



Group of Latin American and Caribbean Countries, 2020 Background Guide

Chair: Parth Nobel
Chair: Kenny Kang



Contents

1	Letters from the Chair	1
2	Committee Organization	3
2.1	Procedure	3
2.1.1	Directives And Resolutions	3
2.2	Position Papers	3
3	GRULAC	4
3.1	Organization History and Origin	4
3.2	Organization Members and Purpose	5
4	Refugee Crisis	5
4.1	Venezuela	5
4.2	Northern Triangle	8
4.3	Key Questions	9
5	Narco-terrorism	10
5.1	Historical Context and Definition	10
5.2	Key Questions	12
6	Organ Trafficking	12
6.1	Key Questions	15
7	The Fragile Latin American Power Grid	15
7.1	Power Grid Design	15
7.2	Sustainability	17
7.2.1	Solar and Wind	18
7.3	Key Questions	19
8	Natural Disasters	19
8.1	2010 Earthquake in Chile	19
8.2	Guatemala Volcano	21
8.3	Key Questions	22



1 Letters from the Chair

Delegates!

My name is Parth Nobel, and I am honored to serve as a Chair for GRULAC 2020 at UCBMUN XXIV. I am a junior at UC Berkeley majoring in Electrical Engineering and Computer Science. I've interned at Apple and HP and do research in simulations and analog computing. I currently serve as the Secretary for UCBMUN, and, previously, I have served as an ACD and Chair at UCBMUN XXII and XXIII and an Editor for the Berkeley Student Journal of Asian Studies. I joined UCBMUN as a freshman and found a new family of friends and an unparalleled community.

I am incredibly excited to hear this committee wrestle with the largest issues that face humanity today. Fragile refugee crises, narco-terrorism, organ trafficking, power grids, and natural disasters all challenge countries the world over. This committee, however, will zoom in on Latin America, and I'm incredibly excited to hear this committee debate novel ideas and approaches to these issues. The best solutions to large problems often require regional answers, and I believe by focusing on Latin America we will create more effective solutions.

Kenny and I would like to extend our sincerest gratitude to our beloved Secretary-General Darren Chow, to our friend and mentor Tanner Yamada, and to the truly inspirational Director-General Vassie Rubstova. I, personally, would like to extend my sincerest appreciation to Kenny for the incredible amount of work he has put into this committee.

Excited,

Parth Nobel

Chair: Group of Latin America and the Caribbean



2 Committee Organization

2.1 Procedure

This committee will run similarly to both a crisis committee and to a GA. We will not have an agenda, instead the committee will respond to crises as they occur. Delegates will be encouraged to write both directives designed to both solve the immediate problem, and—especially for more complex and long term issues—to write directives and short resolutions that help reduce the impact of future similar disasters.

2.1.1 Directives And Resolutions

This committee will be centered around drafting directives to solve fictional crises that occur during the 2020s. The committee timeline will start on *January 1st, 2020*. There will be no crisis notes, personal directives, or any way to influence the world other than Committee Directives and Committee Resolutions. This committee will be split into several different topics with fictional events and crises reflecting each of these major topics, and the delegates will be expected to debate and create a directive to respond to such events, producing specific solutions and measures. After addressing the crisis at hand, delegates will be expected to draft and pass a resolution that addresses the larger issue presented by the update, thinking about how to solve the issue in the long term. Committee flow will be crisis update, directives passed, crisis update, directives passed, possible third crisis update, and then a resolution about the larger issues.

2.2 Position Papers

This committee will require “response papers”. At the end of each section we have written a list of major policy questions inherent in addressing the issue. **Delegates should write replies to each of the questions. NOT a generic paper on their policy views.** We expect no more than a brief paragraph per question. Please be aware the Chairs will be reading every submitted response paper.



black market.³⁹ Other times, victims of organ trafficking are falsely promised a financially secure job before being kidnapped by gang brokers who then forcefully extract the victims' organs. A 2012 Proceso report found a disturbingly large number of online advertisements asking for potential organ sellers in the Mexican state of Jalisco.⁴⁰

6.1 Key Questions

- What policies can be introduced to improve transparency in medical institutions?
- What investigative measures can be taken to determine the legality of organ origins?

