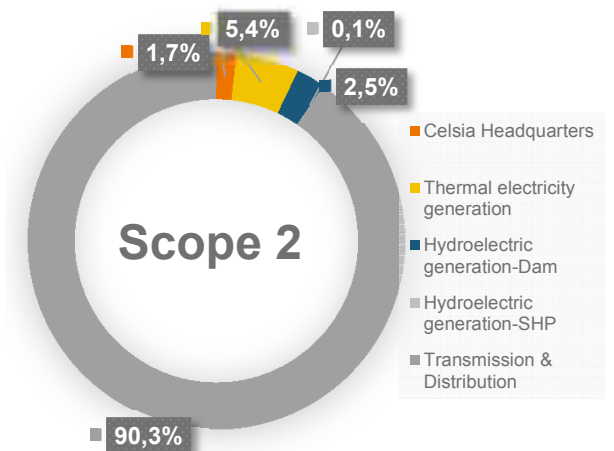
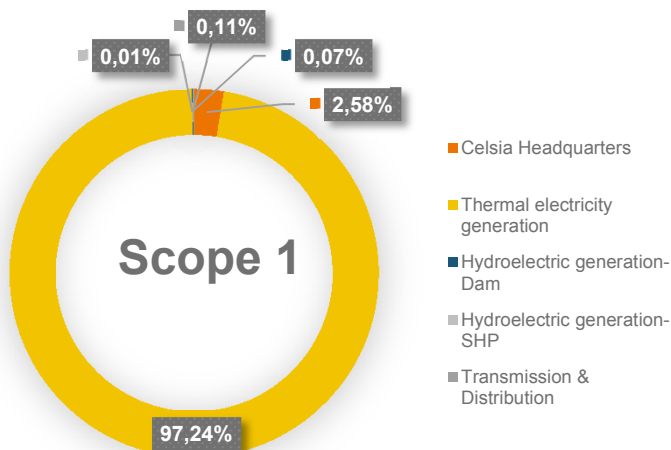


Celsia Assets



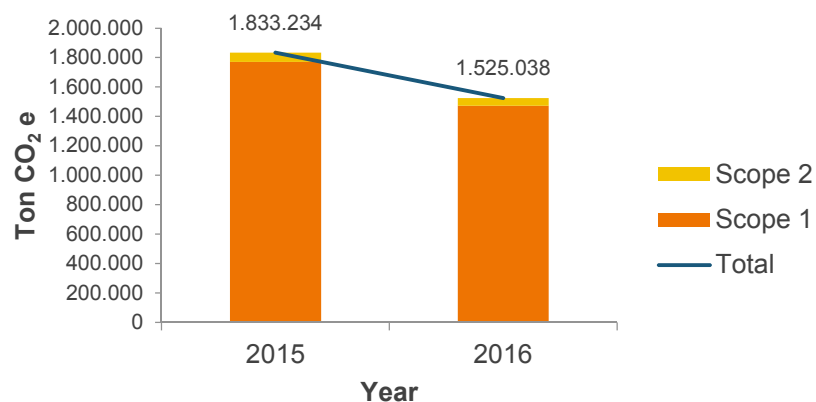
Results

Facilities	Emissions 2016 (ton CO ₂ e/year)			
	Scope 1	Scope 2	Total	%
Celsia Headquarters	38.001	865	38.866	2,55%
Thermal electricity generation	1.433.041	2.782	1.435.823	94,15%
Hydroelectric generation-Dam	980	1.299	2.279	0,15%
Hydroelectric generation-SHP	75	31	106	0,01%
Transmission & Distribution	1.645	46.318	47.964	3,15%
TOTAL	1.473.742	51.295	1.525.038	



