

# 2050Today Charter

# Decarbonising International Geneva Together

The 2050Today Charter is also available in French. The reference version is in English.

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# Preamble

2050Today is the Geneva climate action forum where institutions of International Geneva come together and work towards reducing their greenhouse gas (GHG) emissions.

United by this vision of decarbonisation, over 60 institutions of International Geneva have decided to take action to confront the challenges of climate change by implementing concrete measures. Permanent missions, international organisations and civil society entities have resolved to measure and work towards reducing their emissions while confirming their willingness to work together for effective, inclusive and sustainable climate action.

Among the major environmental and climate change challenges facing humanity today, energy, mobility, food, biodiversity, sustainable ICT and behavioral change are key issues that 2050Today addresses, taking into consideration the necessity to act within the planetary boundaries.

In this perspective, 2050Today wishes to leverage its influence and exceptional network to rally its participating institutions, International Geneva institutions and stakeholders, around a carbon free International Geneva by promoting and enhancing sustainable activities and behaviours, by means of the present Charter.

The Charter has been drafted with the contribution of the 2050Today members, the relevant Swiss authorities and expert partners. Its content is the sole responsibility of 2050Today. This Charter is proposed to be a common framework and provide practical guidelines.

To such end, the Charter signatories express their resolve to take the following actions and measures, consistent with their respective legal frameworks:

- Measure and assess their activities in accordance with internationnaly agreed sustainability and GHG emissions objectives
- Define their own sustainability objectives and action plan to reduce GHG emissions
- Communicate about their actions

To facilitate their climate action, 2050Today provides signatories with a coordinated support through targeted knowledge and monitoring resources and enhanced visibility.



# **1** Introduction

#### 1.1 Framework

The purpose of this Charter is to set a common framework with objectives and targets to be set individually by each institution in order to devise an individual action plan for the reduction of GHG emissions. It also proposes guidelines to help staff and suppliers understand the environmental and climate change issues surrounding all activities. It addresses in particular the possible implications on the energy used, the means of transport chosen, the products selected, the food offered, the ICT used, the waste produced, the biodiversity and the behavioral changes that might be required.

This Charter is also intended to communicate the participating institutions' vision in terms of sustainable activities and practices, without prejudice to their legal frameworks and relevant strategies.

It aims at raising awareness and fostering action by all stakeholders, both internal (management and employees) and external (suppliers, partners, consumers, etc.).

Signing the 2050Today Charter does not imply any form of legal or juridical responsibility assumed by the signatories. It does not involve any obligation to undertake a financial contribution to 2050Today or to commit resources. The signature of the Charter is not construed to create or imply any partnership, association, agency relationship or a joint venture between the signatories. Each signatory will be solely and completely responsible and accountable for all work and services performed by its personnel, contractors or agents in connection with the implementation of the 2050Today Charter.

#### **1.2 Climate Action References**

In the Paris Agreement<sup>1</sup> adopted in 2015, the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) decided to hold the increase of the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C, above pre-industrial levels recognizing that this would significantly reduce the risks and impacts of climate change. The Parties to the Agreement commited to reduce their GHG emissions accordingly. During the 21<sup>st</sup> Conference of the Parties to the UNFCCC (COP21), the Parties requested the Intergovernmental Panel on Climate Change (IPCC) to work on a Special Report on the impacts of a +1.5°C global warming and associated world GHG trajectories. The IPCC's Climate models showed that to limit climate warming to 1.5°C, total anthropogenic GHG emissions should decrease by at least 45% by 2030 and should reach net zero by 2050, as compared to 2010 levels<sup>2</sup>.

In <u>Switzerland</u> the federal authorities, supported by a popular vote, have decided to implement the Paris Agreement's objective by reducing the GHG emissions by 50% by 2030, and by 90% by 2050, to reach carbon neutrality as compared to 1990 levels<sup>3</sup>.



The <u>Canton of Geneva</u> declared the Climate emergency in 2019 and set its climate plan with the objective to reduce GHG emissions by 60% by 2030, and by 90% by 2050 to reach carbon neutrality as compared to 1990 levels. This objective takes into account indirect GHG emissions – territory emissions<sup>4</sup>.

The <u>City of Geneva</u> declared the Climate emergency in 2020. The City defined its own climate plan and set the same objectives as the Canton of Geneva<sup>5</sup>.

The <u>Canton of Vaud</u> adopted its first generation climate plan in 2020 and set the objective to reduce its territorial GHG emissions between 50% and 60% by 2030, and to reach carbon neutrality by 2050 as compared to 1990 levels<sup>6</sup>.

