



# UNFPA 2019 GREENHOUSE GAS (GHG) INVENTORY MANAGEMENT PLAN

This document is produced thanks to the collective input of UNFPA personnel, especially of green focal points for GHG reporting. Document's authors: Oliver Buehler & Mel Amancio, UNFPA Environmental Sustainability Team.

Version 1, copyright © 2021

UNFPA GHG Inventory Management Plan 2019



## 

IM	P 2019	94
3.1	Vers	sion information4
3.2	Con	tact information4
3.3	Bou	ndary conditions
3.3	.1	Organizational Boundary:
3.3	.2	List of GHG's Being Accounted for under the UN GHG Inventory:
3.3	.3	List of Organization-Wide Facilities Included in this Inventory:
3.3	.4	List of Offices Not Included in This Inventory:
3.3	.5	Emission Source Categories (Direct, Indirect and Optional Sources of GHG Emissions): 13
3.3	.6	UNFPA Boundary Condition Assumptions:
3.4	Emi	ssions quantification
3.4	.1	Quantification method:
3.5	Data	a Management17
3.5	.1	The UNFPA Data Collection:
3.5	.2	Source of Activity Data:
3.5	.3	Normalization Factors:
3.5	.4	Data Collection Process for Normalization Factor:
3.5	.5	Data Collection Process – Quality Assurance:
3.5	.6	Data Collection System Security:
3.5	.7	Frequency:
3.6	Base	e Year
3.6	.1	Base Year:
3.6	.2	Base Year Recalculation Policy:
3.6	.3	Adjustment – Structural Changes:



3.6.4	Adjustment – Methodology Changes:	20
3.7 N	Management Tools	20
3.7.1	Roles and Responsibilities:	20
3.7.2	Training:	21
3.8 A	Auditing and Verification	21
3.8.1	Internal Auditing:	21
3.8.2	External Validation and/or Verification:	21
3.8.3	Management Review:	21



# 2 Introduction

This Greenhouse Gas Emissions Inventory Management Plan (IMP) provides a detailed foundation for the UNFPA comprehensive effort to measure and manage greenhouse gas (GHG) emissions from its internal global operations. This document provides organization-wide information, including corporate overview and goals, boundary conditions of the inventory, emissions quantification methods, data management methods, base year, list of management tools, and verification processes.

The IMP sets forth the current vision of UNFPA's commitment to inventory and manage greenhouse gas (GHG) emissions for its internal global operations and contains the UNFPA's greenhouse gas inventory methodology.

The UN GHG Inventory follows a common minimum boundary and GHG accounting principles mostly prescribed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development's (WBCSD) Greenhouse Gas Protocol Initiative (GHG Protocol), but at the same time allows participating UN entities flexibility within these limits.

# 3 IMP 2019

# 3.1 Version information

Item	Description	
А	Reporting Period	2019
В	Version Number of IMP	v1
С	Corresponding inventory version number	v1
D	Date IMP Completed	Wednesday, September 29th, 2021

# 3.2 Contact information

Item	Description	
1	Inventory Contact:	Mel Amancio
2	Inventory Contact Information:	amancio@unfpa.org



# 3.3 Boundary conditions

## 3.3.1 Organizational Boundary:

UN entities differ in their structures and operations. According to the guidelines of the GHG Protocol for corporate GHG Inventory reporting, a company's organizational boundaries can either be defined by the amount of equity a company has in an operation (**Equity Approach**) or based on a company's operational control over a location or facility (**Control Approach**). The GHG Protocol also requires that a company select the type of organizational boundary according to which method most accurately reflects the day-to-day practices of the business.

Control can be defined in either financial or operational terms.

• *Financial Control*: An entity has financial control over the operation if the former can direct the financial and operating policies of the latter with a view to gaining economic benefits from its activities.

• *Operational Control*: An entity has operational control over an operation if the former or one of its subsidiaries has the full authority to introduce and implement its operating policies at the operation.

The UNFPA applies the principle of operational control to define the boundaries of its GHG inventory.

Consistent with this approach the UNFPA accounts for GHG emissions from its locations for which it has direct control over operations, and where it can influence decisions that impact GHG emissions. This includes all owned and leased facilities/vehicles operated by UNFPA. UNFPA adheres to the UN wide boundary for emission reporting.

#### 3.3.2 List of GHG's Being Accounted for under the UN GHG Inventory:

See UN-wide IMP

#### 3.3.3 List of Organization-Wide Facilities Included in this Inventory:

The list of facilities falling within the reporting boundary has been obtained from UNFPAs Country Office Real Estate Management System (COREM) as well as the UNFPA's Global Directory of personnel. The 2019 UNFPA GHG Emissions Calculation includes secondary/project offices in addition to the main offices in each country, similarly to 2018 exercise.

