



Séptimo Encuentro Latinoamericano de Economía de la Energía - 7ELAEE/IAEE

Plenary Session: "Energy and Social Development: Universal Access". The vision from the north of Latin America and the Caribbean (Mesoamerican).

Víctor Hugo Ventura
Chief, Energy and Natural Resources Unit
ECLAC, subregional headquarters Mexico

Buenos Aires, March 12, 2019



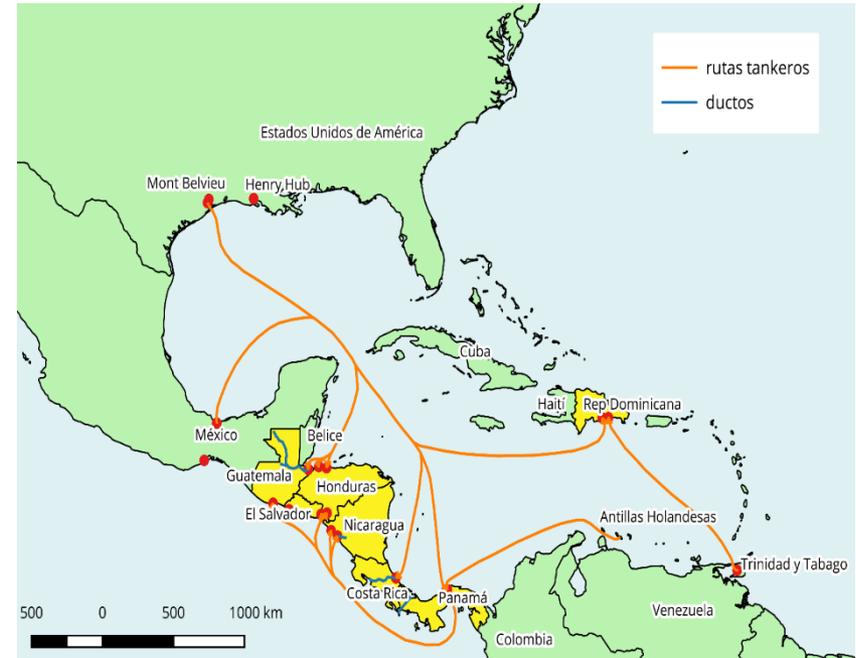
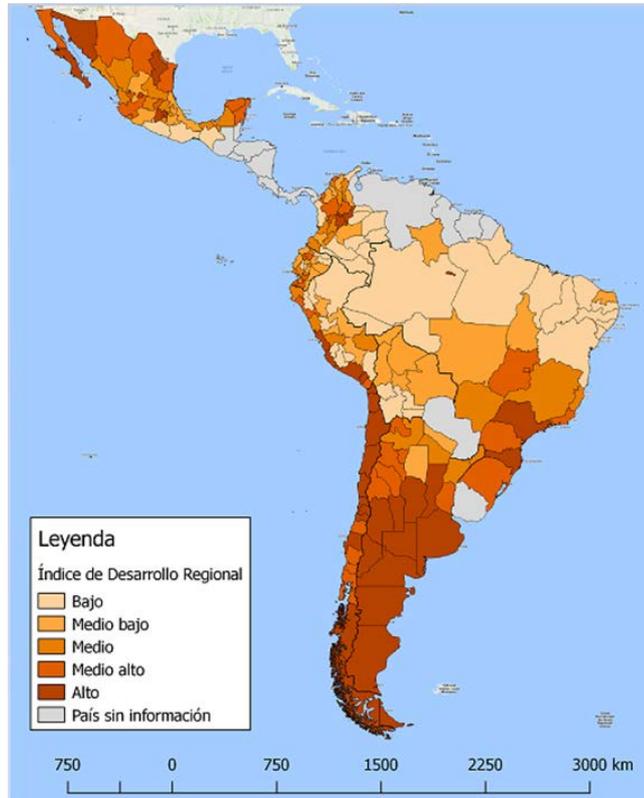
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ECLAC and its subregional headquarters in Mexico and Port of Spain.



ECLAC: Headquarters in Santiago, Chile; two subregional headquarters (Port of Spain and Mexico): a) ECLAC Mexico (Mexico, Central America and non-Anglophone Caribbean countries, 10 countries, ~ 208 million people, 2017); differences, b) ECLAC Port of Spain, (~ 12 million). Total population 220 million (between subregions, between countries and within each country).

Note. South America, 421 million people, 2017.