7 The Fragile Latin American Power Grid

On June 15, 2019, the lights went out in Argentina, Uruguay, Brazil, Chile and Paraguay. Argentina was in the middle of regional elections. Voters filled out ballots with candles and used phones as flashlights. People were warned to conserve water because the water distribution system was going to fail.⁴¹ Some have speculated largely without evidence this was a cyber-attack; more likely, it was just a cascading series of failures overwhelming fragile infrastructure. Utilities throughout Latin America cross country borders, and the power infrastructure borders on continental.

7.1 Power Grid Design

Stability in network flows, *e.g.* power grids, comes from being able to survive lines being cut accidentally by backhoes, towers being knocked over in storms, and adjacent infrastructure going down. Most critically, when events that disrupt part of the network occur, the rest of the system should be able to stay operational. There are a number of ways to create the desired reliability: better technology, local power generation, and redundancy throughout the grid.

Better technology is the most straightforward solution; better tested and better designed power infrastructure leads to better grids. Often times these upgrades come from higher

³⁹<https://www.insightcrime.org/news/analysis/desperation-lack-of-donors-drives-organ-trafficking-in-latin-america/>

⁴⁰<https://www.insightcrime.org/news/analysis/desperation-lack-of-donors-drives-organ-trafficking-in-latin-america/>

⁴¹<https://www.bbc.com/news/world-latin-america-48652686> <https://www.bloomberg.com/news/articles/2019-06-16/massive-power-failure-sweeps-across-argentina-and-uruguay>



spending on infrastructure and better suppliers.

Local power generation means generating power near where it will be used. A factory running off its own generators doesn't require the rest of the country's power grid to work. A town plastered in solar panels, during a sunny day, can survive even if the power lines connecting it to the coal-fired plant in the next valley get cut. Local power generation can also mean local power storage, akin to man-made water reservoirs to store water in places far from a water source.

The current leader in power storage is South Australia and their partnership with Tesla.⁴² The state has had three major phases in its effort to build more reliable and local power. The first will be described in Section 7.2.1. The second was the extensive installation of solar panels and, critically, large batteries in public housing to create and store power.⁴³ This allowed the power supply to avoid the critical availability issue of renewable power sources, as discussed below. The third effort was centered around a subsidy meant to encourage Australians to buy their own massive batteries to power

⁴²<https://arstechnica.com/information-technology/2018/02/tesla-and-south-australia-at-it-again-this-time-building-a-virtual-power-plant/>

⁴³*Ibid.*



their homes in the event of blackouts.⁴⁴ This final effort is not exclusively with Tesla, but includes other European battery manufacturers.⁴⁵ If Latin America had the robust battery-backed locality that South Australia is currently building, the effects of the power outage would have been easier to minimize, potentially allowing sites with power supplies to continue operating, whether they were running elections, or key pumping sites in the water system.

The main problem with South Australian-style locality is cost, at the moment these power wall systems are prohibitively expensive for the average consumer. In the US market, Tesla charges around fourteen thousand dollars for the power capacity for a single house,⁴⁶ enough batteries to power water infrastructure would easily number in the 10s of millions of US dollars; however, the hope is that as adoption grows and innovation continues, the market becomes more competitive and prices eventually decrease.

Another strategy for improving a power grid is redundancy: if a power line runs along a road, a second one should run along a different road to provide power to the same region if the other line is knocked offline.⁴⁷ The challenges with this strategy come from the cost of building all the power infrastructure at least twice. In an ideal world, generation capacity is high enough that even if multiple large generators go offline, either because of internal issues at the generator or because of transmission infrastructure going down, there is enough power available to continue supplying all customers. Maintaining back-up power to this depth is expensive, but critical for reliability.

