



# Inventory of Greenhouse Gas Emissions 2019

NMX-SSA-14064-1-IMNC-2007



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**OBJECTIVE OF THE INVENTORY**

To document the current state of GHG emissions as a carbon footprint indicator, for the mitigation actions to be implemented in the productive sector.

**REFERENCE PERIOD OF THE INVENTORY**

This inventory was created with 2019 as the base year. The total of emissions generated in the activities and processes carried out by Quálitas have been included, as well as scope 1, scope 2, and scope 3 emissions from January 01<sup>st</sup> to December 31<sup>st</sup>.



Figure 1. Reference period of the inventory.

**INTRODUCTION TO THE SCOPE OF THE INVENTORY**

**Quálitas Controladora** has operations in 5 countries: Mexico, the USA, El Salvador, Costa Rica, and Peru.

In Mexico, it operates in several facilities, which are organized into administration offices, Development Quálitas offices (DQOs), and non-insurance subsidiaries, which are financially and operationally controlled by Quálitas.

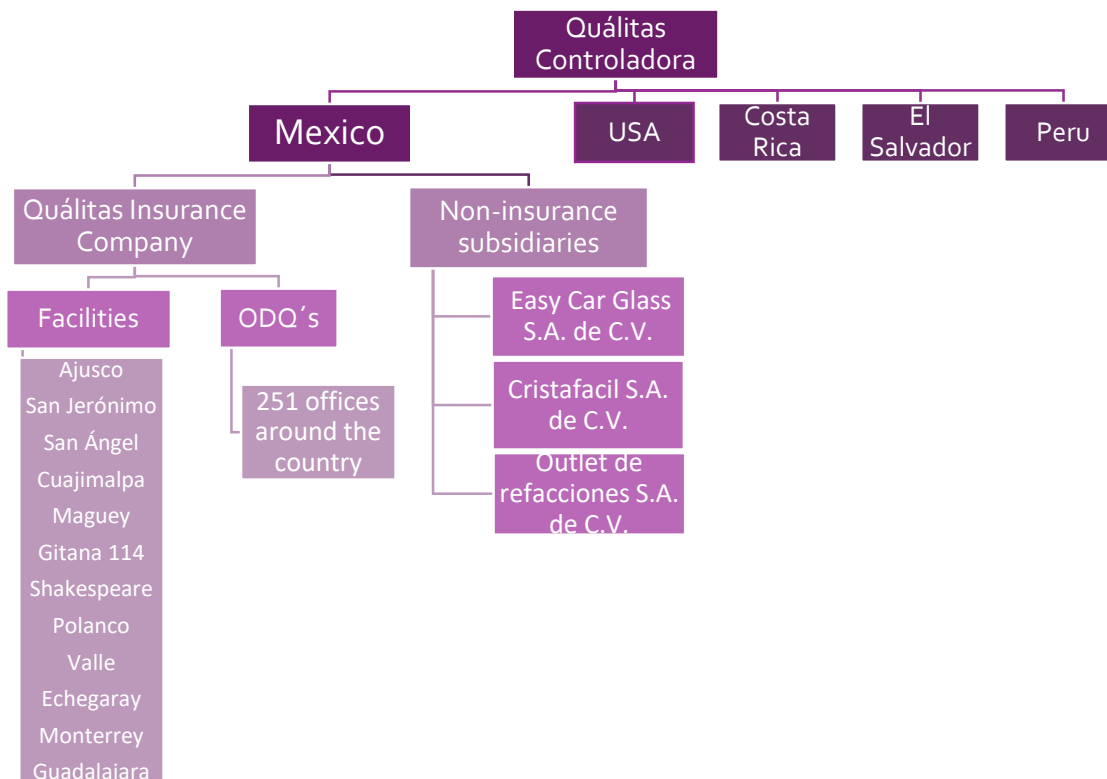


Figure 2. Quálitas Controladora installations.

## OPERATING LIMITS

The operating limits included in this inventory of emissions have been defined in accordance with the NMX-SSA-14064-1-IMNC-2007 regulation and the GHG Protocol (Green House Gases Protocol) which requires the identification of the emissions related to the operations inside the installations, as well as those in the vehicle fleet. The generated emissions have been classified into direct and indirect emissions.

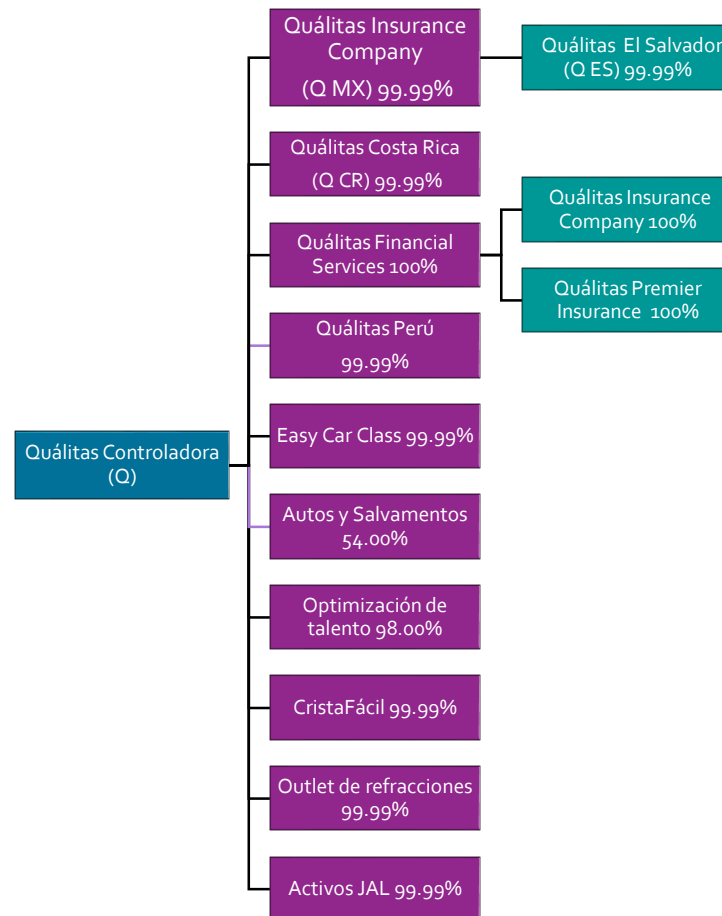


Figure 3. Quálitas Controladora subsidiaries.