Below is a list of the 134 main offices and the 118 secondary/project offices that were covered in the 2019 UNFPA GHG Calculation.



Region	Country	Office	Area (m2)
APRO	Afghanistan	Afghanistan_Bamyan City_Sub-Office	22
APRO	Afghanistan	Afghanistan_Herat City_Sub-Office	80
APRO	Afghanistan	Afghanistan_Kabul_Main-Office	2344
EECARO	Albania	Albania_Tirana_Main-Office	163
ASRO	Algeria	Algeria_Algiers_Main-Office	188
ESARO	Angola	Angola_Luanda_Main-Office	340
ASRO	Jordan	Arab States Regional Office_Amman_Sub-Office	210
ASRO	Egypt	Arab States Regional Office_Cairo_Main-Office	1300
LACRO	Argentina	Argentina_Buenos Aires_Main-Office	60
EECARO	Armenia	Armenia_Yerevan_Gov_Sub-Office	25
EECARO	Armenia	Armenia_Yerevan_Main-Office	114.86
EECARO	Armenia	Armenia_Yerevan_Sub-Office	80
APRO	Thailand	Asia and Pacific Regional Office_Bangkok_Main-Office	974
EECARO	Azerbaijan	Azerbaijan_Baku_Main-Office	144
APRO	Bangladesh	Bangladesh_Cox's Bazar_Sub-Office	558
APRO	Bangladesh	Bangladesh_Dhaka_Main-Office	735
APRO	Bangladesh	Bangladesh_Gulshan Dhaka_Sub-Office	260
EECARO	Belarus	Belarus_Minsk_Main-Office	103
EECARO	Belarus	Belarus_Minsk_Sub-Office	21
WCARO	Benin	Benin_Cotonou_Main-Office	750
WCARO	Benin	Benin_Parakou_Sub-Office	159
APRO	Bhutan	Bhutan_Thimphu_Main-Office	129
LACRO	Bolivia	Bolivia_La Paz_Main-Office	716
EECARO	Bosnia & Herzegovina	Bosnia & Herzegovina_Sarajevo_Main-Office	136
ESARO	Botswana	Botswana_Gaborone_Main-Office	422
LACRO	Brazil	Brazil_Brasilia_Main-Office	319
LACRO	Brazil	Brazil_Salvador_Sub-Office	120
WCARO	Burkina Faso	Burkina Faso_Ouagadougou_Main-Office	693
WCARO	Burkina Faso	Burkina Faso_Ouagadougou_Sub-Office	238
ESARO	Burundi	Burundi_Bujumbura_Main-Office	637
APRO	Cambodia	Cambodia_Phnom Penh_Main-Office	560
WCARO	Cameroon	Cameroon_Bertoua_Sub-Office	80
WCARO	Cameroon	Cameroon_Maroua_Sub-Office	144
WCARO	Cameroon	Cameroon_Pitoare_Sub-Office	293



Region	Country	Office	Area (m2)
WCARO	Cameroon	Cameroon_Yaounde_Main-Office	1134
WCARO	Cape Verde	Cape Verde_Praia_Main-Office	2245
WCARO	Central African Republic	Central African Republic_Bangui_Main-Office	2652
WCARO	Chad	Chad_Baga Sola_Sub-Office	2304
WCARO	Chad	Chad_N'Djamena_Main-Office	1000
LACRO	Chile	Chile_Santiago_Main-Office	4
APRO	China	China_Beijing_Main-Office	704
LACRO	Colombia	Colombia_Bogota_Main-Office	574
ESARO	Comoros	Comoros_Moroni_Main-Office	240
WCARO	Congo	Congo_Brazzaville_Main-Office	1204
LACRO	Costa Rica	Costa Rica_San Jose_Main-Office	128
WCARO	Cote D'Ivoire	Cote D'Ivoire_Abidjan_Main-Office	570
WCARO	Cote D'Ivoire	Cote D'Ivoire_Bondoukou_Sub-Office	40
WCARO	Cote D'Ivoire	Cote D'Ivoire_Bouake_Sub-Office	1840
WCARO	Cote D'Ivoire	Cote D'Ivoire_Guiglo_Sub-Office	40
LACRO	Cuba	Cuba_Ciudad de La Habana_Main-Office	93
ESARO	Dem Rep Congo	Dem Rep Congo_Bukavu_Sub-Office	87
ESARO	Dem Rep Congo	Dem Rep Congo_Bunia_Sub-Office	60
ESARO	Dem Rep Congo	Dem Rep Congo_Goma_Sub-Office	2400
ESARO	Dem Rep Congo	Dem Rep Congo_Kalemie_Sub-Office	60
ESARO	Dem Rep Congo	Dem Rep Congo_KANANGA_Sub-Office	36
ESARO	Dem Rep Congo	Dem Rep Congo_Kinshasa_Main-Office	1204
ESARO	Dem Rep Congo	Dem Rep Congo_Kinshasa_Sub-Office	224
ESARO	Dem Rep Congo	Dem Rep Congo_Lubumbashi_Sub-Office	600
ESARO	Dem Rep Congo	Dem Rep Congo_Mbujimayi_Sub-Office	97
ESARO	Dem Rep Congo	Dem Rep Congo_Tshikapa_Sub-Office	32
APRO	Dem Rep Korea	Dem Rep Korea_Pyongyang_Main-Office	489
ASRO	Djibouti	Djibouti_Djibouti_Main-Office	395
LACRO	Dominican Republic	Dominican Republic_Santo Domingo_Main-Office	162
LACRO	Ecuador	Ecuador_Quito_Main-Office	261
EECARO	Kazakhstan	EECA Regional Office_Almaty_Sub-Office	112
EECARO	Turkey	EECA Regional Office_Istanbul_Main-Office	1276
ASRO	Egypt	Egypt_Cairo_Main-Office	650
LACRO	El Salvador	El Salvador_Antiguo Cuscatlan_Main-Office	400
WCARO	Equatorial Guinea	Equatorial Guinea_Malabo_Main-Office	480



