INTRODUCTION

The climate crisis requires a swift passage from rhetoric to action, from policy aspirations to concrete implementation of legislation. Increased efforts to mitigate and adapt to the impacts of climate change, requires the support and contribution of all stakeholders, including parliamentarians. Not only can parliaments positively contribute to the climate agenda through their functions of representation, lawmaking, oversight, periodic review of the implementation of legislation, and budget approval, but they can also lower the environmental footprint of their institutions. Leading by example, they can contribute to the overall national emission reduction targets by adopting strategies to lower their greenhouse gas (GHG) emissions and improve the overall sustainability of their activities. Individual efforts can make a big difference; however, when they are institutionalized, via political will and support, the impact can be more significant and long term.

This guide briefly outlines how parliaments can measure their current environmental footprint and suggests actions to improve their sustainability practices and environmental consciousness. This is not meant to be a complete set of actions, but rather a guide to initiate dialogue around the development of relevant strategies and practices, as well as establish internal commitments on the short and medium term.

To support this initiative, parliaments can consider establishing a green team or designating individuals to track or lead GHG emissions reduction work including developing an inventory (measuring), assigning reduction targets, implementing actions and educating colleagues on these initiatives.

ESTABLISHING A BASELINE

In order to identify priority actions and measure the impact of changes that are introduced, it is helpful to establish a baseline by compiling and examining data on the use of resources and the mitigation of GHG emissions by the parliament. When defining the parameters of the baseline, it is important to establish the scope of what will be measured, and which parliamentary departments will be included.
Carbon emissions are generally divided into three categories:

<table>
<thead>
<tr>
<th>Scope 1</th>
<th>Scope 2</th>
<th>Scope 3</th>
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<tr>
<td><img src="image" alt="Direct emissions from sources owned or controlled by the parliament (i.e. boilers, furnace and fleet vehicles)" /></td>
<td><img src="image" alt="Indirect emissions from the generation of purchased electricity" /></td>
<td><img src="image" alt="Indirect emissions from indirect activities (i.e. travel, procurement, water and waste)" /></td>
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With the understanding that parliaments may have a limited capacity or resources to obtain these measurements, a solution may be to create a baseline from data and sources that are more widely available and easier to track, such as utility bills. As an initial step to calculate a baseline, parliaments may choose to not convert the data to GHG emissions. If feasible the calculation of emissions can be done by identifying emission factors according to the source and local context.

To obtain GHG emissions from electricity consumption (tCO₂eq) =

Electrical consumption of building (MWh) X Emission factor of the country’s electric system (tCO₂eq/MWh)

Example: In 2018 the annual electricity consumption of the parliament’s main office was 300,000 kWh (found in the annual utility bill). The country’s published emission factor for electricity in 2018 was 0.531 tCO₂/MWh.

\[300\text{MWh} \times 0.531 \text{tCO}_2/\text{MWh} = 159.3 \text{tCO}_2\text{eq}\]

The following are examples of areas that could be measured:

HEATING AND COOLING (SCOPE 1) AND ELECTRICITY USAGE OF PARLIAMENT BUILDINGS (SCOPE 2)

- Review utility bills for each of the parliament’s buildings.
- Identify the source of heating and cooling (gas, electrical, coal, etc.) and electricity (hydro, solar, wind, nuclear, natural gas, coal, oil, etc.).
- Calculate the monthly heating, cooling, and electricity usage of each building, disaggregated by energy source.
FLEET FUEL USAGE (SCOPE 1)

- Identify the different vehicles that the parliament operates and record the type of vehicle (truck, SUV, car, hybrid, electric, etc.) and type/amount of fuel it consumes (diesel, petrol etc.).
- Calculate the monthly mileage of each vehicle.

WATER CONSUMPTION (SCOPE 3)

- Review utility bills for each of the parliament’s buildings.
- Track the monthly water usage per building.

EMPLOYEE TRAVEL (SCOPE 3)

- Calculate the number of flights taken in a month, as well as the total distance flown (this information is usually included on flight itineraries) and the travel class (economy or business – business class takes up a greater amount of space in the aircraft which reduces the total number of passengers that can be transported).
  - Carbon emissions calculators, such as the [ICAO calculator](https://www.icao.org), can help to obtain estimates.
- Calculate employees’ commutes between their home and workplace by using distance-based averages (Google Maps can be used to obtain the total distance), disaggregated by mode of transportation (walking/biking, public transportation, carpooling, driving, etc.).

PAPER CONSUMPTION (SCOPE 3)

- Track the number of pages printed per department or office each month (if the parliament’s printers have this function).
- Track the amount and frequency of paper purchases in a month, and the paper type (is it recycled?).