## DIRECT EMISSIONS (SCOPE 1)

Direct emissions (or scope 1) include all the GHG that are generated from Quálitas Controladora activities and processes, and those emitted in stationary and mobile sources associated with activities of the company<sup>1</sup>. Direct emissions are generated within the operational limits of the organization. These emissions were quantified according to the applied methodology. The following categories have been identified:

### a) Stationary Sources:

Stationary sources are defined in fraction IV of article VI of the LGEEPA atmosphere prevention and control Regulations, as any installation located on one single property with industrial operations or processes, business,

<sup>1</sup> Reglamento de la Ley General de Cambio Climático en Materia del Registro Nacional de Emisiones. DOF. 28 October, 2014.

services or activities, which emits or may emit any air pollutant<sup>2</sup>. Emissions from stationary sources included in this inventory come from LP gas and diesel combustion. LP gas is used in San Jeronimo, San Angel, and in the non-insurance subsidiary Outlet de Refacciones (Table 1) canteens. Diesel is used in the auxiliary equipment of the installations located in Ajusco, San Jeronimo, San Angel, Cuajimalpa, Maguey, Polanco, Guadalajara, and Monterrey (Table 2).

**Table 1. LP Gas consumption per installation.**

LP Gas consumption (L)			Total annual (L)
San Jeronimo	San Angel	Outlet de Refracciones	
4,720	5,894	2,568	<b>13,182</b>

**Table 2. Diesel consumption per installation.**

Diesel consumption per facility Q2019 (L)								Total annual (L)
Ajusco	San Jeronimo	San Angel	Cuajimalpa	Maguey	Monterrey	Guadalajara	Polanco	
5,800	4,770	5,120	7,190	7,110	900	700	2,100	<b>33,690</b>

This is the first year in which **Quálitas Compañía de Seguros** has considered including emissions from refrigerants, since in 2019 they were recharged directly by the company. The following table shows the consumption expressed in kilograms by type of refrigerant (Table 3).

**Table 3. Annual refrigerant recharge.**

Type of Refrigerant	Annual refrigerant recharge (Kg)						Total annual (Kg)
	Ajusco	San Jeronimo	San Angel	Cuajimalpa	Gitana 114	Valle	
R-410		7	5	7			<b>19</b>
R-22	5				2	2	<b>9</b>

Furthermore, there are two Wastewater Treatment Plants (WWTPs) in San Jeronimo and Maguey installations. The volume of treated wastewater is shown in the table below. Only the emissions of the WWTP in Maguey were estimated, due to the lack of data about the Chemical Oxygen Demand (COD) in San Jeronimo installation. Nevertheless, the amount of treated wastewater was too insignificant for the emissions to be worth estimated.

**Table 4. Volume of treated wastewater.**

Wastewater (m <sup>3</sup> )		Total annual (m <sup>3</sup> )
San Jeronimo	Maguey	
324	2,280	<b>2,604</b>

<sup>2</sup> Reglamento de la Ley General del Equilibrio Ecológico y la Protección al Ambiente en materia de prevención y control de la contaminación de la atmósfera. DOF. 25 November, 1988.

**b) Mobile Sources**

According to fraction V of article VI of the abovementioned regulations, mobile sources are all those self-propelled vehicles, equipment and non-fixed machines with combustion engines and similar, that emit or may emit any air pollutant<sup>3</sup>. It is important to mention that most of the **Quálitas Compañía de Seguros** emissions come from mobile sources of its fleet due to the type of activities that the company carries out.

Owing to the type of vehicles of **Quálitas Compañía de Seguros**, the fuel consumed was gasoline, which is distributed among the following consignees:

- **Consignee 1:** A vehicle and a gas card is assigned to someone: either an adjuster, lawyer, etc. This card has a limit previously established in each area.
- **Consignee 2:** A non-assigned vehicle card is given to a coordinator. This card can be used to refill the tank of the vehicle of an adjuster whose card is run out of credit.
- **Consignee 3:** This card is assigned to an adjuster and can be used only to provide road assistance to an insurance holder. It is used to refill the tank of the car of an insured when necessary.
- **Consignee 4:** For private vehicles (This is a benefit in which **Quálitas Compañía de Seguros** absorbs taxes)

For each of the abovementioned schemes, there was a database with the card number, date, credit, general information about the service station (key, name, address, etc), price per unit, mileage information, performance, general information about the vehicle, fuel consumption, etc.

The consumption for each consignee is shown in the following tables.

**Quálitas Compañía de Seguros** only pays for gasoline expenses of **Consignee 1 and 2**, therefore, only these two are included in the Scope 1 of the inventory. Emissions from gasoline consumption of **Consignee 3 and 4** are included in the Scope 3 of this inventory.

**Table 5. Fuel consumption (Consignee 1 and 2).**

CONSIGNEE 1 2019			CONSIGNEE 2 2019		
Month	Subtotal	Consumption (L)	Month	Subtotal	Consumption (L)
January	\$8,261,843.01	431,498	January	\$244,516.74	12,753
February	\$8,281,134.40	425,014	February	\$234,044.82	11,890
March	\$8,651,630.37	432,244	March	\$270,581.37	13,476
April	\$8,510,502.52	428,876	April	\$293,166.66	14,600
May	\$8,613,242.67	434,778	May	\$253,471.45	12,838
June	\$8,535,029.50	434,077	June	\$298,898.13	14,999
July	\$8,573,474.56	435,282	July	\$274,204.49	13,839
August	\$8,489,150.82	432,958	August	\$267,221.67	13,283
September	\$8,366,553.91	425,485	September	\$203,577.33	10,090
October	\$8,343,856.44	425,657	October	\$239,480.80	11,908
November	\$8,185,685.23	417,317	November	\$232,470.65	11,530
December	\$8,123,235.60	411,639	December	\$260,430.56	12,873
<b>Total overall</b>	<b>\$100,935,339.03</b>	<b>5,134,827</b>	<b>Total overall</b>	<b>\$3,072,064.67</b>	<b>154,080.17</b>

<sup>3</sup> Reglamento de la Ley General del Equilibrio Ecológico y la Protección al Ambiente en materia de prevención y control de la contaminación de la atmósfera. DOF. 25 November, 1988.



As seen in table 5, the total consumption of gasoline of **Consignee 1 and 2** was **5,288,907** liters.

## INDIRECT EMISSIONS (SCOPE 2)

Indirect emissions (or Scope 2) are those GHG generated outside **Quálitas Compañía de Seguros** as a result of electric and thermal energy consumption<sup>4</sup>. The Company only consumes electricity in its installations, therefore, only the emissions generated from this consumption were quantified. In Appendix 1, consumptions are expressed in joules (J).

### INSTALLATIONS IN MEXICO

The quantification of electricity consumption corresponds to each of the installations: 251 DQO's and 3 non-insurance subsidiaries in Mexico. Consumption per installation is displayed in the tables below. The consumption of electricity in the 12 facilities of **Quálitas Compañía de Seguros** in 2019 was **6,480,228 kWh** (Tables 6 and 7).