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Latin America and the Caribbean

(LAC, 2017)

- With electricity coverage at more than 96 percent, LAC is close to becoming the world's first developing region to achieve universal access to electricity. 21.8 million people in LAC were still without electricity.
- Electrification in Mesoamerica and the Caribbean (%): Mexico, 98,6%; Central America, 90,8%, Caribbean, 83,5% (without Haiti, 98,6%).
 - ❑ Some countries almost totally electrified
 - ❑ **Population without electricity, 13,3 million**



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Latin America and the Caribbean

(LAC, 2017)

- The región still has a high dependence on biomass fuels, with more than 80 million people relying on firewood and charcoal for cooking.*
- **Mesoamerica and the Caribbean 51,6 million:** Mexico, 19,2; Guatemala, 9,1; Honduras 4,3 and Nicaragua 3 (five countries, 46 million people with no clean fuels for cooking)
- Some countries also have significant biomass consumption for heating and in traditional industries.



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* Brazil 10.8 million.

Haiti

Haiti stands out as a country with extremely low levels of electricity access; the dearth of progress in that country is quite unusual, compared with the rest of LAC. Less than one-third of households in Haiti have electricity, and **this lack of coverage has been caused by institutional and political issues**. Given Haiti's high population densities, extending electricity to those without service would be less costly than in other countries of the region that must deal with more remote populations.

UNDP, IDB, 2018, The Benefits of Sustainable Energy Access in Latin America and the Caribbean.



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Access to electricity

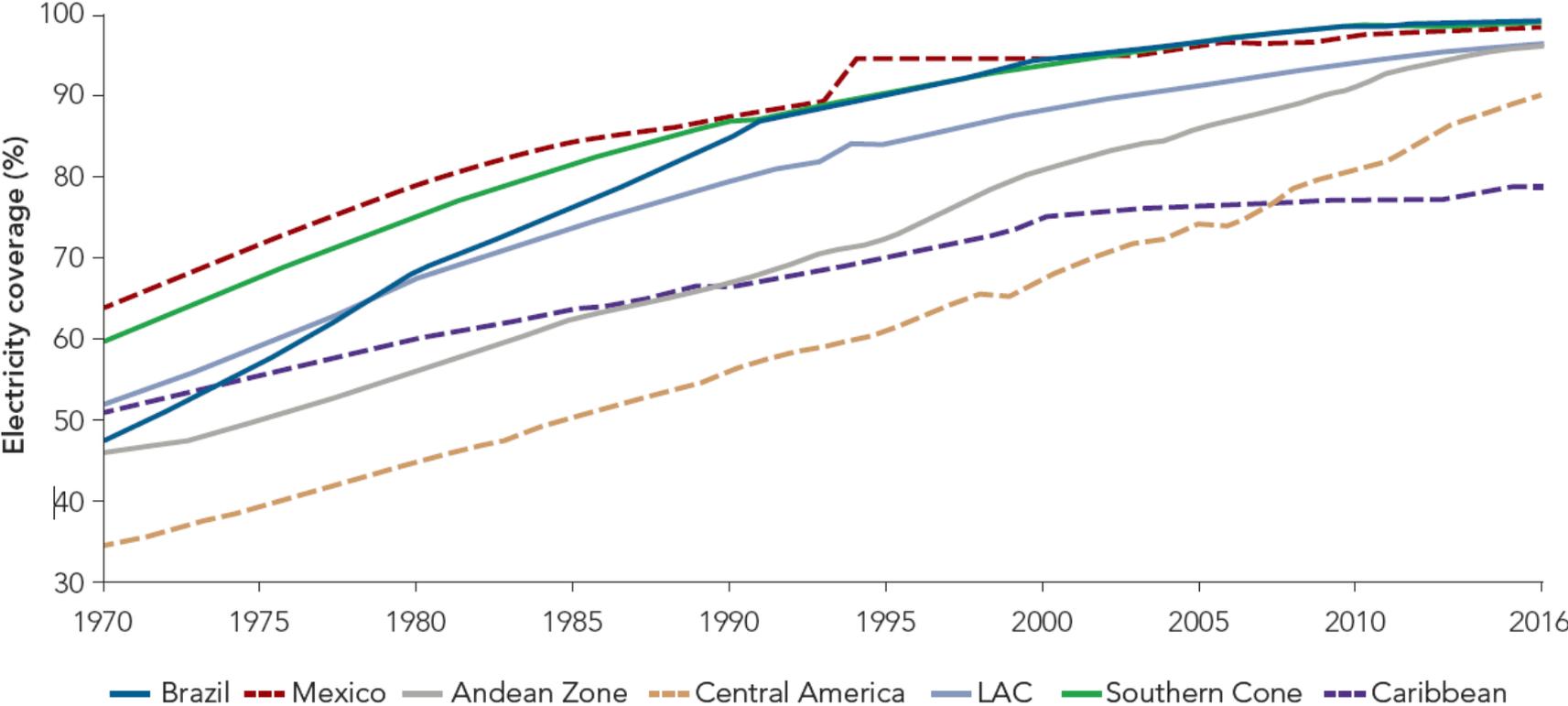
- **Electricity energy access has proven to be a key factor in economic, social, and human development.** This is accepted by governments and by (almost all) civil society.
- All countries have promoted electrification programs and have some degree of subsidies to residential rates.
- Subsidies thresholds exist (ranging from 50, 89, 99, 125 ... 250 and more kWh / month), not necessarily linked to poverty and lower income deciles. In some cases, climatic adversity is has been taken into account.
- Rates and prices of electricity in the social agenda, very sensitive issues. Electrical losses associated with the political-social agenda.
- Areas and regions with greater social lag tend to have a greater degree of conflict against the development of hydroelectric power plants and other private projects,



