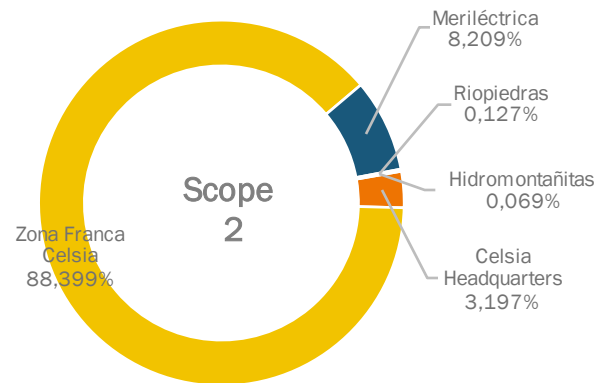
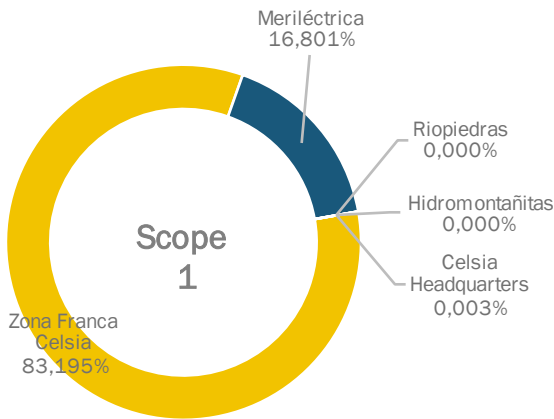


Celsia Assets



Results

Facilities	Emissions 2015 (ton CO2e/year)			
	Scope 1	Scope 2	Total	%
Celsia Headquarters	57,4	115,6	173,0	0,010%
Zona Franca Celsia	1.470.132,0	3.197,3	1.473.329,3	83,206%
Meriléctrica	296.888,3	296,9	297.185,3	16,783%
Riopiedras	1,58	4,58	6,17	0,000%
Hidromontañas	3,37	2,49	5,86	0,000%
TOTAL	1.767.083	3.617	1.770.700	



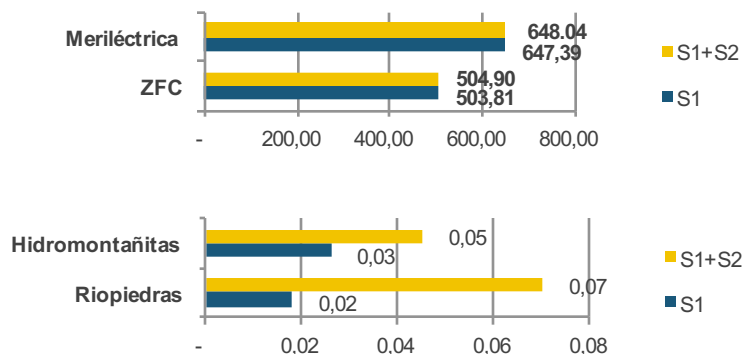
- Celsia Headquarters
- Zona Franca Celsia
- Meriléctrica
- Riopiedras
- Hidromontañas

- Celsia Headquarters
- Zona Franca Celsia
- Meriléctrica
- Riopiedras
- Hidromontañas

Specific Emissions

g CO2e/kWh

Facilities	Power generation 2015 (kWh)
Zona Franca Celsia	2.918.047.970
Meriléctrica	458.594.300
Riopiedras	88.585.958
Hidromontañas	129.847.264