**Table 6. Electricity consumption per installation (kWh).**

Month	Electricity consumption per office 2019 (kWh)				
	Ajusco	San Jeronimo	San Angel	Cuajimalpa	Maguey
January	69,621	86,522	47,461	122,429	53,715
February	68,529	82,865	44,948	111,733	50,044
March	77,133	86,487	50,323	123,568	59,017
April	71,137	85,831	49,265	118,930	58,783
May	80,316	95,756	53,387	124,977	62,848
June	75,914	85,157	53,054	121,430	59,927
July	70,801	88,795	55,065	126,510	59,454
August	92,957	88,272	53,611	122,862	58,949
September	68,396	87,443	50,050	119,165	58,304
October	68,341	93,720	53,600	123,831	62,677
November	65,106	81,348	47,512	120,876	56,034
December	61,248	73,634	46,641	126,239	56,218
<b>Total</b>	<b>869,499</b>	<b>1,035,830</b>	<b>604,917</b>	<b>1,462,550</b>	<b>695,970</b>

<sup>4</sup> Reglamento de la Ley General de Cambio Climático en Materia del Registro Nacional de Emisiones. DOF. 28 October, 2014.



**Table 7. Electricity consumption per installation (KWh).**

Month	Electricity consumption per office 2019 (KWh)						
	Gitana 114	Shakespeare	Valle	Monterrey	Guadalajara	Polanco	Echegaray
January	2,391	2,375	3,470	69,022	26,734	6,492	
February			4,016	70,077	26,653	6,406	
March	2,712	795	4,035	84,673	33,119	7,306	
April			4,358	101,290	34,575	7,088	
May	3,059	930	4,846	116,952	42,606	8,391	90
June			5,269	114,097	39,616	6,914	
July	2,873		5,225	119,438	39,462	6,558	2,674
August			4,612	119,454	37,458	6,742	
September	3,092		4,764	112,748	32,687	6,374	3,690
October			4,453	112,751	35,267	6,885	
November			4,194	110,875	29,857	6,644	
December			4,558	113,773	27,357	6,640	
<b>Total</b>	<b>14,127</b>	<b>4,100</b>	<b>53,800</b>	<b>1,245,150</b>	<b>405,391</b>	<b>82,440</b>	<b>6,454</b>

The electricity consumption of the non-insurance subsidiaries in Mexico is displayed below:

**Table 8. Electricity consumption in the non-insurance subsidiaries in Mexico.**

Office	Address	Consumption (kWh)
Easy Car Glass S.A. de C.V.	Av. 1 de mayo 87 A, Industrial Tlatilco, 53529	13,987
Cristafacil S.A. de C.V.	Sor Juana Inés de la Cruz 215	76,246
Outlet de refacciones S.A. de C.V.	Carretera a Laredo 320 Ex Hacienda el Canada, General Escobedo, Nuevo León	163,902
<b>Total</b>		<b>254,135</b>

The electric power consumed in the 251 ODOs during 2019 was **403,635.61 KWh**. This estimation was carried out with the existing information of 200 of the offices, since no data was collected from the remaining 51 ODOs.

#### INSTALLATIONS IN THE USA

The information about the electricity consumed in the following installations in the USA: Mission Valley Office, and Qualitas Insurance Company US Texas was not available. Therefore, the estimation was carried out based on the number of employees by using the information of other installations in which the information was available. The results are indicated in table 9.

**Table 9.** Electricity consumption in the installations in the USA (KWh).

Office	Address	Employees	Consumption (KWh)
<b>Downtown Office</b>	101 West Broadway Suite 1270 San Diego, CA 92101	21	2,154.20
<b>Mision Valley Office</b>	3333 Camino Del Rio South Suite 225 San Diego, CA 92108	9	923.23
<b>Tijuana Mx Office</b>	Netzahualcoyotl 1660 401 CP. 22 Via Rapida Y Paseo Centen Zona Del Rio. CP 22101 Tijuana, BC	33	20,509
<b>Qualitas Insurance Company US Texas</b>	3402 Enterprise Drive Rowlett, TX 75088	7	718.07
<b>Total</b>			<b>24,304.5</b>

## INSTALLATIONS IN COSTA RICA

**Table 10.** Electricity consumption in the installations in Costa Rica (KWh).

Office	Address	Employees	Consumption (KWh)
<b>Head office</b>	San José Costa Rica, Sabana Norte, Torre Sabana building, first floor	37	82,292
<b>Liberia</b>	Liberia Guanacaste, Santa Rosa Marketplace #7	5	15,949
<b>Perez Zeledón</b>	East side of the Court of Justice, next to Pizza Hut	3	9,324
<b>San Carlos</b>	250 mts Liceo de San Carlos South, next to Dr. Gilberto Rodríguez office, Ciudad Quesada, Alajuela	3	5,265
<b>Corporate office</b>	Sabana Norte, in front of Estadio Nacional, Torre Sabana building 1° floor	15	9,042
<b>Total</b>			<b>121,872</b>

## INSTALLATIONS IN EL SALVADOR

**Table 11.** Electricity consumption in the installations in El Salvador(KWh).

Office	Address	Employees	Consumption (KWh)
<b>Santa Elena</b>	Blvd Orden de Malta Sur, Antiguo Cuscatlán	58	129,606
<b>San Miguel</b>	Plaza Chaparrastique Av Roosevelt San Miguel	2	15,016
<b>Soyapango</b>	Plaza Soyapango, Blvd del Ejercito	1	8,379
<b>Gotera</b>	Barrio El Centro, San Francisco Gotera	1	2,072
<b>Santa Ana</b>	Plaza Prisma, Santa Ana	2	10,451
<b>Total</b>			<b>165,524</b>

## INSTALLATIONS IN PERU

**Table 12.** Electricity consumption in the installations in Peru (KWh).

Office	Address	Employees	Consumption (KWh)
<b>San Isidro</b>	Blvd Orden de Malta Sur, Antiguo Cuscatlán	48	36,211
<b>San Borja</b>	Plaza Chaparrastique Av Roosevelt San Miguel	1	4,361
<b>Total</b>			<b>40,572</b>

**OTHER INDIRECT EMISSIONS (SCOPE 3)**

The emissions known as Scope 3 are also named Other Indirect Emissions. These emissions are from products and services acquired by the organization as a result of activities that occur in sources not owned or controlled by the reporting entity. (Figure 4).