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Figure 2-1. Electricity coverage evolution in LAC and subregions, 1970–2016



Source: OLADE 2017.



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Access to clean energy for cooking

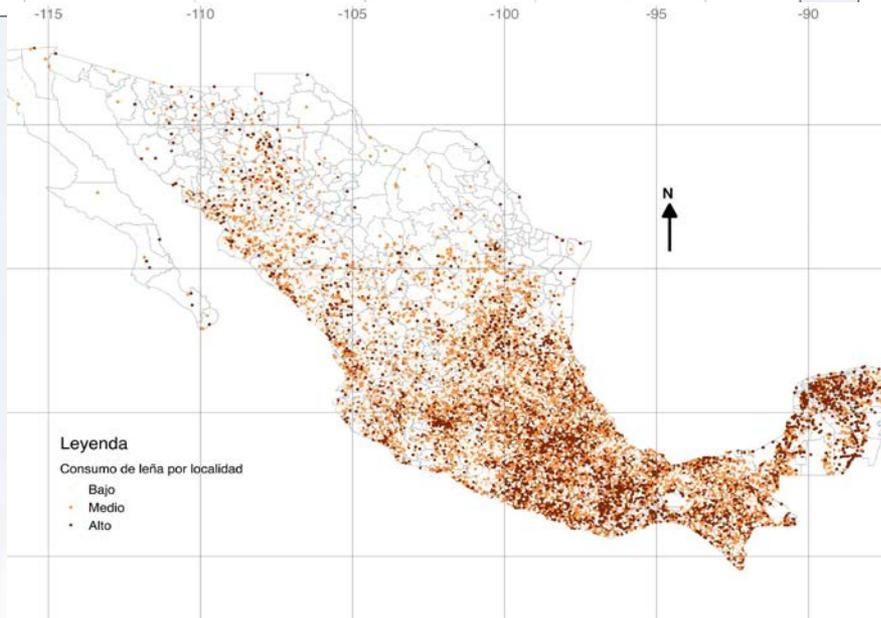
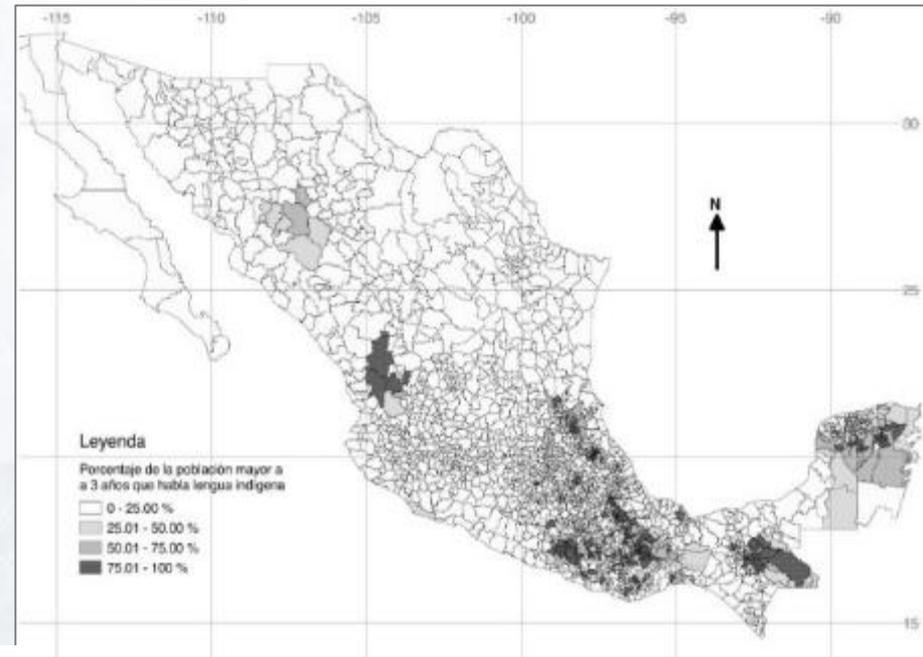
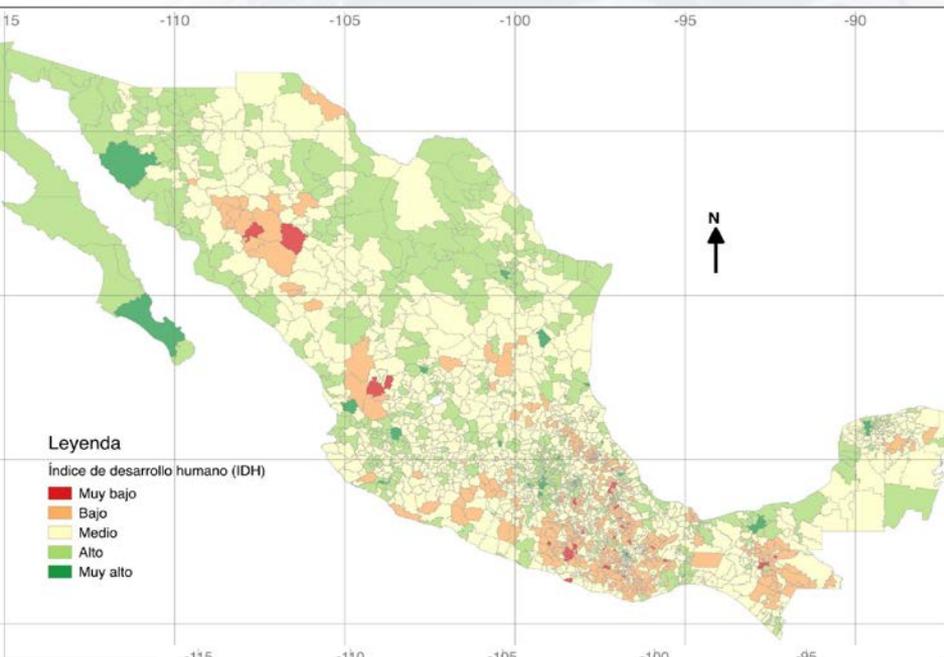
- Air pollution (especially inside homes) is the main environmental risk to health
- In Mesoamerica and the Caribbean more than 50 million people are exposed to air pollution in their homes
- The use of firewood is associated with poverty (also the abundance of biomass and the weak distribution logistics and the lack of LPG subsidy mechanisms)
- In Mexico (and in several countries of Central America) the main food cooked with firewood is the tortillas, which are very intensive in energy use and time (approximately 40 hours per month)
- In Mexico, more than 15,000 people die each year in Mexico from diseases related to the use of firewood for cooking (WHO, 2016)