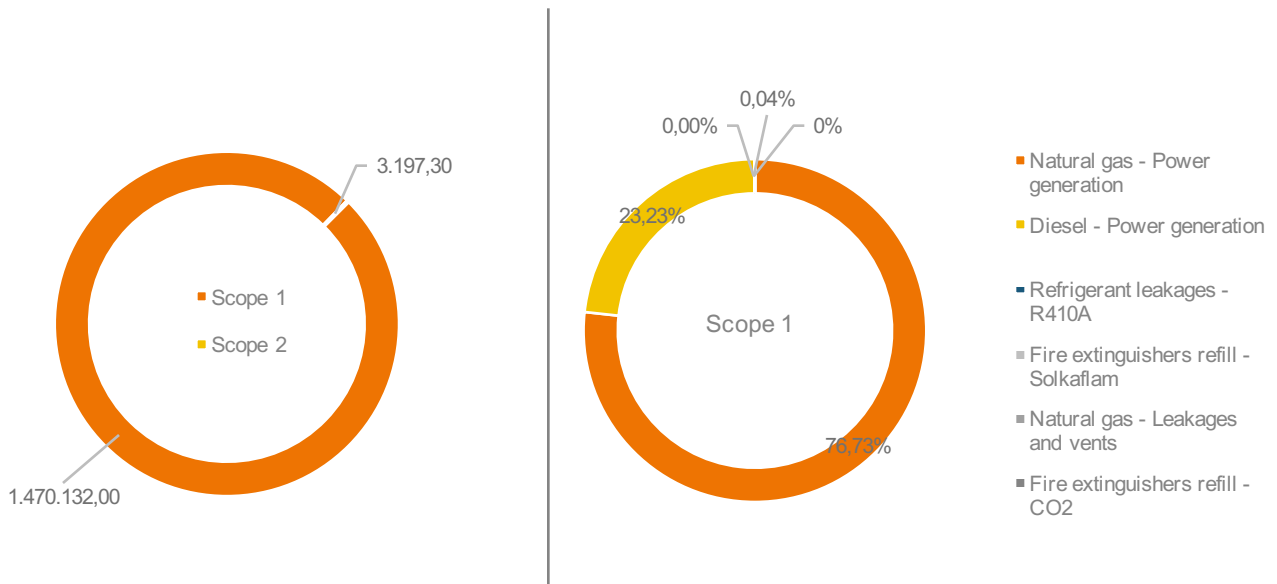
Zona Franca Celsia



Results

Total Emissions → 1.473.329,3 Ton CO₂e

Scope 1	Scope 2
1.470.132,0	3.197,3



Relevant Emission Sources



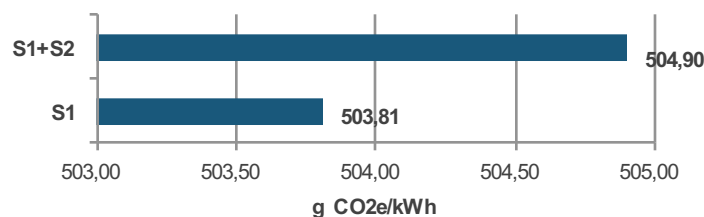
Natural gas for Power generation
76,6%



Diesel for Power generation
23,2 %

Specific Emissions

Power generation 2015 → 2.918.047.970 KWh



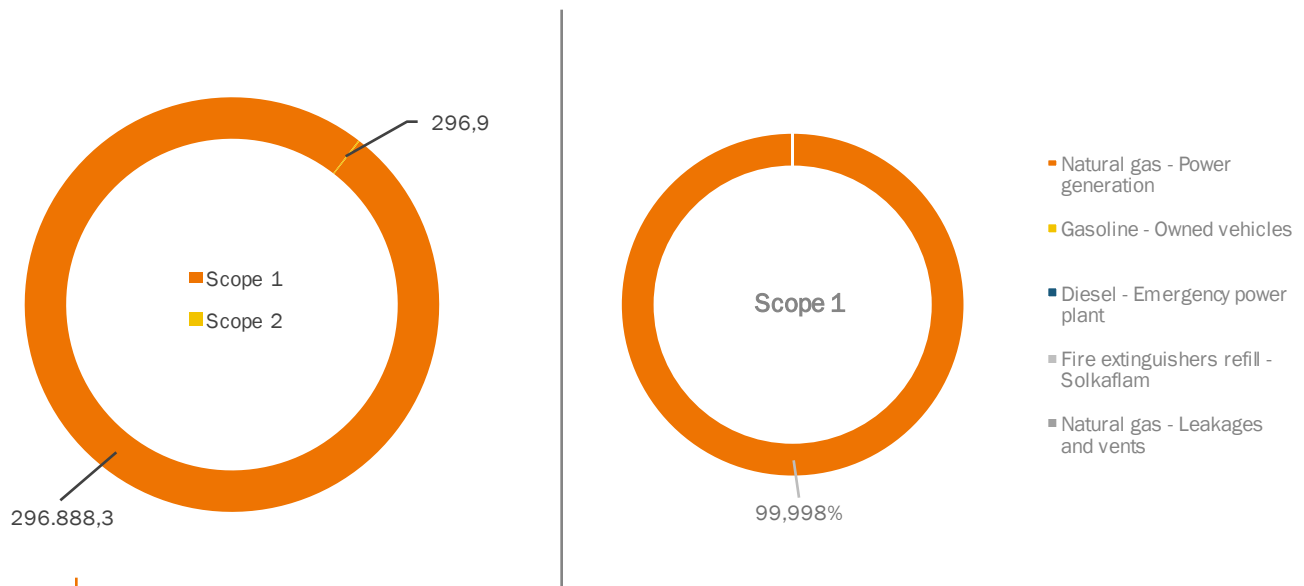
Meriléctrica



Results

Total Emissions → 297.185,3 Ton CO₂e

Scope 1	Scope 2
296.888,3	296,9



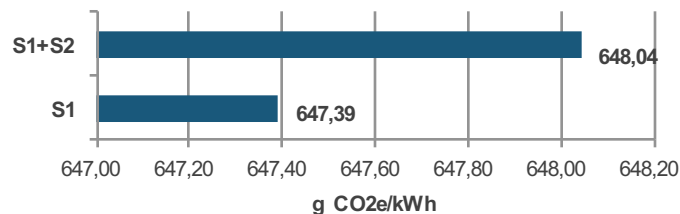
Relevant Emission Sources



Natural gas for Power generation
99,9%

Specific Emissions