The <u>City of Lausanne</u> developed its own climate plan and targets to reach net zero direct emissions in the mobility domain by 2030 and net zero direct emissions in all domains by 2050. Globally, these targets correspond to the reduction of 50% of direct GHG emissions by 2030, -70% by 2040, and reaching carbon neutrality by 2050<sup>7</sup>.

In order to contribute to the achievement of the above targets and in particular the Geneva Canton's climate objectives, 2050Today recommends its members to reduce their emissions compared to 1990 levels as follows :

- 60% GHG emissions by 2030

- 90% GHG emissions by 2050 reaching Carbon Neutrality for the remaining 10%.

By signing the present Charter, the 2050Today participatinh institutions strive to do their utmost - in accordance with their respective legal frameworks and self-set climate objectives - to contribute to reducing Geneva territory's GHG emissions by 60% by 2030, respectively by 50 to 60% for members located in the Vaud territory, (including Scope 1 to 3) and reaching net zero emissions by 2050 (carbon neutrality) as compared to 1990 levels.

Regardless of when an institution joins the 2050Today community, it is recommended to follow the above objectives. As it is not possible for most members to assess their 1990 emissions levels, the following adjustment factors based on the Swiss Federal Office for the Environment, the Canton of Geneva, and the City of Geneva references, are provided as possible guidance for a retrospective assessment<sup>5</sup>:

Goods and services :	stability (0%) between 1990 and 2018
Land mobility :	growth of 2% between 1990 and 2018
Air mobility :	growth of 75% between 1990 and 2019

In case the 1990 values are not available or not representative enough of the real situation, the first measurable reference period and starting point can be based on the year of the first carbon footprint measurement.



#### **1.3 Principles**

To ensure that this common framework enables 2050Today members to implement the necessary measures to achieve their set objectives for decarbonisation in line with the Paris Agreement, this Charter defines five principles that the signatory participating institutions undertake to fulfil :

- 1. Regularly measuring the carbon footprint of their activities according to the standards of the GHG Protocol, possibly once a year, and sharing the results ;
- 2. Carrying out a thorough assessment of the initial situation on the thematic sector(s) of the Charter selected by the participating institution, within six months following the signature of the Charter;
- 3. Defining an individual Action Plan by setting the relevant objectives and actions, and implementing the different phases as resources allow with the aim of reaching the corresponding targets on the selected sectors ;
- 4. Sharing the defined Action Plan and objectives with 2050Today within twelfe months following the signature of the Charter and reporting on the set sustainability sectors ;
- 5. Communicating to all stakeholders, both internal (management and employees) and external (suppliers, partners, consumers, etc.) encouraging them to contribute as much as possible to the achievement of the Charter's objectives themselves, and incorporating these principles into their operations, as appropriate and taking into consideration their organizational rules and regulations.

#### 1.4 Reporting and Timeline

The definition of the individual action plan on the proposed sustainability objectives as detailed below provides participating institutions with the possibility to set the necessary targets in order to achieve the recommended objectives and reach a carbon free International Geneva.

To facilitate the monitoring of the set objectives by each participating institution and organize a common framework, this Charter defines three reporting year deadlines allowing the assessment of the individual action plans and sharing of best practices on the achieved results. Reporting is designed to be succinct and effective to ensure that the impact of actions taken to reduce GHG emissions can be measured.

The common reporting year deadlines and the proposed target deadlines are in :

- 2025
- 2028
- 2030

The carbon footprint reporting is strongly recommended to be annual.



#### **1.5 Priorities**

To maximise the impact of the objectives and actions individually set for the sustainability themes selected by each institution as it defines its own Action Plan, this Charter provides a qualitative indication of the environmental and social significance and impact defined with a priority level. The priority levels corresponding to the proposed objectives and actions are indicated in the Appendix. 2050Today recommends to choose the objectives and actions taking into consideration their priority level to achieve the highest impact as follows :

- Level 1 : Maximum Priority
- Level 2 : Highly Important
- Level 3 : Recommended



# 2 Thematic Sectors of Action

To address the implications of GHG emissions identified by the respective carbon footprints, this Charter recommends to take into consideration the thematic sectors set below for participating institutions to define their own action plan by setting their own relevant and ambitious objectives, specific actions and corresponding targets to be reached in order to implement their action plan.

As for those institutions that already have their own action plan or wish to define it according to their own references, the Charter enables them to compare best practice with the common framework established and to foster mutual and fruitful exchanges on their actions ensuring most effective implementation. The Charter's principles are designed to allow institutions to adhere to them regardless of how they define or have defined their respective action plans.