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Mexico: Use of firewood and social inequality



Emerging issues: migrations *

- Migration can contribute to improving access to reliable, affordable modern energy services (SDG 7), through higher incomes for migrants and de sending of remittances.
- The informal or irregular status of many migrants is a barrier to universal access to modern energy services.
- Migrants require knowledge about modern energy and markets to ensure equitable access to reliable, affordable energy in high-income countries. They may transfer this energy knowledge to their communities of origin.

* SDC, Energy, migration and the 2030 Agenda for Sustainable Development.



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Some reflections

- Well-planned and carefully targeted grid rural electrification programs can provide the remaining last mile customers enormous social and economic value.
- Best practices to promote last-mile grid expansion include the use of low-cost network designs, well-designed tariffs, involving local communities, and provision of subsidies for capital (rather than operating costs) and for segments of the population in extreme poverty.
- Providing energy services to remote populations is not a one-dimensional task. The effects of rural energy cut across diverse facets of rural life—from income and labor productivity to education and women's health, and all facets of development considered in the 2030 Agenda.



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Thank you!

Víctor Hugo Ventura
Jefe de la Unidad de Energía y Recursos
Naturales, sede subregional de la
Comisión Económica para América Latina y el
Caribe (CEPAL) en México.
Correo electrónico: hugo.ventura @cepal.org
Internet: www.eclac.cl
www.eclac.cl/mexico



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