Evolution

2015-2016



Headquarter Medellín

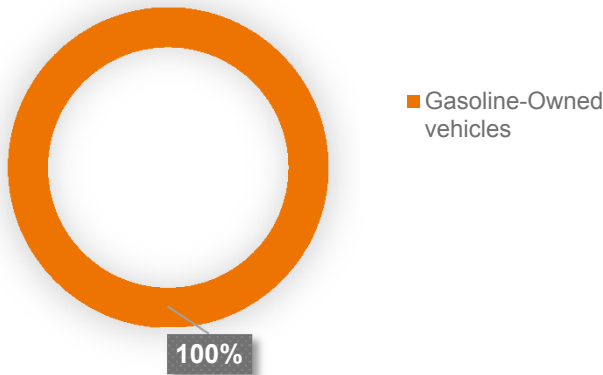


Results

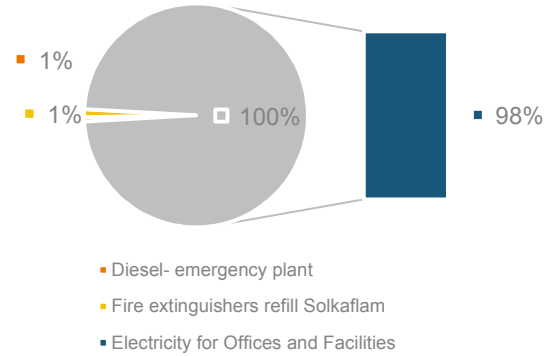
Total Emissions → 37.592,48 Ton CO₂e

Scope 1	Scope 2
37.483,98	108,51

Largest contributor to emissions



Smallest contributors to emission



Relevant Emission Sources



Electricity for Offices and Facilities
0,3%



Gasoline-Owned vehicles
99,7%



Diesel-emergency plant
0,002 %

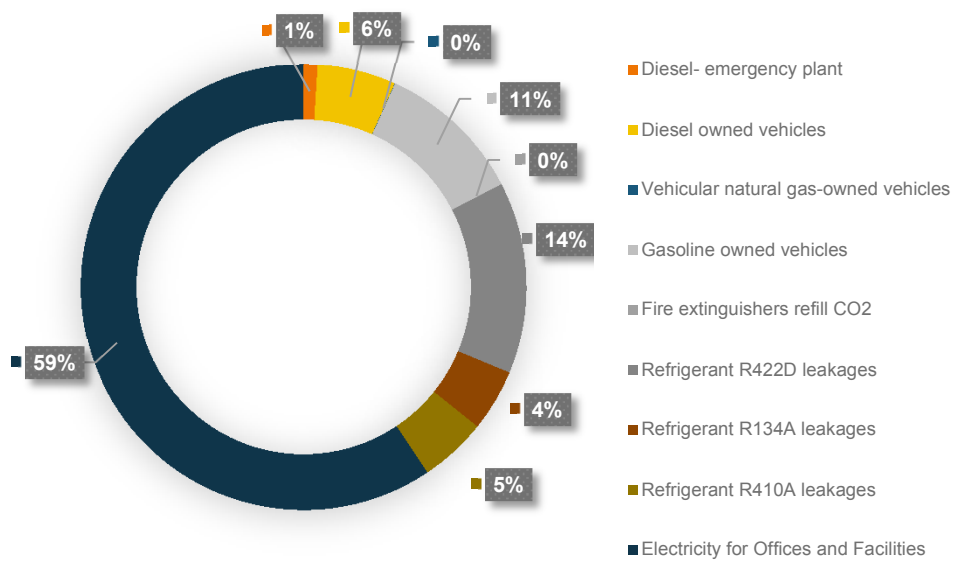
Headquarters Valle



Results

Total emissions → 1.273,68 Ton CO_{2e}

Scope 1	Scope 2
517,40	895



Relevant Emission Sources



Electricity for Offices and Facilities
59,38%



Combustibles- owned vehicles
16,37%

Zona Franca Celsia

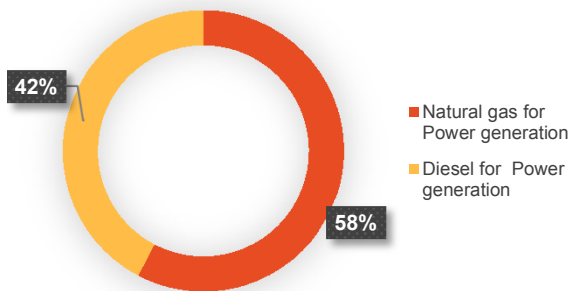


Results

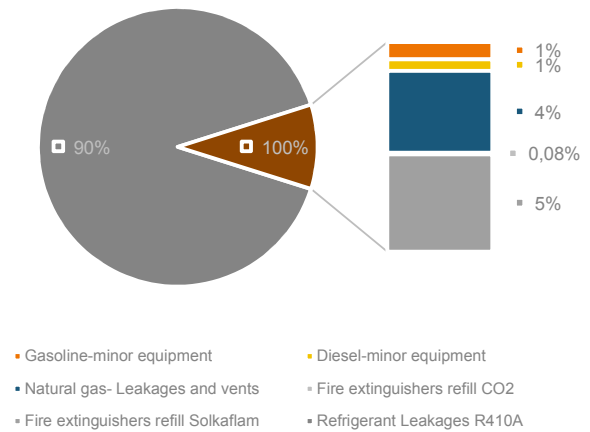
Total emissions → 1.171.800,8 Ton CO₂e

Scope 1	Scope 2