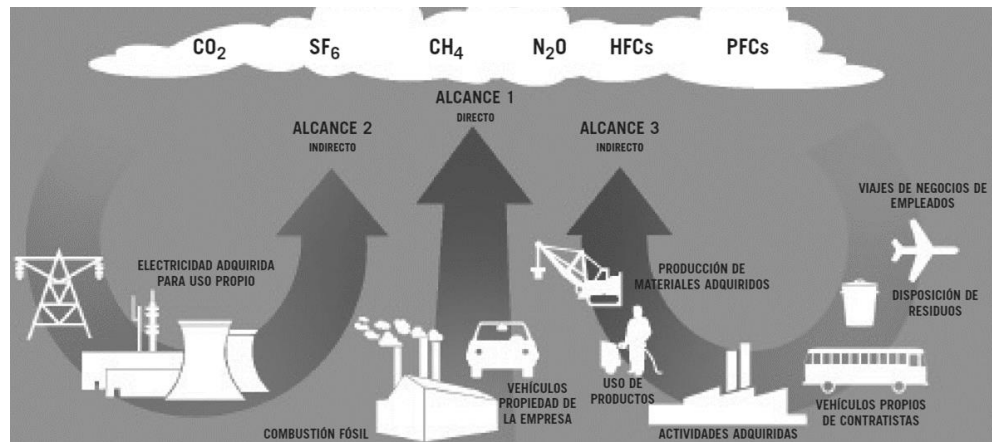


Figure 4. Summary of the scopes and emissions across the value chain<sup>5</sup>.

In Scope 3 of the 2019, only operations in Mexico are included. The emissions recorded come from:

**QUÁLITAS COMPAÑÍA DE SEGUROS AIR TRAVEL**

It refers to commercial flights that Quálitas Compañía de Seguros staff takes as part of their work duties. There is a database with the following information: Month, year, airplane, fare class, type of flight (domestic or international), route.

**GASOLINE CONSUMPTION CONSIGNEE 3 AND 4**

There is a data base with information about the card number, date, credit, general information of the service station (key, name, address, etc.), price per unit, mileage, performance, general information about the vehicle, gas consumption, etc. The total gas consumption of consignee 3 and 4 was **86,912.56** liters (Table 13):

<sup>5</sup> WBCSD, WRI, SEMARNAT, s.f. Protocolo de gases de efecto invernadero. Estándar corporativo de contabilidad y reporte.

Table 13. Fuel consumption (Consignee 3 and 4).

CONSIGNEE 3 2019			CONSIGNEE 4 2019		
Month	Subtotal	Consumption (L)	Mes	Subtotal	Consumption (L)
January	\$5,658.95	296	January	\$128,290.60	6,347
February	\$9,004.36	458	February	\$140,190.60	6,939
March	\$9,483.92	468	March	\$148,650.33	7,125
April	\$4,033.30	204	April	\$140,234.39	6,708
May	\$5,103.81	256	May	\$136,794.75	6,542
June	\$5,181.50	264	June	\$140,500.04	6,735
July	\$10,553.47	535	July	\$129,668.77	6,221
August	\$20,748.72	1,046	August	\$138,065.96	6,626
September	\$19,519.22	983	September	\$136,338.69	6,553
October	\$22,409.75	1,125	October	\$141,025.06	6,821
November	\$13,580.44	682	November	\$141,995.51	6,843
December	\$10,478.46	525	December	\$137,788.79	6,610
<b>Total general</b>	<b>\$135,755.90</b>	<b>6,843.43</b>	<b>Total general</b>	<b>\$1,659,543.49</b>	<b>80,069.13</b>

## ROOM OCCUPANCY

The occupancy or stay in hotel rooms by Quálitas Compañía de Seguros staff in order to accomplish the company activities was of 5,462 room/nights during 2019.

## SUMMARY OF THE OPERATING LIMITS

The following diagram displays the operating limits of **Quálitas Controladora** emissions.

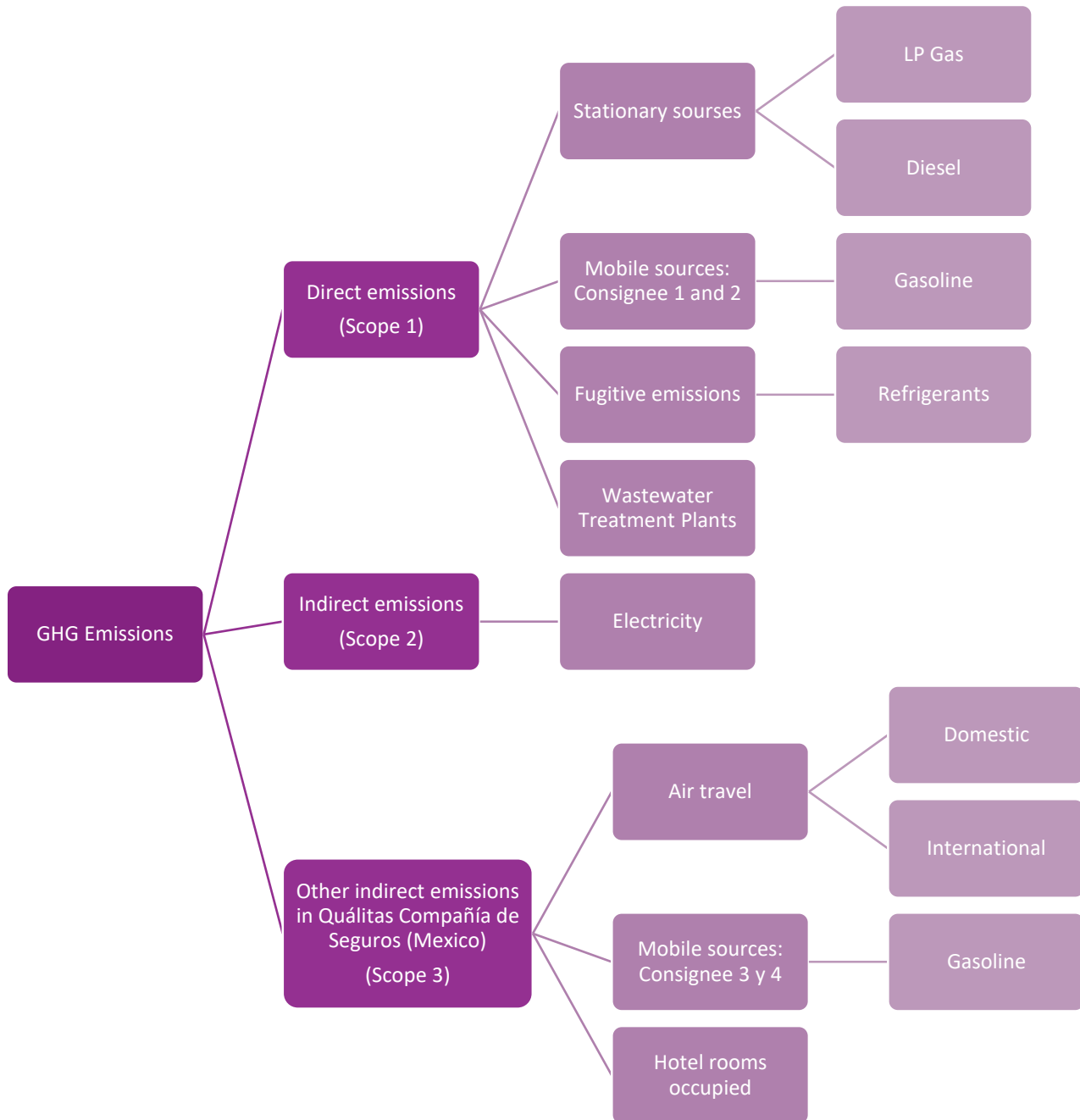


Figure 5. Summary of the quantified emissions based on the operational control approach.