7.2 Sustainability

In response to climate change, the use of renewable power is critical for the continued habitability of the Earth, and therefore of Latin America. Latin America currently relies heavily on fossil fuels for its power, though it has a larger share of hydroelectric power than most of the rest of the world.⁴⁸ At the moment, Latin America has little to no nuclear power, and while some countries have presented plans to open nuclear power plants, the region is far from being able to rely on nuclear power. There is, however, an

⁴⁴<https://arstechnica.com/information-technology/2018/11/south-australia-is-fueling-energy-storage-investment/>

⁴⁵<https://www.renewableenergyworld.com/articles/2018/02/sonnen-turns-to-australia-for-solar-storage-manufacturing.html>

⁴⁶<https://www.tesla.com/powerwall>

⁴⁷<https://www.ucsusa.org/clean-energy/how-electricity-grid-works>

⁴⁸<http://www.worldwatch.org/integrating-latin-american-electricity-grid>



incredible potential for the growth of solar and wind power in Latin America, but both of these sources come with a concerning list of caveats.

7.2.1 Solar and Wind

Over half of Latin America’s potential solar capacity is in Chile, and around 60% of potential wind capacity is in Brazil.⁴⁹ In order to allow all of Latin America to rely on these renewable resources, the existing international grid will be critical to ensure that, as Chile and Brazil bring more sustainable power online, they can help green the entirety of South America’s power consumption. Wind and solar, though, come with critical downsides: some days the wind doesn’t blow and some days there are clouds. Even in high capacity areas, there are significant risks of days or weeks with minimal power generation. Solutions to the reliability problem take two general shapes: 1) fossil fuels and 2) the South Australia model. Fossil fuel powered power plants are more reliable and maintaining them in the grid helps to avoid the risk of blackouts when a storm rolls in and blots out the sun.

The South Australian model, in this context, was the first collaboration between South Australia and Tesla, the installation of a massive number of batteries at a wind farm, to allow the farm, in moments of peak production, to store away the unneeded power for

⁴⁹<https://www.nytimes.com/2018/02/01/opinion/energy-grid-latin-america.html>



when the wind isn't blowing.⁵⁰ A similar model can be used with solar plants to increase their reliability.

The challenges to depending on renewable power are two-fold. First, costs remain prohibitively high (some estimates from South Australia peg the batteries at over \$30 million, which excludes the cost of the wind farm), Second, moving most power production to the two countries with the most potential, Brazil and Chile, severely undermines locality. In order to ensure that a storm in Brazil doesn't kill power to all the neighboring countries, the power grid needs a degree of locality. In order to increase the use of renewable power, the committee will need to balance having very high capacity lines out of the renewable sources to local storage facilities, which is prohibitively expensive and potentially dangerous if we have high power on the lines.

7.3 Key Questions

- What is the energy landscape of your country and how does the international power grid harm or benefit your country?
- How should GRULAC balance the need for sustainability with the need for reliable power supplies?

8 Natural Disasters

8.1 2010 Earthquake in Chile

The power of an earthquake is difficult to understate. The 2010 earthquake in Chile literally changed the length of the Earth's day.⁵¹ The tsunami it triggered caused property damage around the world from San Diego, California to Japan. San Diegans and the Japanese, however, felt little of the devastating effects of the earthquake, which killed over 700 people in Chile,⁵² forced the evacuation of over a million people,⁵³ and which left hospitals unable to serve the thousands of injured.⁵⁴ The humanitarian nightmare