1.169.168,9	2.631,9

Largest contributor to emission



Smallest contributors to emission



Relevant Emission Sources



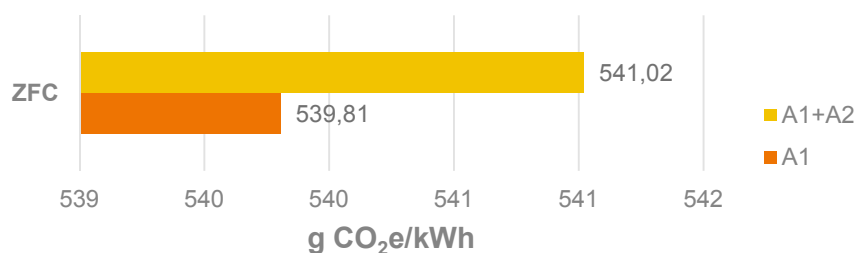
Natural gas for power generation
57,5%



Diesel for power generation
42,2%

Specific Emissions

Generation 2016 → 2.165.908.553 KWh



Merilétrica

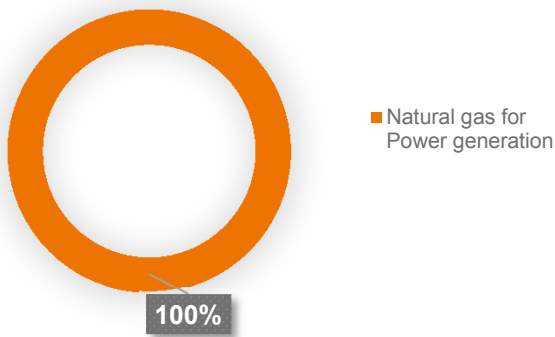


Results

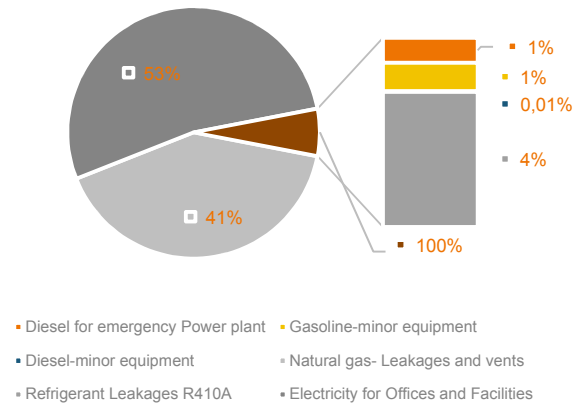
Total emissions → 264.021,94 Ton CO₂e

Scope 1	Scope 2
263.871,63	150,32

Largest contributor to emission



Smallest contributor to emission



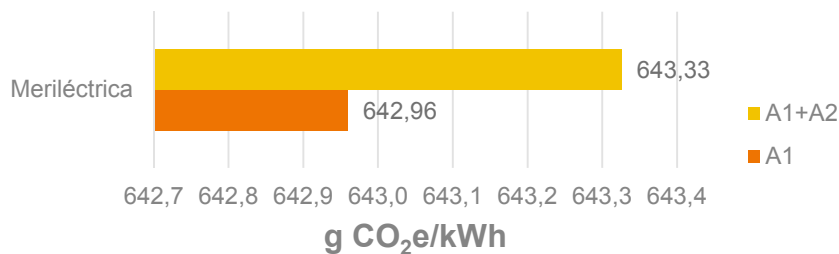
Relevant Emission Sources



Natural gas for power generation
99,9%

Specific Emissions

Generation 2016 → 410.401.940 KWh



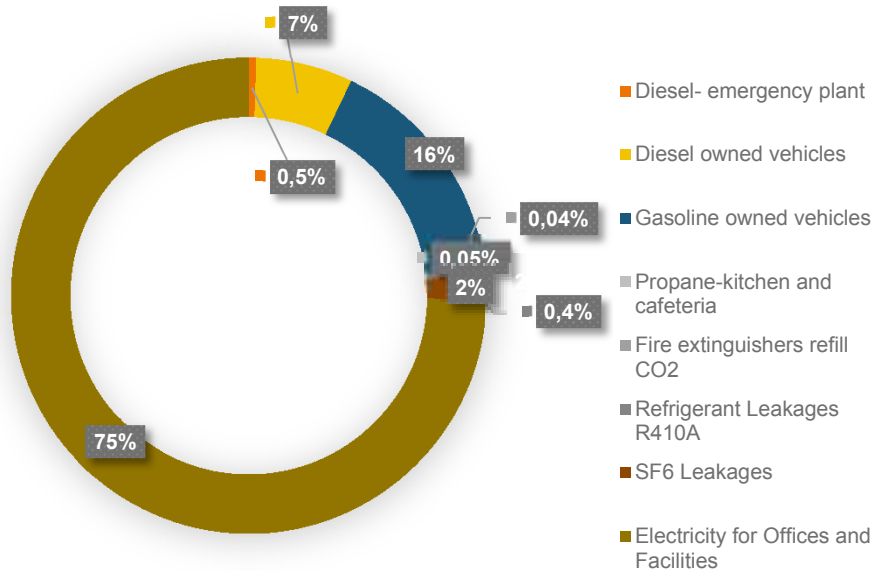
Alto y Bajo Anchicayá



Results

Total emissions → 1.344,23 Ton CO₂e

Scope 1	Scope 2
339,26	1.004,97