## METHODOLOGY

In calculating the emissions, this inventory has followed the *Bottom-up* method, for specific data about the fuel consumption of the vehicle fleet, LP gas consumption, diesel, and electric power per installation was considered.

The GHG that were considered in accordance with the NMX-SSA-14064-1-IMNC-2007 regulations and the applied methodology are: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O).

The methodology corresponds to the emissions factor method using a general equation for the estimation of GHG according to the type of activity.

### A. EMISSION FACTORS AND GLOBAL WARMING POTENTIALS

The emission factors are specific for each type of emission, type of process, and GHG<sup>6</sup>.

**Table 14.** Emission factors for LP gas.

LP Gas		
GHG	Units	Emission factor
CO <sub>2</sub>	Ton/MJ	6.31E-05
CH <sub>4</sub>	kg/MJ	1.00E-06
N <sub>2</sub> O	kg/MJ	1.00E-07

**Table 15.** Emission factors for diesel.

Diesel		
GHG	Units	Emission factor
CO <sub>2</sub>	Ton/MJ	7.41E-05
CH <sub>4</sub>	kg/MJ	3.00E-06
N <sub>2</sub> O	kg/MJ	6.00E-07

**Table 16.** Emission factors for wastewater treatment (t CH<sub>4</sub>/t DQO).

Treatment and elimination system	Emission factor
Aerobic treatment plant in normal conditions	0.00E+00
Aerobic treatment plant (overloaded)	7.50E-02
Anaerobic sewage sludge digester or anaerobic reactor (methane recovery is not considered)	2.00E-01
Anaerobic shallow lagoon (less than 2 meters)	5.00E-02
Anaerobic deep lagoon (more than 2 meters)	2.00E-01

<sup>6</sup> Acuerdo que establece las particularidades técnicas y las fórmulas para la aplicación de metodologías para el cálculo de emisiones de gases o compuestos de efecto invernadero. DOF. 03-09-2015.

**Table 17.** Emission factors for mobile sources.

GHG	Units	Emission factor
CO <sub>2</sub>	Ton/MJ	6.93E-05
CH <sub>4</sub>	kg/MJ	2.50E-05
N <sub>2</sub> O	kg/MJ	8.00E-06

**Table 18.** Emission factors for electricity.<sup>7</sup>

GEI	Unidades	Factores de emisión
CO <sub>2</sub>	t CO <sub>2</sub> /MWh	0.505

The emission factors for the estimation of indirect emissions out of Mexico are displayed in the tables below

**Table 19.** Electricity-related emission factor for the USA.<sup>8</sup>

Egrid Subregion	Total output emission factors (lb/MWh)		
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
CAMX (WECC California)	650.31000	0.03112	0.00567

**Table 20.** Electricity-related emission factor for Costa Rica.<sup>9</sup>

GHG	Units	Emission factor
CO <sub>2</sub> e	t CO <sub>2</sub> e/kWh	8.24E-05

**Table 21.** Electricity-related emission factor for El Salvador.<sup>10</sup>

GHG	Units	Emission factor
CO <sub>2</sub> e	t CO <sub>2</sub> /MWh	6.80E-01

**Table 22.** Electricity-related emission factor for Peru.<sup>11</sup>

GHG	Units	Emission factor
CO <sub>2</sub> e	t CO <sub>2</sub> /MWh	6.15E-01

<sup>7</sup> CRE, s.f. Aviso sobre el factor de emisión eléctrico para el reporte 2019.

<sup>8</sup> EPA, 2015. eGRID2012.

<sup>9</sup> Procuraduría General de la República de Costa Rica, 2012. Inventario de emisiones de gases de efecto invernadero.

<sup>10</sup> Ministerio de Medio Ambiente y Recursos Naturales, 2017. Factores de Emisión de la red, El Salvador 2011.

<sup>11</sup> Ministerio del Ambiente, 2019. Peru 2020.



The emission factor used in order to calculate the emissions generated for one-night stay in a hotel room is the following:

**Table 23. Emission factor for one-night stays in hotels <sup>12</sup>**

Emission factor	Units
28.5	kg CO <sub>2</sub> e /room-night

The global warming potentials used in order to estimate the emissions are displayed in the following table, and are specific for each pollutant<sup>13</sup>.

**Table 24. Global warming potentials.**

Compound	Global warming potential
Carbon dioxide (CO <sub>2</sub> )	1
Methane (CH <sub>4</sub> )	28
Nitrous oxide (N <sub>2</sub> O)	265
R-22 (HCFC)	1760
R-410 <sup>a</sup> mixture (HFC)	677 / 3170

## RESULTS

### EMISSIONS UNDER THE OPERATIONAL CONTROL SCHEME

Below, the results for the GHG emissions generated in the year 2019 are presented, and compared to those reported in the years 2017 and 2018.

In the previous inventories the 4 Consignees were included in Scope 1. However, in this inventory (2019) the gas consumption for Consignee 1 and 2 were reported in Scope 1; and Consignee 3 and 4 in Scope 3.

**In order to compare the results of the years 2017 and 2018, they were recalculated** using this new organization for consignees. The final results are the same, only gas consumptions were moved to Scope 3, since these are not paid directly by Quálitas.

### Scope 1 and 2 emissions

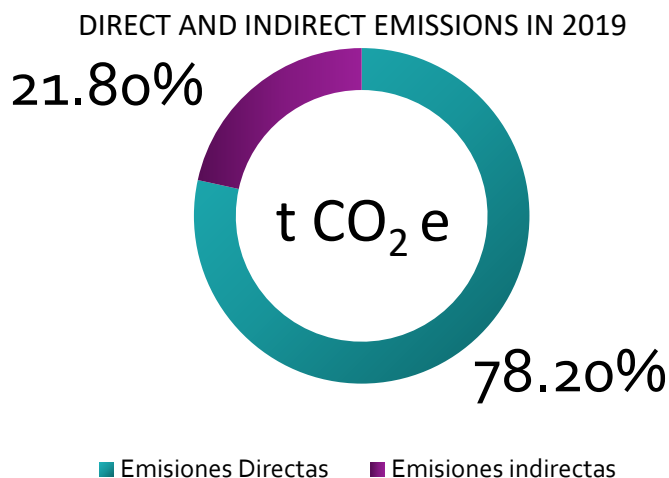
As seen in Figure 6, the emissions for Scope 1 represent 78.2% out of the total emissions, which corresponds to **13,554.50 t CO<sub>2</sub>e** emission. On the other hand, Scope 2 emissions represent the 21.8% (**3,770.24 t CO<sub>2</sub>e**).