WASTE AUDITS (SCOPE 3)

- Plan a [waste audit](https://www.earth911.com/guide/how-to/), a method for analyzing an organization’s waste stream. In general, the process consists of identifying waste categories (e.g. paper, plastic, glass, compost, garbage etc.) sorting the waste from each office/building based on the identified categories and recording the weight of the waste in each category. Determine the percentage of waste for each category, as well as the percentage of contamination (wrongly sorted items).

PROCUREMENT AUDITS (SCOPE 3)

- Identify financial resources spent on single-use plastics (e.g. bottled water).
➢ Identify the lifecycle emissions associated with foods consumed in cafeterias, especially for meat.
➢ Create easy-to-answer checklists that help assess the impact of procurement.
  o How many purchases or services are provided by local, small and medium enterprises?
  o How many purchases or services are provided by companies led by women, Indigenous peoples or a traditionally marginalized group?
  o Are certifications considered when purchasing items? For example, sustainable paper (FSC, Rainforest Alliance, etc.); energy-efficient electronics and devices (ENERGY STAR); fair trade products; sustainability standards (GRI, UN Global Compact etc.).
  o Is the life cycle of purchased items considered?

There are tools and services available to help institutions measure their carbon footprint. There are also local consulting companies that may offer services to the parliament to help them calculate their baseline and identify actions to help reduce their footprint.

TAKING ACTION TO REDUCE THE ENVIRONMENTAL FOOTPRINT

After a baseline is established, reduction targets can be adopted. When establishing these targets, it is important to take incremental steps and identify targets that are ambitious but feasible in the determined time period. Following the adoption of the targets, parliaments can develop a plan to reach them; such plans should be developed with the community in mind. Efficiently doing so requires changes in culture and reductions at the source. Education, transparency and communication of data are essential to raise awareness of the overall impact of the institutional decisions, and actions taken by individuals working at parliament. Given the need for rapid transformation, it will also be crucial to present the results of positive actions to illustrate capacity for change. Parliaments can also consider rewarding active and responsible employees for their efforts.

The following are actions that parliaments can consider (some more simple than others), divided in different categories:

WASTE REDUCTION
➢ Reduce single-use plastic
  o Provide more accessible filtered or tap water instead of bottled water.
Provide and encourage the use of reusable dishware and cutlery instead of disposable ones.

Do not provide plastic straws, and if necessary, offer straws upon request that can be composted and are made of biodegradable substances (e.g. paper, pasta, bamboo, etc.).

➢ **Host waste-free sustainable events**
  - Refrain from using single-use plastics (see above), provide non-bottled beverages, and reduce the amount of packaging from catering.
  - Instead of throwing away leftover food, provide it to employees or a soup kitchen/charitable organization.
  - Provide vegetarian options.
  - Select decorations or marketing materials that can be re-used for other events.
  - Reduce the amount of printed material distributed.

➢ **Introduce recycling and compost within parliament buildings**
  - Become familiar with local recycling and compost guidelines.
  - If the municipality does not offer recycling and/or compost services, inquire if they can be contracted out to a local business.
  - Introduce compost bins in every cafeteria or lunch room.
  - Incentivize employees to recycle all paper (including paper towels not contaminated by food), glass, plastic, and aluminum used in parliament.

➢ **Introduce green procurement training or criteria**
  - Consider environmentally-friendly certificates or standards when purchasing office supplies (as mentioned above in the Procurement Audits section).
  - Introduce a tool to consider the longevity of products that are purchased.
  - Prioritize local products from small and medium enterprises.

➢ **Encourage waste-reduction practices among employees**
  - Conduct an inventory of programs and applications that can assist in dematerializing office needs (documents, calendars, agendas, contacts, clipping, archiving, etc.).
Conduct zero waste challenges, in which employees aim to produce the least amount of garbage for one week. The garbage that could not have been avoided is kept in a container for personal reflection and to compare how much waste one creates in a week.

- Reuse garbage bags if they are not dirty and make garbage containers smaller than recycling bins.
- Encourage employees to print less and consider the amount of use the document will have. When possible, make greyscale and double-sided printing features the default options on all computers.
- Digitize documents so that they can be viewed electronically.
- Conduct paper-free meetings.
- To avoid reprinting, introduce a policy whereby simple mistakes are acceptable for non-sensitive/internal documents (i.e. typos can be corrected with pen).

ENERGY AND WATER CONSUMPTION REDUCTION

- **Consider introducing some retrofits into parliament buildings to improve their energy efficiency**
  - Update lighting with LED lights or install sensor lights that ensure lighting system automatically turns off when rooms are unoccupied.
  - Improve insulation of windows and door frames by sealing them.
  - Update low-efficiency electrical devices (refrigerator, computers, printer, etc.).
  - Introduce low-flow faucets or install aerators.
  - Install water-efficient toilets.
  - Introduce rain gardens and rain barrels to help water the parliament’s natural landscape.
  - Create green roofs on existing buildings.
  - Introduce more natural and native greenery around buildings to provide natural cooling and incentivize employees to go outside.
  - Focus on energy efficiency, efficacy and effectiveness.