Relevant Emission Sources



Electricity for Office and Facilities
74,76%



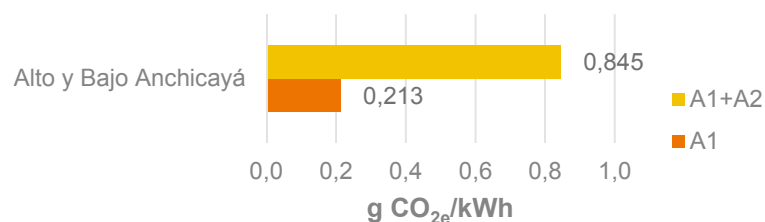
Combustible-Owned vehicles
22,51%



SF6 leakages
1,75%

Specific Emissions

Generation 2016 → 1.590.280.354 KWh



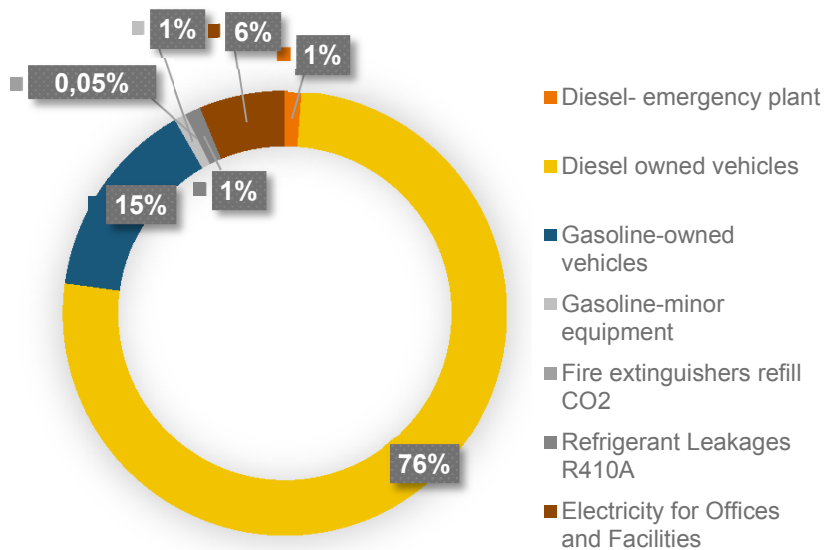
Salvajina



Results

Total emissions → 463,2 Ton CO₂e

Scope 1	Scope 2
434,21	28,97



Relevant Emission Sources



Diesel owned vehicles
75,9%



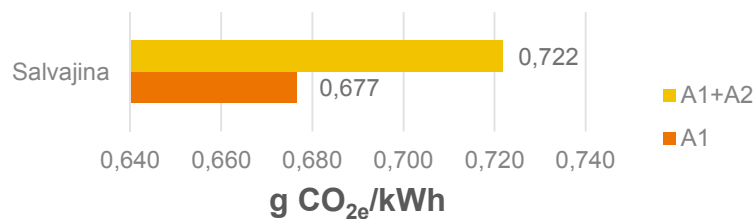
Gasolina owned vehicles
14,6%



Electricity for Offices and Facilities
6,3%

Specific Emissions

Generation 2016 → 641.701.020 KWh



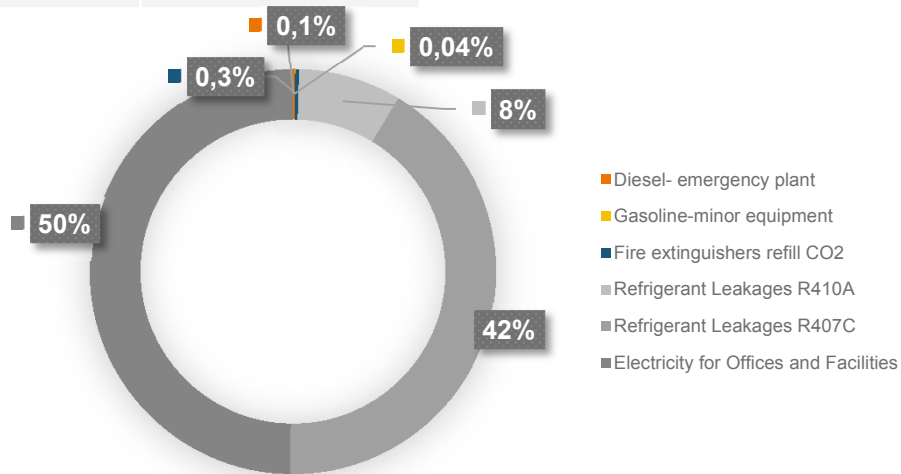
Hidroprado



Results

Total emissions → 266 Ton CO₂e

Scope 1	Scope 2
133,6	132,4



Relevant Emission Sources



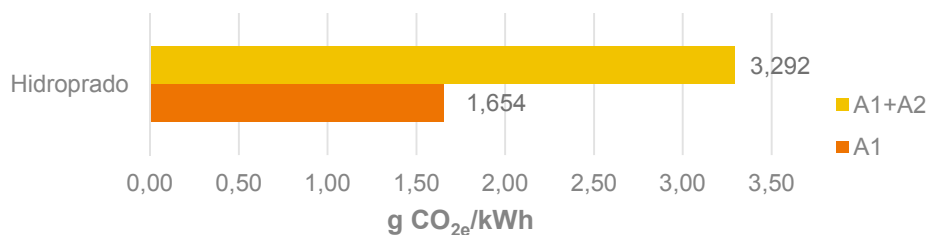
Electricity for
Offices and
Facilities
49,8 %