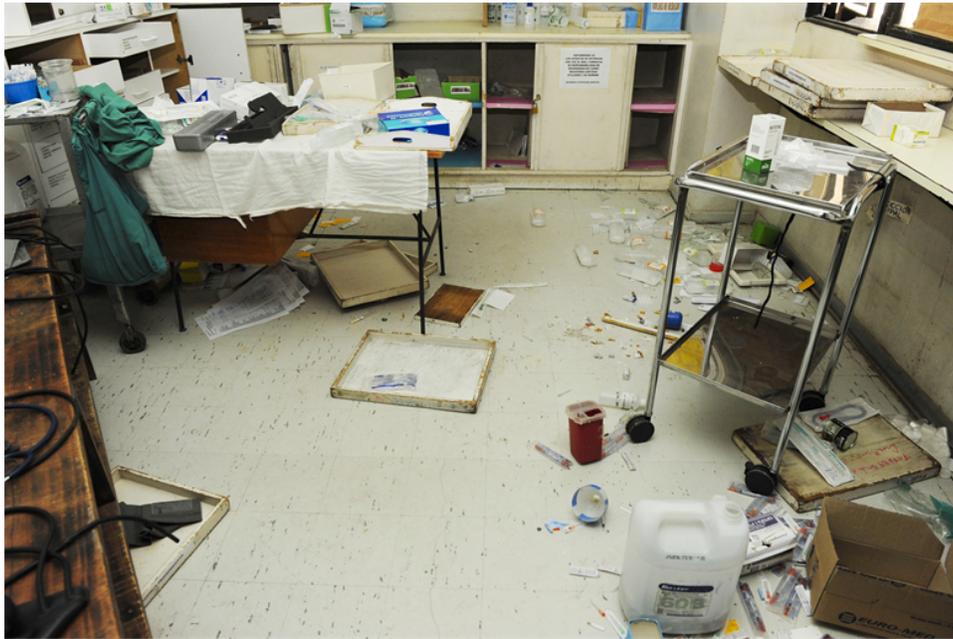
⁵⁰<https://arstechnica.com/cars/2017/12/tesla-beats-deadline-switches-on-gigantic-australian-battery-array/>

⁵¹<https://www.nasa.gov/topics/earth/features/earth-20100301.html>

⁵²<https://www.theguardian.com/world/2010/feb/28/chile-earthquake-death-toll>

⁵³<https://www.cbsnews.com/news/death-toll-from-chile-earthquake-rises-1-million-evacuate/>

⁵⁴<https://www.cambridge.org/core/journals/disaster-medicine-and-public-health-preparedness/article/impact-on-hospital-functions-following-the-2010-chilean-earthquake/>



raises many questions, but we will focus on how the international community came to Chile's assistance. Delegates are encouraged to understand the successes and failures of the response and therefore how delegates should handle future disasters.

The earthquake and subsequent tsunami struck Chile on February 27th, 2010. Chile asked for international assistance on March 1st.⁵⁵ Doctors Without Borders (Médecins Sans Frontières) had arrived a day earlier.⁵⁶ Chile, notably, did not request food aid, but primarily asked for assistance with “temporary field hospital with surgical facilities, electricity generators for hospitals, a pontoon bridge and satellite phones.”⁵⁷ Chilean police focused on minimizing looting and imposed a curfew in some states. Assistance in Latin America came primarily from Argentina, Brazil, Venezuela, and Cuba, along with significant assistance from the rest of the world.

Assistance took many forms, the most effective being field hospitals, a response to the destruction and crippling of numerous hospitals throughout Chile, and assistance in the search and rescue operations. Food aid, medical supplies, and supplies to help bring water to displaced people inside the country.

Co2E85A3AC205CDB035F51D326CC87B1

⁵⁵<https://www.cbc.ca/news/canada/chile-asks-canada-for-help-1.869221>

⁵⁶https://web.archive.org/web/20100314012940/http://www.msf.org/msfinternational/invoke.cfm?objectid=191AD7B3-15C5-F00A-25185772617E29F7&component=toolkit.article&method=full_html

⁵⁷<https://www.cbc.ca/news/canada/chile-asks-canada-for-help-1.869221>