Region	Country	Office	Area (m2)
ESARO	Eritrea	Eritrea_Asmara_Main-Office	262
ESARO	Ethiopia	Ethiopia_Addis Ababa_Main-Office_Liason Office	1219
ESARO	Ethiopia	Ethiopia_Bahir Dar_Sub-office	30
ESARO	Ethiopia	Ethiopia_Gambella_Sub-office	24
ESARO	Ethiopia	Ethiopia_Jijiga_Sub-office	34
ESARO	Ethiopia	Ethiopia_Mekelle_Sub-office	18
WCARO	Gabon	Gabon_Libreville_Main-Office	256
WCARO	Gambia	Gambia_BANJUL_Main-Office	220
EECARO	Georgia	Georgia_Tbilisi Georgia_Sub-Office	45
EECARO	Georgia	Georgia_Tbilisi_Main-Office	72
EECARO	Georgia	Georgia_Tbilisi_Sub-Office	32
WCARO	Ghana	Ghana_Accra_Main-Office	750
WCARO	Ghana	Ghana_Tamale_Sub-Office	64
LACRO	Guatemala	Guatemala_Guatemala City_Main-Office	534
WCARO	Guinea	Guinea_Conakry_Main-Office	1391
WCARO	Guinea	Guinea_Kankan_Sub-Office	100.57
WCARO	Guinea	Guinea_Mamou_Sub-Office	30.2
WCARO	Guinea	Guinea_Nzerekore_Sub-Office	1224
WCARO	Guinea-Bissau	Guinea-Bissau_Bissau_Main-Office	247
LACRO	Haiti	Haiti_Port-au-Prince_Main-Office	764
LACRO	Honduras	Honduras_Tegucigalpa_Main-Office	385
APRO	India	India_Bhopal_Sub-Office	111
APRO	India	India_Bhubaneswar_Sub-Office	284
APRO	India	India_Jaipur_Sub-Office	185
APRO	India	India_New Delhi_Main-Office	259
APRO	India	India_Patna_Sub-Office	69
APRO	Indonesia	Indonesia_Jakarta_Main-Office	415
APRO	Iran	Iran_Tehran_Main-Office	298
APRO	Iraq	Iraq_Baghdad_Main-Office	70
ASRO	Iraq	Iraq_Dohuk_Sub-Office	105
ASRO	Iraq	Iraq_Erbil_Sub-Office	264
ASRO	Iraq	Iraq_Sulaimaniyah_Sub-Office	115
LACRO	Belize	Jamaica-SRO_Belize City_Sub-Office	316
LACRO	Barbados	Jamaica-SRO_Christ Church_Sub-Office	18
LACRO	Guyana	Jamaica-SRO_Georgetown_Sub-Office	36