Refrigerant R 407 C
leakages
41,5%

Specific Emissions

Generation 2016 → 80.791.924 KWh



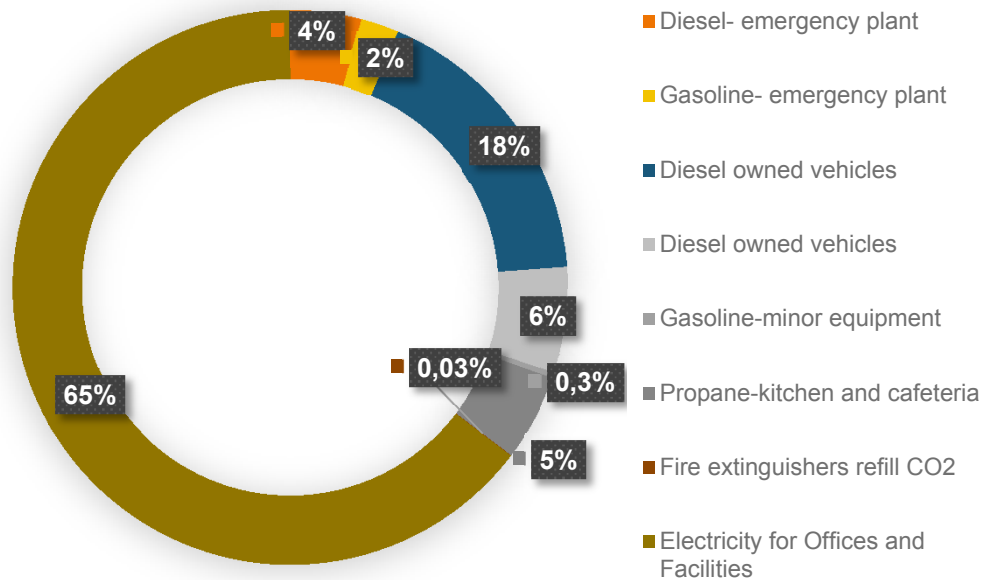
Calima



Results

Total emissions → 205,5 Ton CO₂e

Scope 1	Scope 2
72,70	132,82



Relevant Emission Sources



Electricity for Offices and Facilities
64,6%



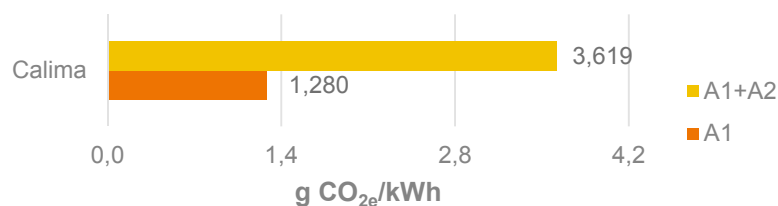
Combustibles-owned vehicles
23,6%



Propane-Kitchen and cafeteria
5,1%

Specific Emissions

Generation 2016 → 56.787.190 kWh



Hidromontañas y Rio Piedras

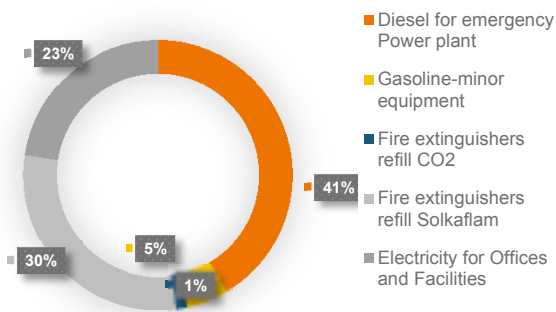


Results

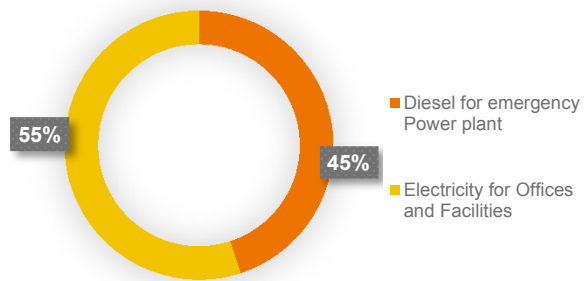
Total emissions → Ton CO₂e

	Scope 1	Scope 2	Totals
Hidromontañas	3,74	1,09	4,84
Rio Piedras	2,16	2,65	4,81

Hidromontañas



Rio Piedras



Relevant Emission Sources



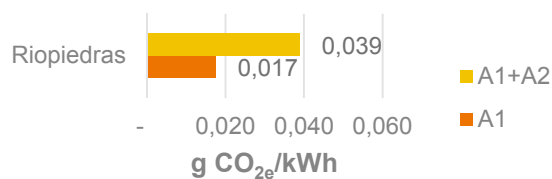
Diesel- emergency plant
41,6%



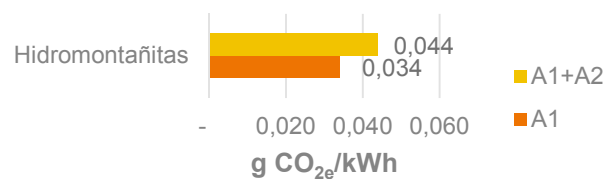
Electricity for Offices and Facilities
55%

Specific Emissions

Generation HM 2016 →
110.091.546,67 KWh



Generation RP 2016 →
123.941.944 KWh



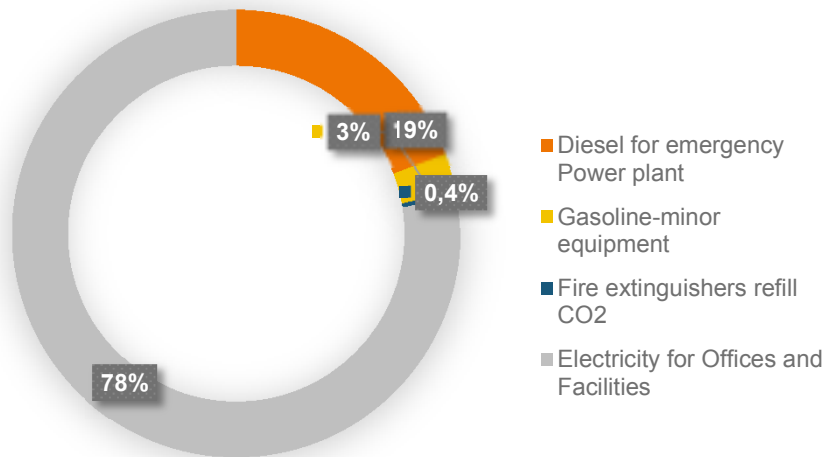
Alto y Bajo Tuluá



Results

Total emissions → 11,6 Ton CO_{2e}

Scope 1	Scope 2
2,62	9,03



Relevant Emission Sources



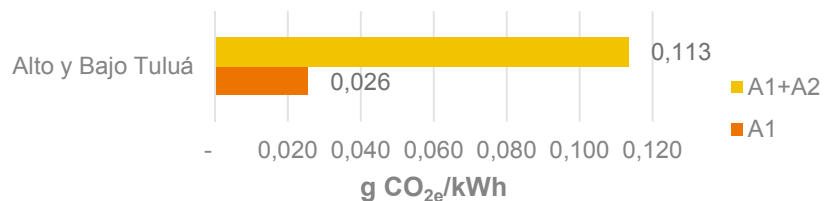
Electricity for Offices and Facilities
77,51%



