one million hectares of wetlands, and almost two million hectares of glaciers. This globally unique region currently has the majority of native forests in Chile including two million hectares of ancient intact forests¹ representing 23% of all ancient forest area in Chile (see Map).

This area of Patagonia is characterised by its glacially carved landscapes, rainy temperate climate, clean air, unpolluted lakes, rivers, fiords and glaciers. The Aysén region contains 30% of all lakes and 29% of all rivers in Chile. Most of Aysén's lakes were formed through glacial activity, and two ice fields covering an area of about 18,000 km² and still influence the region's climate and topography. These geographical features have created a network of diverse ecosystems rich in biodiversity supporting many rare and endemic species.

The population of the region is less than 100,000 people and is sparsely populated. This helps maintain the region's natural, cultural and tradition values. For these outstanding attributes the inhabitants have declared Aysén a "Reserve of Life" and are supporting an alternative regional strategy promoting sustainable activities such as tourism, fishing and organic farming.

Canadian Mining Company threatens the region

In 1995, Aysén came under serious threat by Noranda, a leading international mining and metals company with a notoriously poor environmental record². The Canadian company plans to build a massive aluminum smelter and hydroelectric project in the region. The



The internationally protected Cypress of Guaitecas (*Pilgerodendro uviferum*) is one of the many endemic species found in the Aysén Region and is under threat by the development of the Alumysa Project.

Patagonia is one of the planet's largest reserves of biodiversity. If it is destroyed by incompatible projects or denied a clean environment, sooner or later the way of life and the economic growth of its inhabitants will be affected. The option of sustainable development via ecotourism, clean, natural, organic agriculture, the efficient management of native forests and adequate control of mining, industry and salmon fishing is the correct way to make economic progress and at the same time keep the region pristine for the benefit of humanity."

Senator Antonio Horvath Kiss, Environmental Commission's initiative, *Diario de Aysen* 2nd June, 2003



Panoramic view over the biodiversity of "Los Torreones" ©Greenpeace/BeItra

1 Castastro de Bosque Nativo, 1999.

2 Noranda has a poor environmental record with at least 87 environmental violations in Canada and fines surpassing US\$ 1.2 million. In general these violations include spillings and discharges of toxic substances, deficiencies in the storage of harmful wastes, atmospheric toxic emissions above the allowed limits, accidents caused by negligence, contamination of coastal waters and fishing activities, flaws in the installation of the cleaning and anti-pollution equipment and non compliance with local laws. According to the Canadian Environmental Defense Fund in 1998, Noranda was the second worst company in Canada for air and river pollution releasing a total of 290 tons of toxic substances. They had the worst record of arsenic and lead emissions and the second worst record for cadmium, mercury and particled material.

US\$ 2,750 million project, known as Alumysa, would require the construction of six dams and three hydroelectric stations. The project would flood around 10,000 hectares of largely intact temperate rainforest, fragile riparian areas and farmlands. Additional habitat would be lost to extensive road, port and building infrastructure threatening the survival of the already vulnerable species in the area³.

Massive and continuous (24 hours, 365 days a year) emissions of toxic gases would be generated: (particle fluorides), organic particle material (highly carcinogenic), greenhouse gases (CO₂, perfluorocarbons), acid rain sulfuric gases, carbon monoxide, particle material and others, that contribute to the greenhouse effect. Also, the primary aluminum melting would emit high quantities of CFC-14 and CFC-116, possibly the most detrimental of all greenhouse gases. The emission of these pollutants would threaten the water quality of one of the world's largest fresh water reservoirs, Campos de Heilo.

The increase of large cargo ship traffic and the discharge of ballast water would endanger the survival of small-scale economies such as artesian fishing, salmon farming, ecotourism, traditional activities of agriculture and livestock.

Also, the Aysén area is geologically unstable. It is prone to landslides, and tidal waves. The Alumysa smelter was to be situated close to a fault where the intense Valdivia earthquake originated.

On top of this devastation, estimates showed that Chile and the Aysén region had a great deal economically to lose if the Alumysa project had been approved. Of the approximate US\$ 290 million per year in direct benefits that the project was to generate, only US\$13.5 million would remain in the area and only US\$ 52 million would of gone Treasury which, if the project is judged to be viable, will have to assume the environmental costs.