While 2050Today encourages its members to take action in all of the thematic sectors of action listed below, signatories are free to choose which sectors they wish to focus on and for which they plan to develop assessments and action plans. When sharing their action plan, signatories will indicate the sectors selected.

An inclusive set of **Common Thematic Guidelines** to define an action plan is proposed in the appendix for each sector. It provides a detailed description of the thematic intervention objectives indicated below.

A sector by sector **Assessment and Action Plan Tool** is also included in the Common Guidelines to enable an in-depth assessment of the initial situation specific to each institution. On the basis of their own assessment, the participating institutions can then define their own action plan using the proposed objectives, actions and targets. The objectives, actions and targets proposed are non exhaustive examples, to be set and adapted to each members' initial individual situation.

In order to successfully implement their defined action plan, participating institutions are invited to set up - for each selected sector - the appropriate measures to achieve the following objectives:

- 1. Establishing management measures to ensure the action plan implementation
- 2. Monitoring sustainability over time
- 3. Championing change and involving all stakeholders

These three objectives apply to all areas of intervention. As their achievement by sector may require specific and different actions, the appendix proposes respective actions for each sector.



# 2.1. Energy

Energy consumption (thermal and electric) of buildings accounts for 40% of total final energy consumption in Switzerland. This corresponds to a consumption of 90TWh per year<sup>8</sup>.

According to Geneva's climate plan and associated cantonal carbon footprint, energy consumption of buildings is responsible for 40% of cantonal greenhouse gas emissions, ahead of land and air mobility (29%) and consumables (28%). 86% of total building emissions come from fossil heating consumption, and 14% come from electricity consumption<sup>9</sup>. Therefore, reducing and decarbonising buildings' energy consumption is key in safeguarding the future of our planet.

In addition, embodied energy and corresponding indirect carbon emissions regarding new buildings as well as building transformation and renovation should not be forgotten, as they represent about a quarter of total primary energy needed for the production and exploitation of the building and for users' travel<sup>10</sup>. Building demolition rather than renovation can also have a higher carbon footprint if the entire life cycle is considered.

This Charter demonstrates the resolve to incorporate the principles of energy sufficiency<sup>11</sup> - using energy within the planetary boundaries - into all aspects of the building(s)' infrastructure taking into account the quantity and the quality of energy services required.

#### 2.1.1. Sustainable Energy and Buildings Objectives

The topics addressed are based on different federal and cantonal recommendations on energy efficiency and sustainable buildings<sup>12</sup>.

With this Charter, signatory institutions express their resolve to take action towards the following Energy and Buildings Objectives when defining their action plan:

- 1. Deploying sustainable energy systems
- 2. Improving energy efficiency
- 3. Reducing demand for energy services

#### 2.2. Mobility

In Switzerland, mobility is a very important source of  $CO_2$  emissions. In 2020,  $CO_2$  emissions from transport (excluding air transport) totalled 13.4 million tons, which corresponds to almost 40% of total national emissions.

In addition, the  $CO_2$  impact of air transport is also very significant. In 2019, air transport was responsible for 11% of  $CO_2$  emissions in Switzerland. By applying a Radiative Forcing Index factor (RFI), the climate impact of air transport amounts to 27%.



The Canton of Geneva has set very ambitious targets for reducing  $CO_2$  emissions from transport by 2030:

- A 40% reduction in individual motorized traffic (cars and motorcycles/scooters)
- An increase of the share of electric vehicles: up to 40% of the Geneva car fleet

To achieve these objectives, the employers of the Canton in general, and the members of 2050Today in particular, have a major role to play in influencing and accompanying their employees and visitors to change their mobility habits in the direction of sustainability.

#### 2.2.1. Sustainable Mobility Objectives

The topics addressed are based on different federal and cantonal recommendations on sustainable mobility.

With this Charter, signatory institutions express their resolve to take action towards the following Mobility Objectives when defining their action plan :

- 1. Implementing incentives for sustainable mobility
- 2. Adopting parking management schemes favouring sustainable mobility
- 3. Providing innovative solutions for sustainable mobility

## 2.3. Food

Food accounts for 28% of the environmental impact of consumption in Switzerland, ahead of housing (24%) and mobility (12%)<sup>13</sup>. Therefore, restaurants and food industry actors (producers, processors, suppliers, etc.) have a crucial role to play in safeguarding the future of our planet.

