

Helmut Wittelsbürger, Stefan Burkhard: Energy Policy in Chile: From Dependence to Sustainable Development

Chile's energy supply is anything but secure: The country's own resources are limited, 90 percent of its gas, coal, and oil come from abroad, and even imports from Argentina are no longer reliable.

The integration depth of Mercosur, to which Chile is affiliated, is far removed from that of the European Union which, rooted in the ECSC that was established in 1951, is the most highly developed community of states anywhere as far as integration and cooperation are concerned. Economic imbalances between the Mercosur member states of Uruguay and Paraguay on the one hand and Brazil and Argentina on the other keep triggering fresh conflicts and slowing down the progress of integration. What is more, Venezuela has been raising confusion and unrest rather than promoting the process ever since its recent accession. And indeed, efforts to promote cooperation in South America are in a state of disorder; witness the fact that there are three models existing side by side: the South American Community of Nations, the Andean Community, and Mercosur.

As far as Chile is concerned, the only way in which the country can cover its demand for energy is by importing it, which leads to dependence. Yet energy integration appears to be a matter for bilateral treaties rather than regional agreements, which generally fail to get off the mark. When the Mercosur states set up the Gasoducto del Sur together with Chile, Peru, and Bolivia in 2005, they planned to link bilateral and national pipelines to form a supply ring. Even now, however, no laws have been adopted to furnish the legal certainty required for progress in energy-policy integration. Similarly, some hopes were raised by the 2007 Mercosur summit in Rio de Janeiro, when members professed their intention to enhance cooperation in the energy as well as other sectors of the economy. Still, it is not clear how this intention is to be implemented.

In Europe, securing the supply of energy is one of the overarching goals of development policy. For this reason, the EU Commission's Latin America Facility has been given the task of providing fresh impulses for the process of integration in Latin America, with a focus on energy, telecommunication, and the infrastructure in general. At the first European-American Energy Congress held in Madrid late in 2005, the Europeans expressed a desire, which was duly noted, for the Latin Americans to advance their regional integration by creating a domestic energy market.

And indeed, there are signs of joint endeavours to enhance energy efficiency. Thus, the BEPINET programme (Biomass Energy Platforms Implementation for Training in Latin America Network) promotes the development of renewable energies derived from biomass in parts of Peru and Ecuador, but no further steps have been taken as yet.

The accession of Venezuela to Mercosur marked the end of the line for Washington's plans to establish a Free Trade Area of the Americas, for the Venezuelan president, Mr Chávez, vehemently opposes any economic and political cooperation with the USA. Controlling the fifth largest oil reserves worldwide, the populist head of Venezuela's government deftly uses the revenues from that source to advance his ideological aspirations. To realise his plans for strategic integration, Chávez founded three projects, Petrocaribe, Petrosur, and Petroandina, as steps on the way towards his supreme goal – Petroamérica.

Another signal, possibly more important, was set by the project of a gas pipeline to connect Venezuela, Brazil, and Argentina, with branches to Bolivia, Paraguay, and Uruguay. An agreement on conducting a feasibility study – a step towards the Petroamérica – has already been ratified by presidents Lula and Chávez. Being a country with a functioning democracy, Chile is hardly susceptible to populist mobilisation campaigns. This, however, is the very reason why it should not

put its credibility on the line by entering into treaties with states that hold values like representative democracy, the rule of law, or freedom of opinion in low esteem.

Chile's coastline stretches across c. 6,400km. Its neighbour, Bolivia, owns South America's second largest reserves of natural gas but has no access to the sea, having lost it when Bolivia and Peru were defeated by Chile in the Saltpetre War at the end of the 19th century. Relations between Chile and Bolivia, which has been demanding a sovereign corridor to the sea for years, are more than tense: Thus, the gas supply treaties between Bolivia and Argentina prohibit Argentina from providing Chile with Bolivian gas. The Chileans, in turn, are planning to import liquefied gas from Asia which, however, would call for enormous investments in a new port infrastructure.

Whether Chile would be prepared to grant Bolivia access to the sea in return for gas is a matter of speculation. At all events, the most recent steps taken by the Morales government in La Paz – nationalising the country's mineral resources, banning exploration by non-Bolivian enterprises, and appropriating foreign capital without adequate compensation – are hardly designed to improve Bolivia's relations with its neighbour.

Does the future of Chile's energy supply lie in renewable sources? As the country does offer good opportunities for utilising wind, solar, and tidal energy as well as geothermal and biomass generation, the chances for diversifying its energy policy look good. However, production prices are high compared to fossil fuels, and legal framework conditions are needed to provide a secure environment for the plans of the operators as well as inducements for investors. A first step has already been taken in legislation, for a recent bill stipulates that 5 percent of the energy generated in the country must come from renewable sources.

The energy mix envisaged by the government is to be realised by enhancing hydroelectric power generation and importing liquefied gas within public-private projects. Regarded as a renewable source, hydroelectric power currently covers more than one fifth of Chile's primary-energy needs. Santiago is endeavouring to increase this proportion, particularly with a view to the potential present in Patagonia, but environmentalists as well as people living in the regions concerned vehemently protest against these endeavours because of the grave effects of large hydroelectric power stations on the neighbouring fauna and flora. Power generation from wave and tidal forces represents another water-based energy source, although it is still in its infancy. In the north of Chile, where the sun regularly shines for more than 300 days every year, photovoltaic plants are being discussed as a source of electricity. Another option is to use steam turbines to generate power by solar convection. Being virtually pollutant-free, wind power generation is especially advantageous. A potential source of heat is the CO₂-neutral combustion of biomass, all the more so as the amount of wood extracted every year ranges below the renewal threshold, permitting sustainable use. Another barely-tapped potential is that of generating heat from biogas extracted from municipal and agricultural waste. Finally, there is geothermal energy which, although a source of hope, constitutes something of a long-term perspective because no exploratory wells have been sunk as yet.

To safeguard its energy supply, Chile will have to use several tracks at once. Tying the country's gas supply to a single provider was revealed as a fatal error in 2004, when Argentina reduced its deliveries. In view of the currently bad prospects for closer energy cooperation between Chile and Venezuela and/or Bolivia, the ongoing politicisation of Mercosur, and the failure of related integration efforts, continent-wide energy cooperation appears indicated. What is needed is not more integration alliances but supranational structures, which implies that states must be willing to relinquish some of their national competences and exercise patience in negotiating about the requisite rules.

Whichever way Chile intends to solve its energy problem in the long run – it will need to act quickly and realise decisions efficiently. The bottlenecks in its energy supply, which became apparent when it was rationed by Argentina, admit of no hesitation. In the short run, Chile will need a well-balanced energy mix. In the long run, however, both Chile and its neighbours will have to apply reason and political will-power to create the foundations of an energy partnership from which all countries on the continent would stand to benefit.