Diesel- emergency plant
19,19 %

Specific Emissions

Generation 2016 → 102.671.601,58 KWh



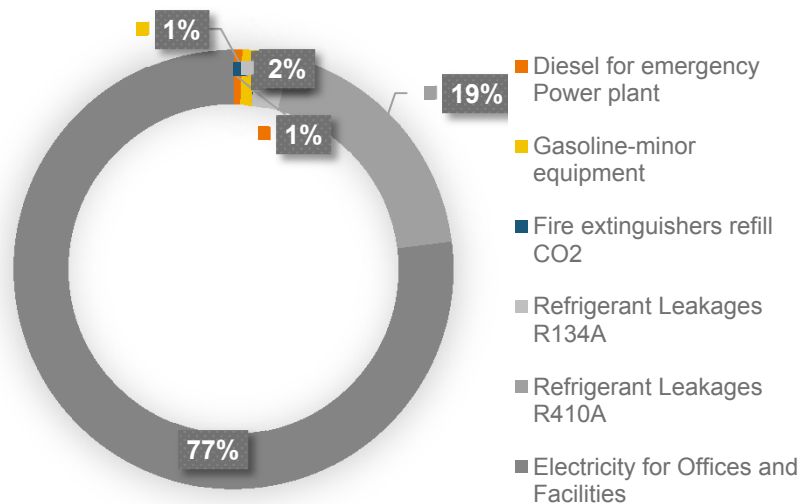
Amaime

Results



Total emissions → 23,35 Ton CO₂e

Scope 1	Scope 2
5,37	17,98



Relevant Emission Sources



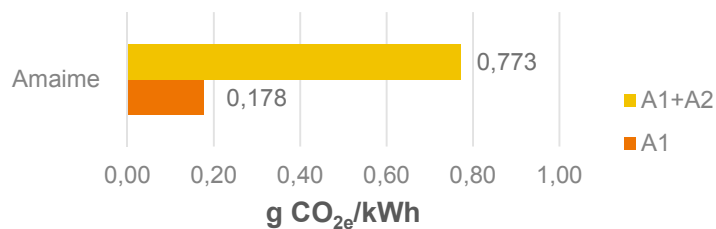
Electricity for Offices and Facilities
77,00%