The daily choices of catering professionals can have massive consequences on various aspects of sustainable development such as: greenhouse gas emissions (in particular  $CO_2$ ) and their impact on the climate, loss of biodiversity, water pollution, soil degradation, waste, animal welfare, working conditions, food safety and health.

The catering industry, whether commercial or institutional, serves a considerable volume of meals every day, which means that it has certain responsibilities towards its partners and customers, as well as citizens and the environment. These responsibilities include preparing dishes that respect consumers and the planet.

This Charter demonstrates the resolve of the signatories to incorporate the principles of sustainable development into all aspects of the restaurant business, and to champion these principles in their relations with all partners and customers.



#### 2.3.1. Sustainable Food and Catering Objectives

The topics addressed are based on the recommendations of the Federal Office for the Environment for sustainable institutional catering (2020).

With this Charter, signatory institutions express their resolve to take action towards the following Food and Catering objectives when defining their action plan :

- 1. Sourcing sustainable products
- 2. Promoting healthy and nutritionally balanced food
- 3. Preventing food waste
- 4. Reducing food packaging
- 5. Running sustainable food and catering facilities

# 2.4. Sustainable IT

Smartphones, computers, tablets, televisions and other connected objects give a feeling of immaterial connection, yet they are all very real objects. From their manufacture to their end-of-life, they have an impact on the environment, including during their use. Relay antennas, satellites, servers and data centres are needed to transport, process and store all our data. The digital sector mobilises a lot of resources, accounting for 2 to 4% of total greenhouse gas emissions worldwide, a growing proportion that corresponds to that of air transport. It consumes around 10% of electricity in Europe, and in Switzerland nearly 8% of electricity is used by internet-related infrastructures. By way of comparison, the railways consume just over 5% in Switzerland and public lighting less than 1%. The space used by 93 data centres based in Switzerland is equivalent to almost 154,000 m<sup>2</sup>, or around 24 football pitches. They alone consume 3.6% of the country's electricity. Conducting a simple search on the web corresponds to the emission of around 7 grams of CO<sub>2</sub>, and sending an e-mail generates just under 20 grams. On average, an institution emits more than 130 kg of CO<sub>2</sub> per employee each year just from email activity alone.

The impact of digital technology is therefore a rising source of environmental concern, as datacentres and computer servers are growing to support various online activities. Societies become increasingly digital with online services and content available and consumed continuously. To minimise this environmental impact, there is a need to change practices and customs and implement a sustainable IT approach that helps benefit from the ICT potential for improvement while reducing its harmful consequences.

While digital technology definitely has a carbon footprint, it can also be a lever for reducing that of other sectors. Creating a digital solution to a given problem in order to reduce its footprint is known as IT for Green. This digital solution for sustainability must be advocated for while developing it in such a way as to reduce its environmental impact.



#### 2.4.1. Sustainable IT Objectives

The topics addressed are based on various recommendations for the promotion of sustainable IT, in particular those of the Swiss Institute.

With this Charter, signatory institutions express their resolve to take action towards the following Sustainable IT objectives when defining their action plan :

- 1. Streamlining IT equipment
- 2. Reducing IT environmental impact
- 3. Optimizing IT energy consumption

# 2.5. Biodiversity

Evolutionary processes have generated a rich and wonderful palette of species and ecosystems, each worthy of protection for their own sake, and upon which humans also ultimately depend for their existence and well-being. Among other services, ecosystems capture  $CO_2$  and therefore contribute to climate change mitigation. Vegetation in general helps people adapt to new climate conditions by acting as a thermo-regulator in and around cities. Human driven actions – primarily landconversion, overexploitation of natural resources and climate change – have become unsustainable. In other words, humans are now causing a net loss of species richness and hampering nature's ability to contribute to human well-being.

All institutions can contribute to the protection of biodiversity and its contributions to human well-being through a two-pronged approach. First, each actor can manage its own land holdings to favour nature-positive outcomes. Recent work has identified simple measures that provide guidance to institutions on how to favour local biodiversity. In addition, Switzerland has one of the highest environmental footprints in the world (4.3 global hectares per capita in 2018) and so each actor must also consider the undesirable impacts on biodiversity through consumption and trade processes. Indeed, the import of processed goods, raw materials, and food cause detrimental impacts elsewhere, which are often out of sight and out of mind. Hence, the second approach entails the identification of measures that significantly reduce these invisible impacts.

## 2.5.1. Biodiversity Objectives

Biodiversity objectives seek to both promote local biodiversity by contributing to the Greater Geneva's Green Instructure and reduce the negative impacts on biodiversity elsewhere, while adapting to and mitigating climate change. The topics addressed are based on recent work in Geneva for mainstreaming biodiversity-friendly measures into urban planning, the Canton's Biodiversity Action plan, and the Greater Geneva's Charter for an Ecological Transition in 2050.