Region	Country	Office	Area (m2)
LACRO	Jamaica	Jamaica-SRO_Kingston_Main-Office	41
LACRO	Suriname	Jamaica-SRO_Paramaribo_Sub-Office	42
LACRO	Trinidad and Tobago	Jamaica-SRO_Port-of-Spain_Sub-Office	4
ASRO	Jordan	Jordan_Amman_Main-Office	946
EECARO	Kazakhstan	Kazakhstan_Nur-Sultan_Main-Office	159
ESARO	Kenya	Kenya_Nairobi_Main-Office	335
EECARO	Kosovo	Kosovo_Pristina_Main-Office	93
EECARO	Kosovo	Kosovo_Zvecan_Sub-Office	22
EECARO	Kyrgyzstan	Kyrgyzstan_Bishkek_Main-Office	228
APRO	Lao	Lao_Vientiane_Main-Office	292
ASRO	Lebanon	Lebanon_Beirut_Main-Office	313
ESARO	Lesotho	Lesotho_Maseru_Main-Office	255
WCARO	Liberia	Liberia_Monrovia_Main-Office	856
ASRO	Libya	Libya_Benghazi_Sub-Office	24
ASRO	Libya	Libya_Tripoli_Main-Office	170
ASRO	Libya	Libya_Tunis_Sub-Office	298
EECARO	North Macedonia	Macedonia_Skopje_Main-Office	71
ESARO	Madagascar	Madagascar_Antananarivo_Main-Office	720
ESARO	Madagascar	Madagascar_Toliara_Sub-Office	81.44
ESARO	Malawi	Malawi_Lilongwe_Main-Office	841
APRO	Malaysia	Malaysia_Putrajaya_Main-Office	70
APRO	Maldives	Maldives_Male_Main-Office	127
WCARO	Mali	Mali_Bamako_Main-Office	479
WCARO	Mauritania	Mauritania_Nouakchott_Main-Office	400
LACRO	Mexico	Mexico_Mexico, D.FMain-Office	932
EECARO	Moldova Republic	Moldova Republic_Chisinau_506_Sub-Office	95
EECARO	Moldova Republic	Moldova Republic_Chisinau_802_Sub-Office	8
EECARO	Moldova Republic	Moldova Republic_Chisinau_Main-Office	196
APRO	Mongolia	Mongolia_Ulaanbaatar_Main-Office	335
ASRO	Morocco	Morocco_Rabat_Main-Office	315
ESARO	Mozambique	Mozambique_Beira_Sub-Office	76
ESARO	Mozambique	Mozambique_Maputo_Main-Office	918
ESARO	Mozambique	Mozambique_Nampula_Sub-Office	36
ESARO	Mozambique	Mozambique_Pemba_Sub-Office	85
ESARO	Mozambique	Mozambique_Tete_Sub-Office	75



Region	Country	Office	Area (m2)
APRO	Myanmar	Myanmar_Hpa-An_Sub-Office	91
APRO	Myanmar	Myanmar_Lashio_Sub-Office	8
APRO	Myanmar	Myanmar_Maungdaw_Sub-Office	87
APRO	Myanmar	Myanmar_Myitkyina_Sub-Office	49
APRO	Myanmar	Myanmar_Naypyitaw_Sub-Office	158
APRO	Myanmar	Myanmar_Sittwe_Sub-Office	290
APRO	Myanmar	Myanmar_Yangon_Main-Office	519
ESARO	Namibia	Namibia_Windhoek_Main-Office	318
APRO	Nepal	Nepal_Butwal_Sub-Office	254
APRO	Nepal	Nepal_Janakpur_Sub-Office	215
APRO	Nepal	Nepal_Kailali_Sub-Office	243
APRO	Nepal	Nepal_Kathmandu_Main-Office	903
LACRO	Nicaragua	Nicaragua_Managua_Main-Office	191
WCARO	Niger	Niger_Diffa_Sub-Office	12
WCARO	Niger	Niger_Niamey_Main-Office	301
WCARO	Niger	Niger_Tahoua_Sub-Office	16
WCARO	Niger	Niger_Zinder_Sub-Office	38
WCARO	Nigeria	Nigeria_Abuja_Main-Office	388
WCARO	Nigeria	Nigeria_Calabar_Sub-Office	306
WCARO	Nigeria	Nigeria_Ikoyi Lagos_Sub-Office	139
WCARO	Nigeria	Nigeria_Kaduna_Sub-Office	287
HQ	Belgium	Office in Brussels_Brussels_Main-Office	271
HQ	Switzerland	Office in Geneva_Main-Office	525
HQ	United Kingdom	Office in London_London_Main-Office	12
HQ	South Korea	Office in Seoul_Seoul_Main-office	34
HQ	Japan	Office in Tokyo_Tokyo_Main-Office	82
HQ	USA	Office in Washington_DC_Main-Office	23
ASRO	Oman	Oman_Muscat_Main-Office	329
APRO	Samoa	Pacific-SRO_Apia, Samoa_Sub-Office	16
APRO	Solomon Islands	Pacific-SRO_Honiara, Solomon Islands_Sub-Office	30
APRO	Tonga	Pacific-SRO_Nukualofa_Sub-Office	40
APRO	Micronesia	Pacific-SRO_Pohnpei Federated States of Micronesia_Sub-Office	86
APRO	Vanuatu	Pacific-SRO_Port Vila Vanuatu_Sub-Office	4
APRO	Vanuatu	Pacific-SRO_Suva_Main-Office	8810