- **Apply sustainable design standards to new constructions and major renovation projects, and adopt alternative clean energy sources**
  - Consider building to a green standard (e.g. LEED, BREEM, EDGE) and refer to the International Organization for Standardization (ISO) energy efficient standards.
  - Take steps towards becoming a net-zero or net-positive energy building (i.e. buildings that generate 100% or more of their energy needs on-site) by
Introducing renewable energy for the building (solar panels, geothermal energy, etc.).

- Install grey water systems.
- Consider the resiliency of the parliament buildings against disasters by better preparing for natural hazards (severe and extreme weather and climate events).

✓ **Encourage energy-saving practices**

- Encourage turning off lights when a room is not in use, through signage.
- Avoid leaving computer screens on and put computers to sleep when not in use. Turn computers off at the end of the day.
- Unplug devices that are not in use to avoid plug loads.
- Keep air vents clear of obstructions to allow air to circulate freely.
- Be mindful of the temperature set in the building. The recommendation is 20°C - 25°C depending on the climate/season (the closer the temperature to the outside, the better for energy and cost savings).
- Decentralize water heating at point of use to offer heated water on demand only rather than offer continuous and excessive water heating.
- Address emissions from cloud storage by encouraging archiving of data to reduce energy used by servers.

✓ **Assess whether parliament buildings can obtain electricity from a renewable source**

- Explore opportunities for the external provision of renewable energy (i.e. explore local utility companies or private companies that can provide partial or complete sourcing of energy from renewal sources).

✓ The Congress of Paraguay has signage that asks users to turn off the light when the bathroom facilities are not in use.

✓ Through public bidding, the Chamber of Deputies of Chile has sought to source the building’s supply of electricity to a sustainably-generated renewable energy to eradicate fossil fuel consumption.

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**SUSTAINABLE TRANSPORTATION**

➢ **Encourage more sustainable forms of commuting to work** (e.g. carpooling, public transportation, walking/biking)

- Provide incentives to use greener forms of transportation (e.g. showers in workplace buildings, secure bike storage, employee discounts for public transit passes, incentives for car-pooling).
- Install electric car and bike charging stations.
o Improve the sustainable practices related to parliamentary transportation fleets.
  ▪ Introduce hybrid and electric vehicles.
  ▪ Introduce idling policies for stationary vehicles (e.g. they should be turned off after one minute).
  ▪ Reduce the number of trips with a single passenger.
  ▪ Encourage the use of public transportation.
  ▪ Calculate frequency need for circulation of fleet and add more mass transportation when needed.

o Allow or introduce policies about working from home and using videoconferencing systems for meetings.

➢ Reduce or take more sustainable forms of air travel
  o Adopt policies that promote flying in economy instead of business class.
  o Increase the use of video conferencing. Consider making parliamentary sitting weeks longer but less numerous.
  o Travel via train or bus when possible.
  o Purchase carbon offsets (see Compensation section).

KNOWLEDGE CAPACITY AND OTHER GREEN HABITS

➢ Develop a communications plan to disseminate information to employees about green actions and how to engage with them.
➢ Introduce community gardens outside of parliament buildings.
➢ Encourage meat-free lunches meals by providing vegetarian options and pricing meals according to their carbon footprint. Host informative sessions to teach employees about climate change, the initiatives the parliament is taking to become green, how to garden, etc.
COMPENSATION

Compensation is meant to be used when all feasible options to reduce GHG emissions have been exhausted. It is encouraged that any emissions that could be not be reduced be compensated through the purchase of carbon offsets. Carbon offsets are credits for GHG reductions that are achieved by another party to help offset emissions.

Many companies offer the purchase of these offsets, but it is important to ensure that they are certified to a recognized standard (Gold Standard, CDM, VCS, Climate Action Reserve, etc.).

ParlAmericas would appreciate your thoughts and input to this publication, as well as any good practice that may exist in your parliament that could be shared in the publication.

Please send any insights to ParlAmericasCC@parlamericas.org

PARLAMERICAS AND THE CLIMATE NEUTRAL NOW INITIATIVE

The Climate Neutral Now initiative was launched in 2015 to encourage diverse stakeholders to reduce their GHG emissions. Stakeholders that sign the pledge to address their climate footprint go through a three-step method of measuring, reducing and compensating their emissions.

The ParlAmericas International Secretariat signed the pledge to join this initiative. International Secretariat staff agreed to compensate the emissions associated with work travel through the purchase of carbon offsets via UNFCCC’s Carbon Offset Platform.

Parliaments and parliamentarians are invited to join the International Secretariat staff and offset their flights. Please notify the ParlAmericas Climate Change Program of your intention to do so, or if you wish to receive further information about this initiative (ParlAmericasCC@parlamericas.org).

Canada

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