Refrigerant R410A leakages
18,68%

Specific Emissions

Generation 2016 → 30.224.793,60 KWh



Nima I y II

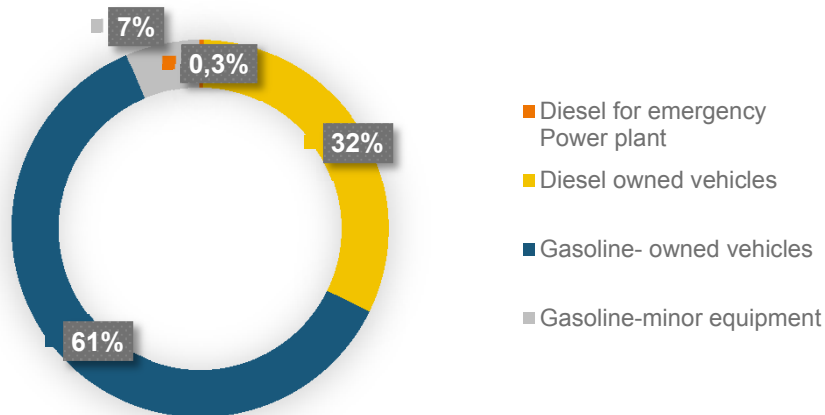


Results

Total emissions → 23,35 Ton CO₂e

Scope 1	Scope 2
44,38	-

Nima I y II



Relevant Emission Sources



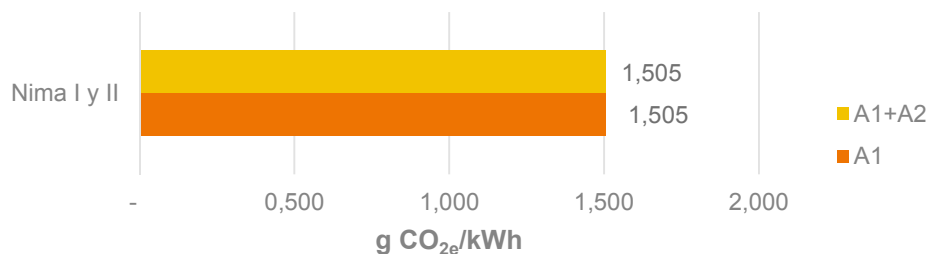
Combustible owned vehicles
93,27%



Gasoline minor equipment
6,39%

Specific Emissions

Generation 2016 → 29.486.184 KWh



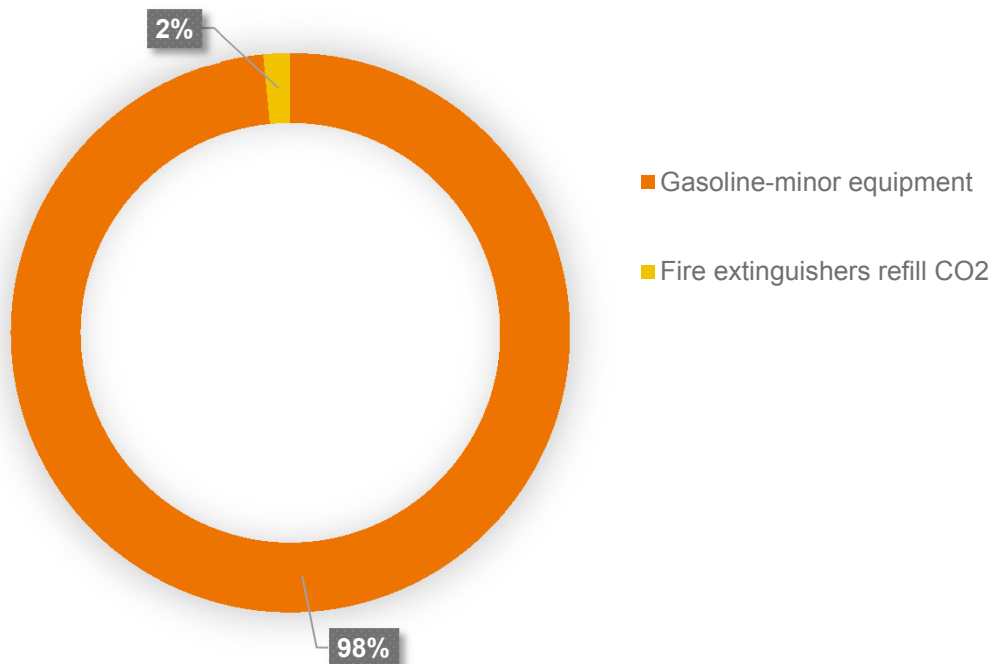
Río Cali I y II



Results

Total emissions → 1,02 Ton CO₂e

Scope 1	Scope 2
1,02	-



Relevant Emission Sources



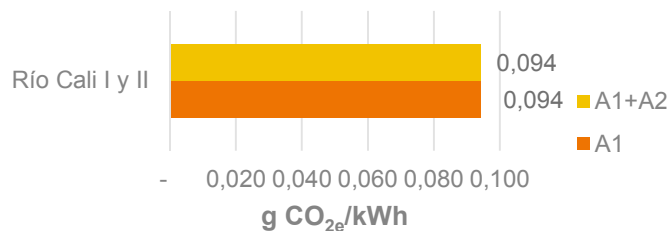
Fire extinguishers refill CO₂
98,44%



Gasoline minor equipment
1,56%

Specific Emissions

Generation 2016 → 10.787.581,59
KWh



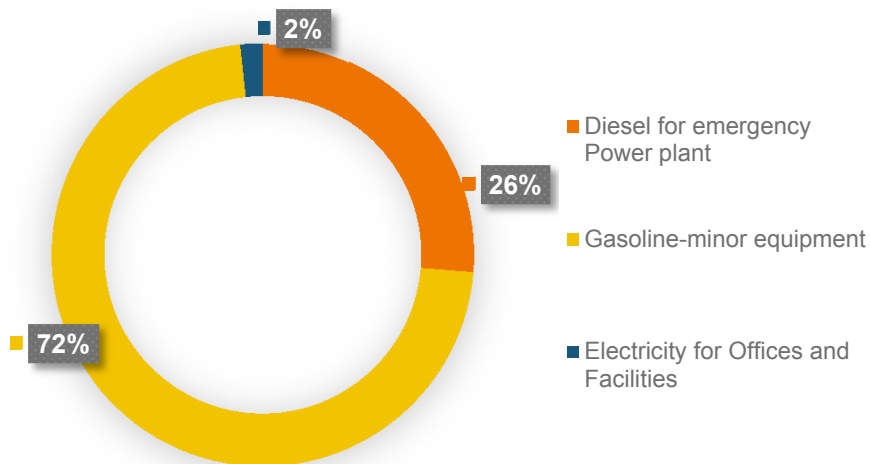
Rio Frio I y II



Results

Total emissions → 4,2 Ton CO₂e

Scope 1	Scope 2
4,14	0,07



Relevant Emission Sources



Gasoline-minor equipment
72,0 %



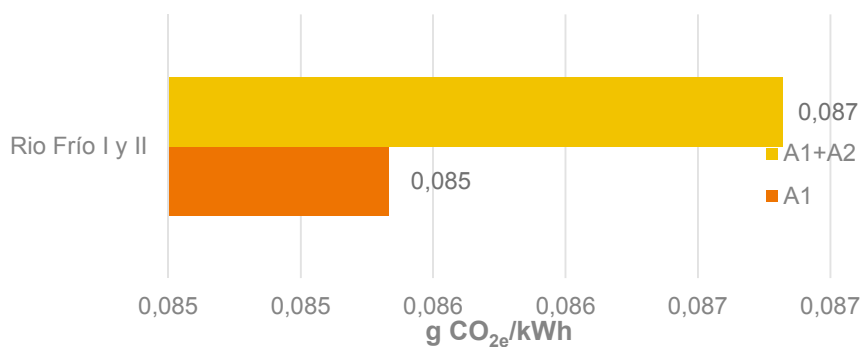
Diesel- emergency plant
26,3 %



Electricity for Offices and Facilities
1,7 %

Specific Emissions