Region	Country	Office	Area (m2)
APRO	Kiribati	Pacific-SRO_Tarawa, Kiribati_Sub-Office	11
APRO	Pakistan	Pakistan_Islamabad_Main-Office	622
APRO	Pakistan	Pakistan_Karachi_Sub-Office	46
APRO	Pakistan	Pakistan_Lahore_Sub-Office	19
APRO	Pakistan	Pakistan_Peshawar_Sub-Office	238
APRO	Pakistan	Pakistan_Quetta_Sub-Office	14
ASRO	Palestine	Palestine_Gaza_Sub-Office	82
ASRO	Palestine	Palestine_Jerusalem_Main-Office	466
ASRO	Palestine	Palestine_Ramallah_Sub-Office	12
LACRO	Panama	Panama_Panama City_Main-Office	167
APRO	Papua New Guinea	Papua New Guinea_Port Moresby_Main-Office	225
LACRO	Paraguay	Paraguay_Asuncion_Main-Office	278
LACRO	Peru	Peru_Lima_Main-Office	1391
APRO	Philippines	Philippines_Cotabato City_Sub-Office	111
APRO	Philippines	Philippines_Iligan City_Sub-Office	70
APRO	Philippines	Philippines_Mandaluyong City_Main-Office	492
HQ	Denmark	Procurement Services Branch_Copenhagen_Main-Office	1235
ASRO	Republic of Yemen	Republic of Yemen_Aden_Sub-Office	6
ASRO	Republic of Yemen	Republic of Yemen_Hodeidah_Sub-Office	33
ASRO	Republic of Yemen	Republic of Yemen_Ibb_Sub-Office	8
ASRO	Republic of Yemen	Republic of Yemen_Saa'da_Sub-Office	14
ASRO	Republic of Yemen	Republic of Yemen_Sana'a_Main-Office	1520
WCARO	Senegal	RO_Dakar_Main-Office	777
ESARO	South Africa	RO_Johannesburg_Main-Office	1767
LACRO	Panama	RO_Panama_Main-Office	1208
ESARO	Rwanda	Rwanda_Kigali_Main-Office	685
WCARO	Sao Tome & Principe	Sao Tome & Principe_Sao Tome_Main-Office	177
WCARO	Senegal	Senegal_Dakar_Main-Office	382
EECARO	Serbia	Serbia_Belgrade_Main-Office	109
WCARO	Sierra Leone	Sierra Leone_Freetown_Main-Office	600
ASRO	Somalia	Somalia_Baidoa_Sub-Office	20
ASRO	Somalia	Somalia_Garowe_Sub-Office	155
ASRO	Somalia	Somalia_Hargeisa_Sub-Office	94
ASRO	Somalia	Somalia_Mogadishu_Main-Office	24



Region	Country	Office	Area (m2)
ASRO	Somalia	Somalia_Nairobi_Sub-Office	26
ESARO	South Africa	South Africa_Bisho_Sub-office	79
ESARO	South Africa	South Africa_Durban_Sub-office	10
ESARO	South Africa	South Africa_Pretoria_Main-Office	460
ESARO	South Sudan	South Sudan_Bentiu_Sub-Office	100
ESARO	South Sudan	South Sudan_Juba_Main-Office	643
ESARO	South Sudan	South Sudan_Malakal_Sub-Office	50
ESARO	South Sudan	South Sudan_Wau_Sub-Office	42
APRO	Sri Lanka	Sri Lanka_Colombo_Main-Office	285
ASRO	Sudan	Sudan_El Fasher_Sub-Office	600
ASRO	Sudan	Sudan_Geneina_Sub-Office	820
ASRO	Sudan	Sudan_Khartoum_Main-Office	820
ASRO	Sudan	Sudan_Nyala_Sub-Office	600
ESARO	Eswatini	Swaziland_Mbabane_Main-Office	233
ASRO	Syrian Arab Republic	Syrian Arab Republic_Aleppo_Sub-Office	120
ASRO	Syrian Arab Republic	Syrian Arab Republic_Damascus_Main-Office	210
ASRO	Syrian Arab Republic	Syrian Arab Republic_Damascus_Sub-Office	220
ASRO	Syrian Arab Republic	Syrian Arab Republic_Deir Ezzor_Sub-Office	43
ASRO	Syrian Arab Republic	Syrian Arab Republic_Homs_Sub-Office	123
EECARO	Tajikistan	Tajikistan_Dushanbe_Main-Office	255
ESARO	Tanzania	Tanzania_Dar-es-Salaam_Main-Office	800
ESARO	Tanzania	Tanzania_Zanzibar_Sub-Office	218
APRO	Thailand	Thailand_Bangkok_Main-Office	165
APRO	Timor Leste	Timor Leste_Dili_Main-Office	311
WCARO	Togo	Togo_LOME_Main-Office	2700
ASRO	Tunisia	Tunisia_Tunis_Main-Office	250
EECARO	Turkey	Turkey_Ankara_Main-Office	555
EECARO	Turkey	Turkey_Gaziantep_Sub-Office	119
EECARO	Turkmenistan	Turkmenistan_Ashgabat_Main-Office	204
ESARO	Uganda	Uganda_Gulu_Sub-Office	68
ESARO	Uganda	Uganda_Kampala_Main-Office	1500
ESARO	Uganda	Uganda_Moroto_Sub-Office	180
EECARO	Ukraine	Ukraine_Kramatorsk_Sub-Office	25
EECARO	Ukraine	Ukraine_Kyiv_Main-Office	453
EECARO	Ukraine	Ukraine_Severodonetsk_Sub-Office	43