This local landowner's property was threatened by the flooding that would be produced by the Alumysa Project. ©Greenpeace/Beltrá

Noranda indicated that it may not be able to comply with Chilean environmental regulations at its global operations, and that to do so may "materially adversely affect our business, financial condition, liquidity and results of operations"

(quote from Noranda, Prospectus Supplement, June 18, 2002)



Noranda's CEO Derek Pannell speaking at Noranda Inc. Annual General Meeting in Toronto, April, 23, 2003 ©Tockman

2nd July in the National Congress Senator Nelson Ávila of the Environmental Commission analysed the economic and environmental implications of the Alumysa project. He registered his deep concern at the damage to the country which would be caused by the construction of a gigantic aluminium plant. The MP emphasized that Alumysa would not only affect the eleventh region of Aysén but that people throughout the whole country would suffer the environmental and economic consequences of this vastly contaminating mega-project.

Santiago, 3rd July, 2003.

³ At least 118 flora species and 49 fauna species would be affected by this mega project including some of the following species: Cypress Guaitecas (*Pilgerodendron uviferum*), in danger of extinction; Huemul (*Hippocamelus bisulcus*), in danger of extinction; Puma (*concolor Felis*), in danger of extinction; Colorado Fox, designated as vulnerable; River Otter, in danger of extinction; Lesser Rhea (the Nandu), vulnerable; Coscoroba Swan (*Coscoroba coscoroba*), vulnerable; Patagónian Cactus (*Austrocactus patagonicus*), vulnerable; and- Orchids, the Tip of Parrot (*magellanica Chlorea*) and the Mountain Tulipán (alpine *Chlorea*).
<http://www.patagonia-accu.cl/index.htm>



Habitat loss and fragmentation proposed by the Alumysa Project threatens vulnerable fauna such as the internationally protected Culpeo Fox (*Pseudalopex culpaeus*). Patagonian fox, Tierra del Fuego, Chile. 05/1998. ©Greenpeace/Papavoine

Noranda in South America

In order to understand why Chile's Central Patagonia was chosen for the Alumysa project it is important to consider that in developed countries this type of manufacturing process is highly questioned by government environmental agencies. The developed world has established a more rigorous legal framework for foreign investment, which forces companies like Noranda to look to places like Chile, Brazil, Argentina or Peru, which, in their eagerness for economic growth, accept projects of this type that elsewhere would not be permitted. Among Noranda's investment plans, Chile is the "heart of the strategy" for Latin America.

The global campaign against Alumysa

Greenpeace has actively supported the campaign work of local Chilean NGOs by helping to create local and international momentum opposing the Alumysa project. Thousands of letters and emails by Greenpeace supporters were sent to the Chilean President Ricardo Lagos Escobar demanding the halt of the project. There were 1,400 individual critiques of Noranda's original Environmental Impact Assessment (EIA), submitted by a number of organizations including the Mining Department of the Catholic University, the Medical Association of Chile, the Chilean salmon industry, the fishing industry, tourism industry, and concerned non-governmental organizations. Greenpeace Chile tracked and publicly exposed these critiques and Noranda's failure to accurately evaluate the project's EIA that was reviewed twice by the Chilean environmental authority (CONAMA). This is the first time in ten years that a Canadian mining company's EIA has been rejected by CONAMA. Greenpeace also participated in a joint NGO protest at Noranda's 2003 annual general meeting in Toronto, Canada questioning the board and major shareholders about their environmental and social accountability for the Alumysa project.

With growing opposition, the National Congress Senator Nelson Ávila of the Environmental Commission invited Greenpeace and other NGOs to explain the impact of the Alumysa Project in July 2003. After the meeting, he analysed the economic, social and environmental implications and emphasized that Alumysa would not only affect the eleventh region of Aysén but also people throughout the whole country would suffer the consequences of this mega-project.

"For Alumysa to exist, it must respect all the environmental laws, but mainly it cannot happen to affect activities that already exist, as it is the case of the salmon industry. We are in favor to support all the projects that generate employment and well-being for the community, while their existence is harmonic and respects the environmental norms" President of the Christian Democracy (DC) of Chile, Adolfo Zaldívar, June 25, 2003 *Diario Financiero*

The communities of the Aysen Region support sustainable development in their local economy such as windpowered energy sources and small scale fishing.



Windmills on the road to Puerto Aysén. ©Greenpeace/Beltrá



Small scale fishermen sailing out at dawn. ©Greenpeace/Papavoine



A local march in Cohaique (XI Region of Chile) protesting Noranda's formal request to the Chilean government to build the Alumysa Project in the Aysén. March 8, 2001 ©Peter Hartmann

On August 4th 2003, the Chilean President, Ricardo Lagos, after visiting the region, expressed the view that the proposed location of Alumysa would be detrimental to the development of fish farming and tourism in the region. He concluded that the explosive growth in activity would make a too high a demand on this coastal area. This statement, and mounting international pressure on Noranda, made the company rethink and they withdrew their current application for the Alumysa Project to the National Commission of the Environment (COREMA, XI Region) on August 19th 2003. Noranda has decided to wait until the Chilean government defines a land planning and coastal zone policy that will influence the alternative location Patagonia. However Noranda still has not given up the project and it will still need to flood a large area of forest in Patagonia in order to generate enough power for the proposed smelter.