<sup>12</sup> UK Government GHG Conversion Factors for Company Reporting

<sup>13</sup> Acuerdo que establece los gases o compuestos de efecto invernadero que se agrupan para efectos de reporte de emisiones, así como sus potenciales de calentamiento. DOF. 14 August, 2015.

**Table 25. Quálitas Controladora emissions (Scope 1 and 2).**

Direct emissions (t CO <sub>2</sub> e)		Indirect emissions (t CO <sub>2</sub> e)	Total
2017	14,003.84	3,856.07	17,859.91
2018	14,269.73	3,513.11	17,782.84
<b>2019</b>	<b>13,554.50</b>	<b>3,770.24</b>	<b>17,324.74</b>



**Figure 6. Estimated percentage of direct and indirect emissions.**

Mobile sources virtually represented the total emissions (Table 26) with a gross of 13,418.50 t CO<sub>2</sub>e (99%), whereas the stationary sources only generated 136 t CO<sub>2</sub>e (1%).

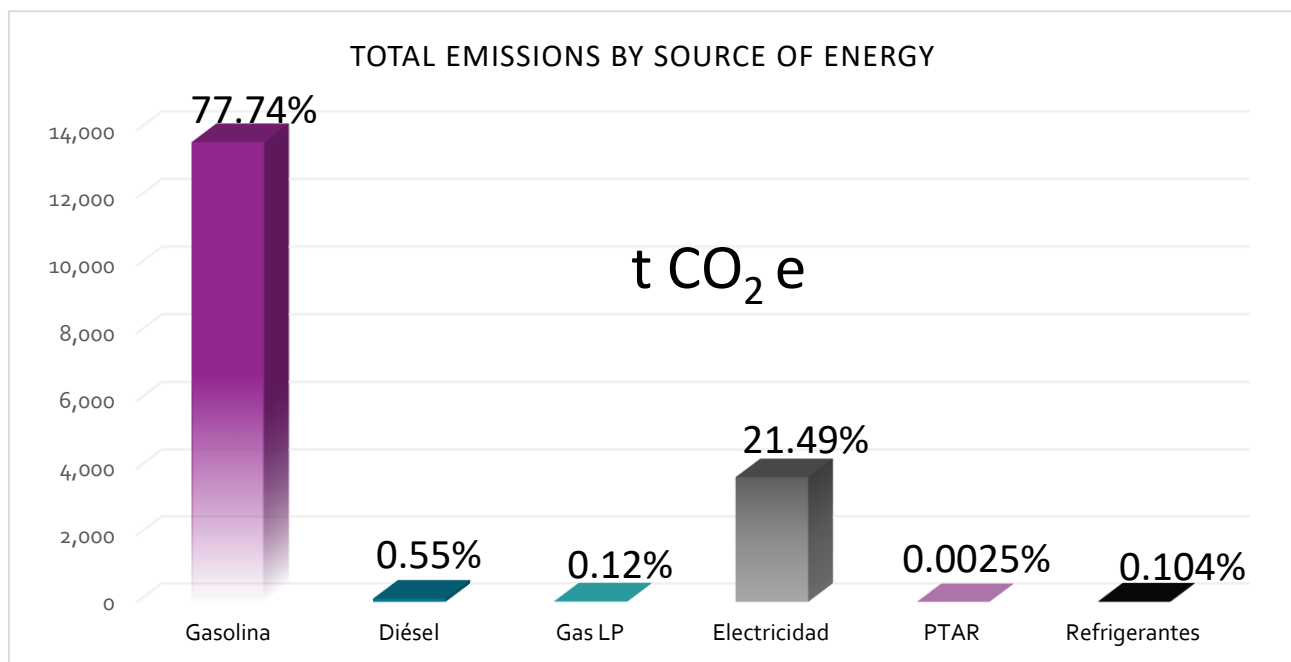
**Tabla 26. Direct emissions disaggregation (Scope 1) (t CO<sub>2</sub>e).**

Stationary Sources		Mobile Sources	Total
2017	121.18	13,882.66	<b>14,003.84</b>
2018	665.09	13,604.64	<b>14,269.73</b>
<b>2019</b>	<b>136.00</b>	<b>13,418.50</b>	<b>13,554.50</b>

Based on the analysis of emissions by energy source (Table 27 and Figure 9), gasoline consumption presents the largest emission with 13,639.01 t CO<sub>2</sub>e, followed by electric power consumption which generated 3,770.24 t CO<sub>2</sub>e, diesel with 95.47 t CO<sub>2</sub>e, and finally; LP gas, refrigerants, and WWTP which contributed with 21.75 t CO<sub>2</sub>e, 18.34 t CO<sub>2</sub>e, and 0.45 t CO<sub>2</sub>e, respectively.

**Table 27. Emissions by type of energy (t CO<sub>2</sub>e).**

	Gasoline <sup>14</sup>	Diesel	LP Gas	Electricity	WWTP	Refrigerants	Total
2017	14,180.97	0.85	17.45	3,856.07	102.88	0	18,158.22
2018	13,852.95	105.77	14.85	3,513.11	544.47	0	18,031.14
<b>2019</b>	<b>13,639.01</b>	<b>95.47</b>	<b>21.75</b>	<b>3,770.24</b>	<b>0.45</b>	<b>18.34</b>	<b>17,545.26</b>



**Figure 7. Total emissions per source of energy**

### Scope 3 emissions

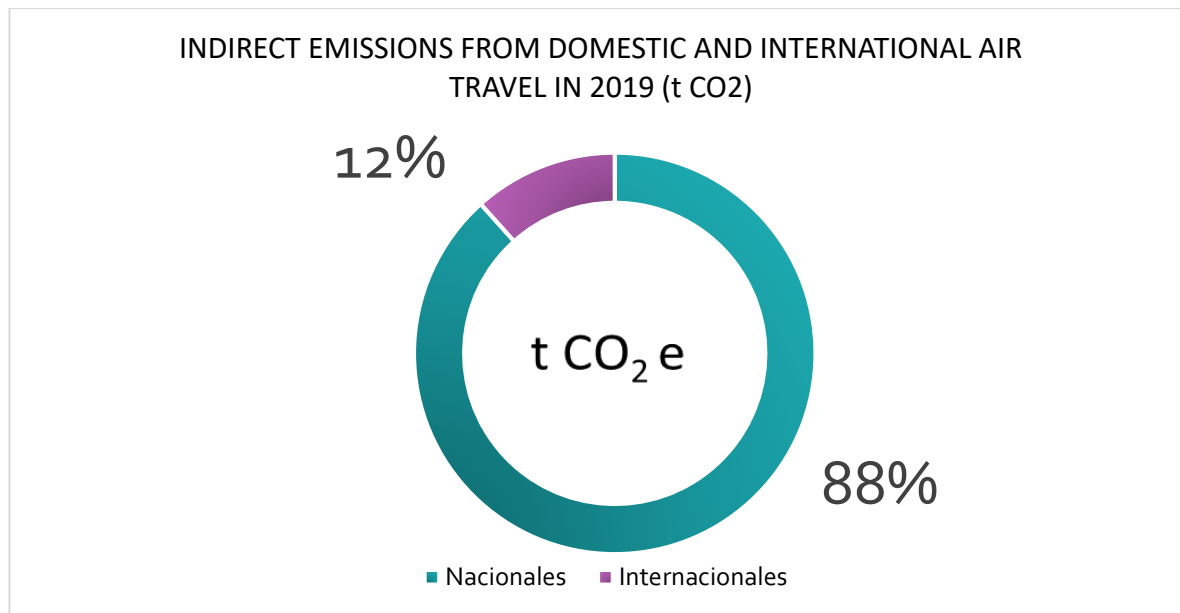
The emissions for Scope 3 were calculated for Quálitas Compañía de Seguros.