With this Charter, signatory institutions express their resolve to take action towards the following Biodiversity Objectives when defining their action plan :



- 1. Increasing the naturality of the facilities
- 2. Assessing and reducing key consumption pathways that negatively affect biodiversity

## 2.6. Waste Management

The production of waste has increased massively around the world in recent decades. By 2050, global municipal solid waste production will have risen from 2 to 3.4 billion tons, according to a World Bank report. This trend is due to a number of factors, including population growth, urbanisation, economic growth and consumer purchasing habits. Less than 20% of waste is recycled each year, and huge quantities are still sent to landfills. Poorly managed waste pollutes the oceans, clogs sewers, transmits diseases, increases respiratory problems, harms animals that eat it by mistake, and affects economic development, particularly through reduced tourism.

Switzerland produces 80 to 90 million tons of waste per year. The construction and transportation sectors account for 9/10 of the waste produced. Municipal waste (7%) has been rising steadily and amounted to over 6 million tons in 2021, equivalent to 698 kg per person.

In the Canton of Geneva, waste sorting is compulsory for everyone: households, businesses, autonomous public establishments and public authorities. The Canton's objective is to reduce incinerable waste by 25% by 2025 and to achieve 80% sorting of recoverable waste.

#### 2.6.1. Waste Management Objectives

The topics addressed are based on the recommendations of the Geology, Soil and Waste Service, Cantonal Environment Office, Department of the Territory.

With this Charter, signatory institutions express their resolve to take action towards the following Waste Management objectives when defining their action plan :

- 1. Avoiding waste at source
- 2. Improving circularity for an enhanced use of resources



# 3. Signature

We, (name of the institution) ......, express our resolve to take the following actions and measures, consistent with our respective legal frameworks, towards a carbon free International Geneva:

- 1. Measuring regularly the carbon footprint of our activities;
- **2. Carrying out an initial assessment of our situation** on one or possibly more sustainability sectors of the Charter;
- **3. Defining our own Action Plan** and implementing it to work towards the corresponding targets;
- 4. Sharing the Action Plan with 2050Today and reporting on the set sustainability topics;
- 5. Communicating our climate action.

Place and date:

Name and surname:

Title:

Signature:



# APPENDIX

• Common Thematic Guidelines for the development of an Action Plan

1. Energy	Thematic Guidelines	Assessment & Action Plan Tool
2. Mobility	Thematic Guidelines	Assessment & Action Plan Tool
3. Food	Thematic Guidelines	Assessment & Action Plan Tool
4. Sustainable IT	Thematic Guidelines	Assessment & Action Plan Tool
5. Biodiversity	Thematic Guidlelines	Assessment & Action Plan Tool
6. Waste Management	Thematic Guidelines	Assessment & Action Plan Tool

<sup>10</sup>L'énergie grise dans les transformations de bâtiments – Guide pour les professionnels du bâtiment

<sup>11</sup> <u>https://www.energysufficiency.org</u>

<sup>12</sup> Federal Office for Energy - 2050 Vision on buildings, Geneva Energy Plan 2020-2030



<sup>&</sup>lt;sup>1</sup> <u>https://unfccc.int/process-and-meetings/the-paris-agreement</u>

<sup>&</sup>lt;sup>2</sup> <u>https://www.ipcc.ch/sr15/</u>

<sup>&</sup>lt;sup>3</sup> https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-82140.html

<sup>&</sup>lt;sup>4</sup> <u>https://monplanclimat.ch/geneve/plan-climat/objectifs.html</u>

<sup>&</sup>lt;sup>5</sup> <u>https://www.geneve.ch/fr/document/strategie-climat-ville-geneve-document-technique</u>

<sup>&</sup>lt;sup>6</sup> <u>https://www.vd.ch/themes/environnement/climat</u>

<sup>&</sup>lt;sup>7</sup> https://www.lausanne.ch/portrait/climat/plan-climat.html

<sup>&</sup>lt;sup>8</sup> Parc immobilier 2050 – Vision de l'OFEN, version du 1<sup>er</sup> mars 2022

<sup>&</sup>lt;sup>9</sup> Plan Climat cantonal Genève 2030, 2<sup>e</sup> génération - <u>https://www.ge.ch/document/24973/telecharger</u>

<sup>&</sup>lt;sup>13</sup> <u>https://www.meschoixenvironnement.ch</u>