Generation 2016 → 48.474.496 KWh



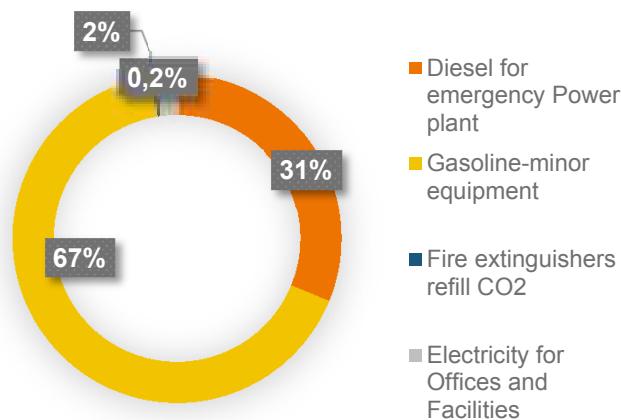
Rumor



Results

Total emissions → 2,82 Ton CO₂e

Scope 1	Scope 2
2,76	0,06



Relevant Emission Sources



Combustibles minor equipment
66,3 %



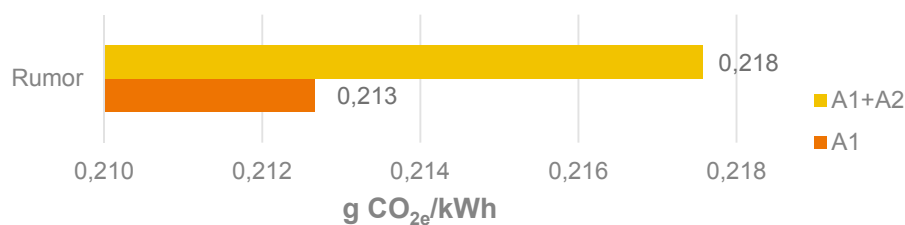
Diesel- emergency plant
31,2 %



Electricity for Offices and Facilities
2,3 %

Specific Emissions

Generation 2016 → 12.973.864 KWh



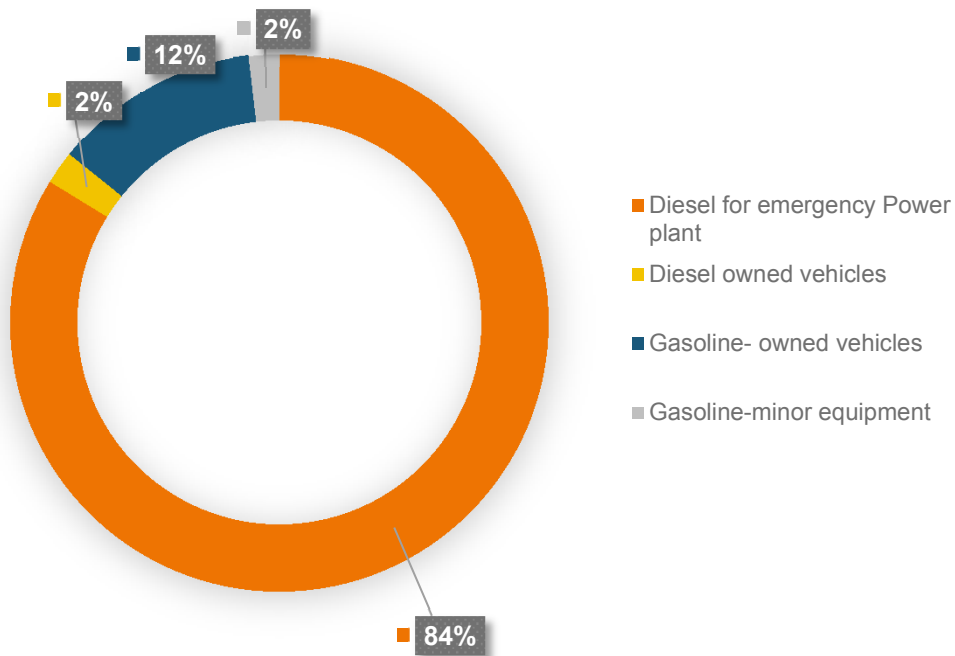
Cucuana



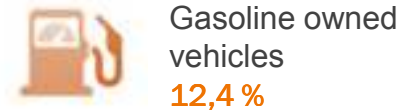
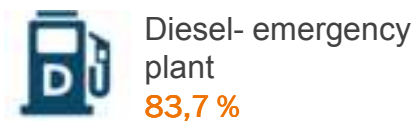
Results

Total emissions → 9,06 Ton CO₂e

Scope 1	Scope 2
9,06	-

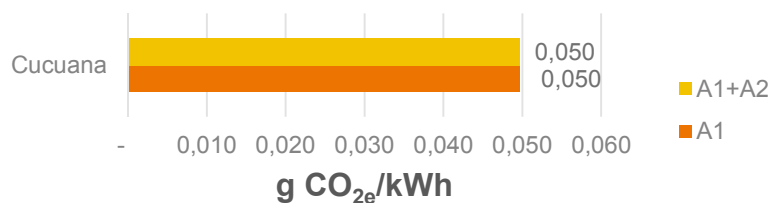


Relevant Emission Sources



Specific Emissions

Generation 2016 → 182.712.945 KWh



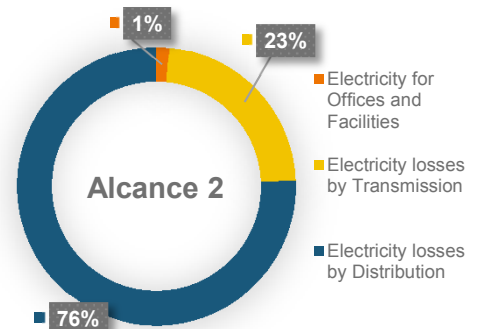
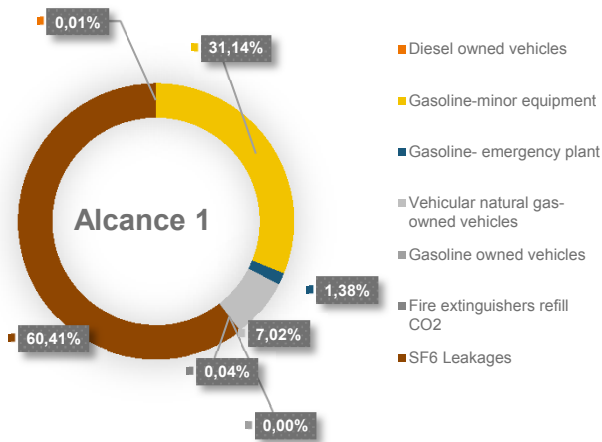
Distribution & Transmission



Results

Total emissions → 47.964 Ton CO₂e

Scope 1	Scope 2
1.645	46.318



Relevant Emission Sources



Electricity losses by Transmission
73,1 %



Electricity losses by Distribution
22,1 %

Specific Emissions

Distribution 2016 → 2.100.650.961 KWh