Regarding the Scope 3 emissions estimated with the ICAO Carbon Emissions Calculator, it was estimated a total of 971.98 t CO<sub>2</sub>e, which are emitted in domestic and international air travel. The majority of emissions correspond to domestic flights, these emissions amount to 858.87 t CO<sub>2</sub>e, 88% out of the total. The emissions from international flights are 113.11 t CO<sub>2</sub>e (12%).

**Table 28. Emissions for air travel in 2019 (t CO<sub>2</sub>e).**

Domestic	International	Total
858.87	113.11	971.98

<sup>14</sup> 4 consignees were considered.



**Figure 8. Indirect emissions from domestic and international air travel in 2019 (t CO<sub>2</sub>e)**

The emissions generated from 5,462 room/night occupancy in hotels is 155.67 tCO<sub>2</sub>e during the year 2019. The corresponding emissions to Scope 3 per year are indicated in the following table. Consignees 3 and 4 for the years 2017 and 2018 were recalculated, since these emissions were included in the Scope 1 of these reports.

**Table 29. Total Scope 3 emissions per year (t CO<sub>2</sub>e).**

Scope 3	2017	2018	2019
Air travel	692.19	456.09	971.98
Room/night occupancy	NA	NA	155.67
Consignee 3 and 4	298.31	248.31	220.51
Total	990.51	704.40	1,348.15

## SUMMARY OF EMISSIONS

### Total emissions per country

As stated in Section 2.1, the estimated emissions correspond to the offices located in Mexico, the USA, Costa Rica, El Salvador, and Peru. The following table displays the emissions that were calculated, which represent a total emission of 18,672.90 t CO<sub>2</sub>e.

**Table 30. Emissions for Quálitas Controladora subsidiaries.**

Year	Mexico	USA (t CO <sub>2</sub> e)	Costa Rica (t CO <sub>2</sub> e)	El Salvador (t CO <sub>2</sub> e)	Peru (t CO <sub>2</sub> e)	Total (t CO <sub>2</sub> e)
2017	18,825.82	4.48	8.49	11.62	0	18,850.41
2018	18,372.32	5.30	9.32	100.29	0	18,487.23
2019	18,507.35	18.04	10.04	112.52	24.95	18,672.90

**Table 31. Emissions (tCO<sub>2</sub>e) corresponding to each scope per country in 2019.**

	Mexico	USA	Costa Rica	El Salvador	Peru
Scope 1	13,554.50	0	0	0	0
Scope 2	3,604.69	18.04	10.04	112.52	24.95
Scope 3	1,348.15	0	0	0	0

Tables 32 and 33 show the comparison with the three periods in which the GHG emissions have been calculated, but considering each premium written by Quálitas Compañía de Seguros and Quálitas Controladora. This relation is a more reliable indicator, since the operational growth of the company is taken into account. Scope 3 is not included.

**Table 32. CO<sub>2</sub>e emissions per premium written in Quálitas Insurance Company**

Period	Premium written QMx	Emissions per premium written ( (Kg CO <sub>2</sub> e)/premium written)
2017	\$ 32,140,845,956	0.000555
2018	\$ 32,821,166,077	0.000538
<b>2019</b>	<b>\$ 34,249,202,740</b>	<b>0.000501</b>

**Table 33. CO<sub>2</sub>e emissions per premium written in Quálitas Controladora**

Period	Premium written QC	Emissions per premium written ( (Kg CO <sub>2</sub> e)/premium written)
2017	\$33,819,940,707	0.000528
2018	\$34,494,936,475	0.000516
<b>2019</b>	<b>\$36,196,441,030</b>	<b>0.000479</b>

The emissions generated by **Quálitas Controladora** in 2019 are equivalent to a total emission of **18,672.90 t CO<sub>2</sub>e**. This estimation was quantified based on the operating limits (Scope 1, Scope 2 and Scope 3). The results are displayed in the following table, in which a comparison with the data reported one and two years ago is made, including the recalculation of consignee 3 and 4 that was moved to Scope 1 and 3.

**Table 34. Total emissions from Quálitas Controladora (t CO<sub>2</sub>e).**

Type of emission	Scope	2017 emissions (t CO <sub>2</sub> e)	2018 emissions (t CO <sub>2</sub> e)	2019 emissions (t CO <sub>2</sub> e)
Direct emissions	1	14,003.84	14,269.73	<b>13,554.50</b>
Indirect emissions	2	3,856.07	3,513.11	<b>3,770.24</b>
Other emissions	3	990.50	704.40	<b>1,348.15</b>
<b>Total</b>		<b>18,850.41</b>	<b>18,487.24</b>	<b>18,672.90</b>

**Table 35. Emissions tCO<sub>2</sub>e per source.**

	<b>Mexico</b>		
	2017	2018	2019
<b>Gasoline<sup>15</sup> (m<sup>3</sup>)</b>	5,826.97	5,692.19	5,375.819
<b>Emissions (t CO<sub>2</sub>e)</b>	14180.97	13852.95	13,639.01
<b>Diesel (m<sup>3</sup>)</b>	0.3	37.47	33.69
<b>Emissions(t CO<sub>2</sub>e)</b>	0.85	105.77	95.47
<b>LP Gas (m<sup>3</sup>)</b>	10.59	9.01	13.18
<b>Emissions (t CO<sub>2</sub>e)</b>	17.45	14.85	21.75
<b>Electricity (kWh)</b>	6,583,297.32	6,448,184.69	7,137,998.61
<b>Emissions (t CO<sub>2</sub>e)</b>	3,831.48	3,398.19	3,604.69
<b>WWTP (m<sup>3</sup>)</b>	4,475	22,383.14	2,280
<b>Emissions(t CO<sub>2</sub>e)</b>	102.8	544.47	0.45
<b>Refrigerants (Kg)</b>	0	0	9.8
<b>Emissions (t CO<sub>2</sub>e)</b>	0	0	18.34