Region	Country	Office	Area (m2)
HQ	USA	UNFPA HQ_New York_Main-Office	12146
LACRO	Uruguay	Uruguay_Montevideo_Main-Office	139
EECARO	Uzbekistan	Uzbekistan_Tashkent_Main-Office	411
LACRO	Venezuela	Venezuela_Caracas_Main-Office	437
APRO	Viet Nam	Vietnam_Hanoi_Main-Office	345
ESARO	Zambia	Zambia_Lusaka_Main-Office	314
ESARO	Zambia	Zambia_Mansa_Sub-Office	57
ESARO	Zambia	Zambia_MONGU_Sub-Office	27
ESARO	Zambia	Zambia_Solwezi_Sub-Office	27
ESARO	Zimbabwe	Zimbabwe_Harare_Main-Office	1049

## 3.3.4 List of Offices Not Included in This Inventory:

The UNFPA includes all its main and sub-offices in its reporting boundary.

## 3.3.5 Emission Source Categories (Direct, Indirect and Optional Sources of GHG Emissions):

Direct Emissions:

- On-site (stationary) combustion scope 1
- Fugitive emissions (refrigerants) scope 1
- Mobile sources scope 1

Indirect Emissions:

- Electricity purchased scope 2
- Purchased heat, steam, and chilled water scope 2

Other Indirect Emissions:

• Business travel emissions – scope 3

# **3.3.6 UNFPA Boundary Condition Assumptions:**

The UN Environmental Inventory Software divides GHG emissions from a UN entity in to five categories, including (i) Buildings; (ii) Air travel; (iii) Transport; (iv) Water; (5) Waste. The inventory data collection



methodology is, to the extent possible, the same throughout all offices. Our boundary conditions and assumptions are outlined below:

i. Buildings

Where UNFPA shares office facilities without a separate meter, emissions are apportioned by percentage of total square meters occupied by the organization. Estimates on number of personnel are derived from HR records at the moment of the reporting. All offices are required to report on electricity, refrigerants, steam, and generator fuel consumption (when applicable).

#### Electricity

For offices that can provide electricity consumption for the entire building but not for the UNFPA-occupied area, annual electricity consumption is prorated for the UNFPA-occupied area. This is accomplished by dividing the UNFPA-occupied space by the size of the entire building and then multiplying this figure by the annual electricity consumption of the facility.



Where reliable electricity figures are missing: a proxy is calculated using the SUN recommended methodology - based on office square meters and Energy Efficiency Index (EEI) per climatic zones.

Country offices producing renewable energy, such as solar, can report on the electricity produced through the GHG calculator. This enables UNFPA to account for savings in electricity through investments in photovoltaic.

#### Cooling

Refrigerant data is often one of the hardest pieces of information for offices to collect. All UNFPA offices are asked to submit annual refrigerant use if applicable. The consumed amount is not reflected in the total amount of refrigerant used in the equipment, but only the amount that is used to "top up" or replace the refrigerant (like the oil that is used in a car). That is how we can calculate fugitive emissions from refrigeration, freezer, and air-conditioning equipment refrigerants. GHGs from heating, ventilation, or air conditioning (HVAC) operations, refrigeration, and freezer units are not intentionally released, but escape into the atmosphere as fugitive emissions through varying means, including but not limited to maintenance, installation, disposal, and operational leakage.



#### Generators

Information on purchased steam or heat from an individual Combined Heat and Power plant (CHP) can be acquired by consulting the office's purchasing records (amount of steam/heat purchased) and/or by contacting office building management. If the office purchased fuel for generators that are owned by UNFPA, the office is asked to enter information within the "Stationary Combustion" category instead. Where steam figures or generator fuel figures are missing a data gap is marked.

ii. Air travel

Air travel is representative of the UNFPA's core business activities and a significant emissions source. All offices are required to fill in Air Travel data through the ICAO Air Travel GHG calculator. Version 5.0.4 which is measured in tons of CO<sub>2</sub> and total km traveled.