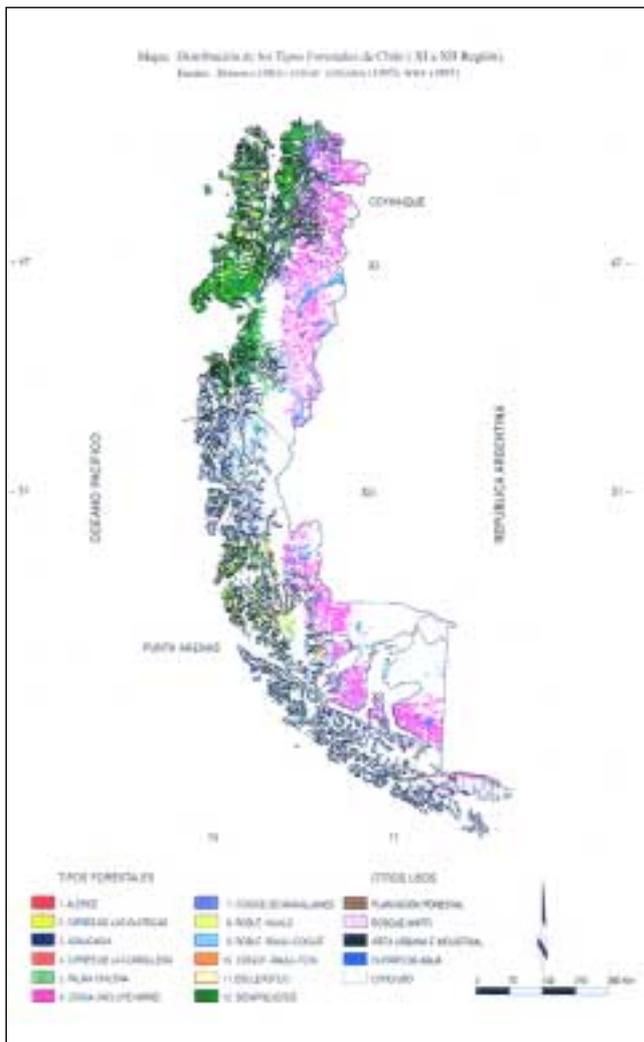
Nature Needs Protection

Greenpeace is campaigning for the protection of the Aysén region from large-scale destructive development projects, such as proposed by Noranda, and maintains its support for the “Reserve of Life” proposal by local people. Greenpeace is calling on the Chilean government to protect Patagonia’s biodiversity and natural resources from any future threat from large-scale unsustainable exploitation. Aysén is an area of outstanding global features that deserve local, regional and global protection.

“I don’t think the Bay of Chacabuco is a suitable place for this kind of project...We are proud of our international trade, but we must respect our environment. Soon the more developed countries will be demanding green guarantees for their imports, which means that they will be accepted only if they are produced according to environmentally friendly procedures...” Excerpts from Chilean president, Ricardo Lagos, Speech, 4th August 2003



The Reserve of Life would provide valuable pristine habitat for the internationally protected Huemul (*Hippocamelus bisulcus*) which is under threat of extinction. ©Peter Hartmann



World governments are recognizing the need to protect more of the world’s threatened biological diversity, including Ancient Forests. At the Convention on Biological Diversity (CBD COP7) conference in February 2004 Greenpeace calls on them to make a stronger commitment to protecting and safeguarding the future of life on earth. Such a commitment will help provide the impetus for the Chilean government to protect biodiversity in Patagonia and prevent projects like Noranda’s Alumysa from being approved.

“We offer our wholehearted support to the nomination of Chile’s Patagonia as a World Heritage. The people of Aysen envisage a future with the region’s natural strengths enhanced by the benefits of a clean environment.” Miriam Chible of the Citizens Committee and Ulda Vera of the Civic Committee of Puerto Aysen, Diario de Aysen 2nd June, 2003



Forest Cover Map of XI and XII Region of Chile, Neira, E., H. Verschuere and C. Revenga. 2002. *Chile’s Frontier. Forests: Conserving a Global Treasure.* WRI, CODEFF, UACH: Washington DC, USA and Santiago, Chile

The Aysén has been nominated a “Reserve of Life” by local people and are promoting an alternative regional strategy promoting sustainable activities such as tourism, fishing and organic farming. ©Peter Hartmann