**Table 36. Electricity consumption and emissions tCO<sub>2</sub>e per country.**

	<b>Mexico</b>		
	2017	2018	2019
<b>Electricity (kWh)</b>	6,583,297.32	6,448,184.69	7,137,998.61
<b>Emissions (t CO<sub>2</sub>e)</b>	3,831.48	3,398.19	3,604.69
	<b>Estados Unidos</b>		
	2017	2018	2019
<b>Electricity (kWh)</b>	11,133.79	13,072.92	24,304.5
<b>Emissions (t CO<sub>2</sub>e)</b>	4.48	5.3	18.04
	<b>Costa Rica</b>		
	2017	2018	2019
<b>Electricity (kWh)</b>	103,012	113,119	121,872
<b>Emissions (t CO<sub>2</sub>e)</b>	8.49	9.32	10.04
	<b>El Salvador</b>		
	2017	2018	2019
<b>Electricity (kWh)</b>	140,981	147,534	165,524
<b>Emissions (t CO<sub>2</sub>e)</b>	11.62	100.29	112.52
	<b>Peru</b>		
	2017	2018	2019
<b>Electricity (kWh)</b>	NA	NA	40,572
<b>Emissions (t CO<sub>2</sub>e)</b>			24.95

<sup>15</sup> Gasoline consumption by the 4 consignees is included

## APPENDIX 1

**Table 37.** Summary of the tCO<sub>2</sub>e emissions during 2017, 2018 and 2019.

Year / Scope	Total Mexico	Mexico				USA (t CO <sub>2</sub> e)	Costa Rica (t CO <sub>2</sub> e)	El Salvador (t CO <sub>2</sub> e)	Peru (t CO <sub>2</sub> e)	Total (t CO <sub>2</sub> e)
		Quáalitas Compañía de Seguros	Outlet de Refacciones	Crista Fácil	EasyCar					
2017	18,825.82	18,825.82	0.00	0.00	0.00	4.48	8.49	11.62	0.00	18,850.41
Scope 1 / Direct	14,003.84	14,003.84	0	0	0	0	0	0	0	14,003.84
Stationary sources	121.18	121.18	0	0	0	0	0	0	0	121.18
LP Gas	17.45	17.45	0	0	0	0	0	0	0	17.45
Diesel	0.85	0.85	0	0	0	0	0	0	0	0.85
Fugitive emissions	0	0	0	0	0	0	0	0	0	0
Wastewater treatment plants	102.88	102.88	0	0	0	0	0	0	0	102.88
Mobile sources	13,882.66	13,882.66	0	0	0	0	0	0	0	13,882.66
Gasoline	13,882.66	13,882.66	0	0	0	0	0	0	0	13,882.66
Scope 2 / Indirect	3,831.48	3,831.48	0	0	0	4.48	8.49	11.62	0	3,856.07
Electricity	3,831.48	3,831.48	0	0	0	4.48	8.49	11.62	0	3,856.07
Scope 3	990.50	990.50	0	0	0	0	0	0	0	990.50
Domestic flights	674.85	674.85	0	0	0	0	0	0	0	674.85
International flights	17.34	17.34	0	0	0	0	0	0	0	17.34
Mobile sources (gasoline consignee 3 and 4)	298.31	298.31	0	0	0	0	0	0	0	298.31
2018	18,372.32	18,372.32	0.00	0.00	0.00	5.30	9.32	100.29	0.00	18,487.23
Scope 1 / Direct	14,269.73	14,269.73	0	0	0	0	0	0	0	14,269.73
Stationary sources	665.09	665.09	0	0	0	0	0	0	0	665.09
LP Gas	14.85	14.85	0	0	0	0	0	0	0	14.85
Diesel	105.77	105.77	0	0	0	0	0	0	0	105.77
Fugitive emissions	0	0	0	0	0	0	0	0	0	0
Wastewater treatment plants	544.47	544.47	0	0	0	0	0	0	0	544.47



Year / Scope	Total Mexico	Mexico				USA (t CO <sub>2</sub> e)	Costa Rica (t CO <sub>2</sub> e)	El Salvador (t CO <sub>2</sub> e)	Peru (t CO <sub>2</sub> e)	Total (t CO <sub>2</sub> e)
		Quálitas Compañía de Seguros	Outlet de Refacciones	Crista Fácil	EasyCar					
Mobile sources	13,604.64	13,604.64	0	0	0	0	0	0	0	13,604.64
Gasoline	13,604.64	13,604.64	0	0	0	0	0	0	0	13,604.64
Scope 2 / Indirect	3,398.19	3,398.19	0	0	0	5.30	9.32	100.29	0	3,513.10
Electricity	3,398.19	3,398.19	0	0	0	5.30	9.32	100.29	0	3,513.10
Scope 3	704.40	704.40	0	0	0	0	0	0	0	704.40
Domestic flights	444.21	444.21	0	0	0	0	0	0	0	444.21
International flights	11.88	11.88	0	0	0	0	0	0	0	11.88
Mobile sources (gasoline consignee 3 y 4)	248.31	248.31	0	0	0	0	0	0	0	248.31
2019	18,507.35	18,374.77	87.01	38.50	7.06	18.04	10.04	112.52	24.95	18,672.90
Scope 1 / Direct	13,554.51	13,550.27	4.24	0	0	0	0	0	0	13,554.51
Stationary sources	136.01	131.77	4	0	0	0	0	0	0	136.01
LP Gas	21.75	17.51	4	0	0	0	0	0	0	21.75
Diesel	95.47	95.47	0	0	0	0	0	0	0	95.47
Fugitive emissions	18	18	0	0	0	0	0	0	0	18
Wastewater treatment plants	0.45	0.45	0	0	0	0	0	0	0	0.45
Mobile sources	13,418.50	13,418.50	0	0	0	0	0	0	0	13,418.50
Gasoline	13,418.50	13,418.50	0	0	0	0	0	0	0	13,418.50
Scope 2 / Indirect	3,604.69	3,476.35	83	39	7	18.04	10.04	112.52	25	3,770.24
Electricity	3,604.69	3,476.36	83	39	7	18.04	10.04	112.52	25	3,770.24
Scope 3	1,348.15	1,348.15	0	0	0	0	0	0	0	1,348.15
Domestic flights	858.87	858.87	0	0	0	0	0	0	0	858.87
International flights	113.11	113.11	0	0	0	0	0	0	0	113.11
Mobile sources (gasoline consignee 3 and 4)	220.51	220.51	0	0	0	0	0	0	0	220.51
Hotel rooms	155.67	155.67	0	0	0	0	0	0	0	155.67