The green focal points obtain information on air travel either by contacting their travel agency or by collecting data from the associate responsible for travel at their office. Then, they transfer the data to ICAO air travel calculator spreadsheet. UNFPA HQ asks all the offices to submit their ICAO air calculator spreadsheet report for the reference.

Where IATA codes are faulty and/or incomplete, they are corrected by UNFPA HQ on the base of likelihood/approximations or further clarification from the focal points.

- Entitlement travel is not included in 2019 GHG Emission report and marked as data gap.
- Relocation travel is impossible to determine and marked as data gap.
- All other types of ET (Initial Appointment, Lump-Sum Travel) are marked as a data gap.
  - iii. Transport

#### **Non-Air Business Travel**

To account for transportation to/from airports, the GHG Helpdesk recommends applying a proxy of 25km per terminal recorded under "taxi" (also in those locations where taxi services are not used). Having said that in most UNFPA locations transport to/from airports is provided by an office vehicle and therefore already accounted for in the vehicle emissions.

#### Mobile sources

Mobile GHG emissions result from the combustion of fuel in an organization's owned and leased vehicles. In accordance with the operational control approach for organizational boundaries, the UNFPA reports data



for fleet vehicles that it owns and operates (data on vehicles operated by implementing partners is not included).

The majority of UNFPA offices report the quantity of fuel used from driver logs or invoices. Many vehicles have fuel consumption logs to track their purchases. All the mobile sources data is entered either by fuel used or by distance traveled. GHG Emission Calculator asks the offices to specify vehicle type and fuel type. Not all offices report mobile fuel use. Some do not have any owned or leased vehicles.

#### iv. Water consumption

While the UN Environmental Inventory Software establishes an independent Water questionnaire and encourages offices to report through accessing water bills and/or meters, water consumption was an optional exercise in 2019. The UNFPA is striving to make water consumption a mandatory exercise starting next year, as this data will be integral to the UN's broader sustainability reporting in the coming years.

#### v. Waste management

While the UN Environmental Inventory Software establishes an independent Waste questionnaire, reporting on waste management was on a voluntary basis for the 2019 GHG inventory. Nevertheless, providing the data was highly encouraged given that the data will be integral to the UN's broader sustainability reporting in the coming years. However, due to the voluntary nature of the reporting and the limited data turnover, the collected data cannot be considered reliable for 2019.

UNFPA has continued its efforts to measure e-waste production. E-waste includes items like monitors, laptops, desktops, and mobile phones. Country offices are asked to report how many items they disposed of in 2019 and then indicate whether the item had been donated, discarded, or recycled. Like the rest of waste management collection, e-waste reporting was voluntary and data turnover was limited. Received data, however, provides the basis for a global e-waste program UNFPA is planning in the future.

# 3.4 Emissions quantification

# **3.4.1 Quantification method:**

#### See UN-wide IMP

Note on quantification of Scope 3 emissions - duty travel emissions (air travel):



- Business air travel is a significant component of UNFPA emission profile. In the UN GHG inventory, emissions from air travel are calculated using the ICAO air travel calculator (v 5.0.4).
- Proxies for Air Travel emissions were used for Armenia, Benin, Botswana, Cape Verde, Djibouti, Equatorial Guinea, Gambia, Mali, Mauritania, Morocco, Mozambique, Namibia, Somalia, South Sudan CO, and ESARO.
- Electricity proxies were used for all Field offices not providing data, based on the number of staff.

# 3.5 Data Management

## 3.5.1 The UNFPA Data Collection:

The UNFPA conducted GHG emissions data collection and management for 2019 by using a Web-based inventory management application called UN Environmental Inventory Software through the UN Intranet <a href="https://unenvironmentalinventory.org/#/">https://unenvironmentalinventory.org/#/</a>

It allows Office Users to input activity data via five online questionnaires that collects information in following categories:

- Building electricity, stationary combustion (generator), on-site renewable electricity, refrigerants, purchased steam
- Transport non-air business travel, mobile sources (by fuel used, or by distance travelled), optional emissions, energy efficiency measures.
- Air travel (reported separately from UN Environmental Inventory Software)
- Water
- Waste

Data owners in country offices are typically green focal point staff or designated administrative staff who collect the necessary information. A notification is sent to green focal points in the second quarter of each year alerting them that annual GHG Emissions Calculator application is ready for entries. The system is secure and requires data providers to have the right to work with the GHG Emission Calculator.

# 3.5.2 Source of Activity Data:

#### **Vehicle Sources**



• Fuel consumption/mileage for office car: activity data typically comes from fuel purchase receipts and/or logbook records. Where fuel purchase data is not available, typically driver log information on fuel purchases or mileage is used.

#### Generators

• Generators on-site that are UNFPA owned. This information is usually collected from purchasing records maintained by facility managers of buildings and/or contacting building management or the vendor directly.

## Electricity

• Emissions from electricity usage typically come from landlords for leased buildings and from monthly electric utility bills for owned buildings.

#### Steam

• Purchased steam or heat from an individual Combined Heat and Power plant (CHP) can be acquired by consulting the purchasing records (amount of steam/heat purchased) and/or contacting the building management.

#### Travel

- Air Travel data was collected the following way. First, Field Office Focal Point obtained annual travel data through their local travel management contractor. Then, the itineraries with expressed IATA codes and class of travel were transferred for processing into the ICAO calculator. Afterwards, the final number was entered to GHG emission calculation report under Air Travel category. A copy of each country's travel ICAO report was saved for internal records and verification purposes.
- Land-based travel including bus and train was calculated by distance travelled and the latest UN emission factors.

## **3.5.3** Normalization Factors:

See UN-wide IMP

#### 3.5.4 Data Collection Process for Normalization Factor:



Office square meters and number of personnel are self-reported by individual offices via the UN Environmental Inventory Software application.

#### **3.5.5 Data Collection Process – Quality Assurance:**

Uncertainty is widespread in all data sources, as office reports are not accompanied by any supporting evidence but rely fully on the accuracy of reporting personnel.

To provide a level of quality assurance with the country office activity data, all office entries are reviewed in detail and clarifying questions are sent to key contacts. When clarifying information is not received, data is taken out of the inventory if it has a large potential for error and will skew inventory results. In these cases, an estimate is made when possible.

To detect obvious errors, year on year comparison of the reported emission levels is performed. This type of quality check is possible for offices that are at least in their second year of reporting.

## 3.5.6 Data Collection System Security:

Data Collection System is administered through the UN intranet site. Each office's GHG focal points are provided access to that office's information. Entity administration access is provided only to UNFPA's GHG focal point at the executive office.

#### 3.5.7 Frequency:

Facility data will be reported on an annual basis in time for annual inventory reporting, generally by the end of the third quarter of the year.

# 3.6 Base Year

#### 3.6.1 Base Year:

Following the new Strategy for sustainability management in the United Nations, 2020-2030, the base year is now 2010.

#### 3.6.2 Base Year Recalculation Policy:

At present, a Base Year Recalculation Policy specific to UNFPA does not exist. UNFPA will follow the UN-wide recalculation policy when this is made available, or until its internal recalculation policy is developed.



## 3.6.3 Adjustment – Structural Changes:

Structural changes include mergers, acquisitions, and divestments and/or outsourcing or insourcing of GHG emitting activities. Changes in the status of leased assets also are considered structural changes. Since 2010, UNFPA real estate has evolved and since 2019 sub-offices are also included in the scope of the GHG inventory.

#### **3.6.4** Adjustment – Methodology Changes:

Methodology changes include changes in activity data accuracy, changes in emission factors, changes in electricity intensity or air travel intensity figures, and/or changes to the methodology used to calculate GHG emissions.

UNFPA follows the UN wide guidance in this area.

# 3.7 Management Tools

#### 3.7.1 Roles and Responsibilities:

GHG Focal Points in each of the field offices (Office Users) provided office information into the UN Environmental Inventory Software application. This information is then compiled by a GHG Focal Point at the UNFPA HQ office (Entity Administrators).

Each UNFPA office is encouraged to have a chart to track roles and responsibilities. This IMP contains detailed roles and responsibilities for UNFPA HQ only.

Emission Source	Location	Department Responsible	Persons responsible
Electricity, Boilers, Refrigeration, Waste	UNFPA HQ Leased space	FASB	Mr. Rogelio Abreu, Administrative & Facilities Management Associate
Mobile Combustion Sources	Owned UNFPA HQ vehicles	Office of Security Coordinator	Mr. Jimmy Lopez, Security Assistant
Business Travel	Travel booked through American Express & Ultramar	FASB	Ms. Elsa Kandelman, Chief, Travel Services



## 3.7.2 Training:

The UNFPA understands that most Green Focal Points perform different professional functions and are not familiar with issues of climate neutrality or environmental sustainability. For some, it was the first time using the UN Environmental Inventory Software to calculate UNFPA GHG emissions. Therefore, to alleviate this challenge, online training sessions of the UNFPA 2019 GHG Calculation Guidelines were delivered to help focal points familiarize themselves with the new application.

# 3.8 Auditing and Verification

## 3.8.1 Internal Auditing:

Internal procedures used to verify accuracy of GHG inventory. UNFPA has a data quality review in place for all data submitted by Country Offices, to ensure that results are realistic.

## 3.8.2 External Validation and/or Verification:

At this stage there is no External procedures (i.e., 3rd party verifiers) used to verify accuracy of GHG inventory.

#### 3.8.3 Management Review:

At present, there is no management review process for the GHG inventory.