Power generation 2015 → 458.594.300 KWh



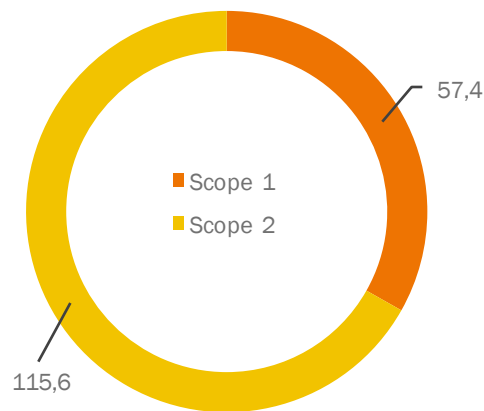
Celsia Headquarters



Results

Total Emissions → 173,0 Ton CO₂e

Scope 1	Scope 2
57,4	115,6



Relevant Emission Sources



Electricity for Offices and Facilities
67%



Gasoline for own vehicles
32%



Diesel for emergency Power plant
1%

PCHs: Hidromontañas y Rio Piedras

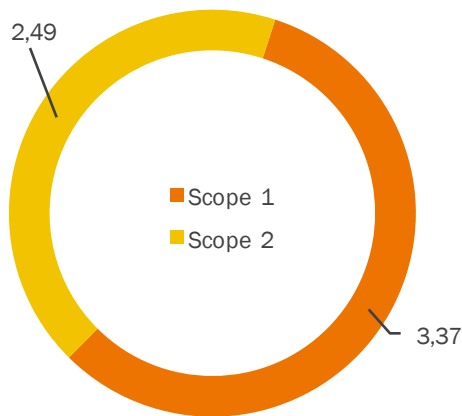


Results

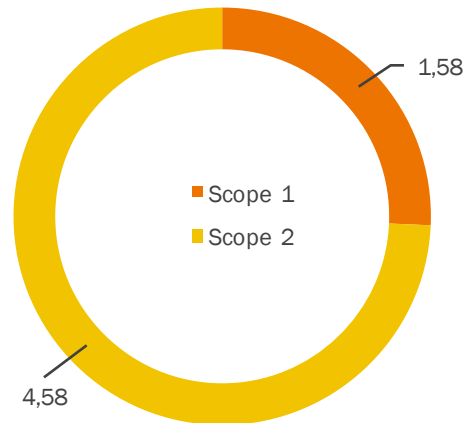
Total Emissions → 12,02 Ton CO₂e

	Scope 1	Scope 2	Total
Hidromontañas	3,37	2,49	5,86
Rio Piedras	1,58	4,58	6,17

Hidromontañas



Rio Piedras



Relevant Emission Sources



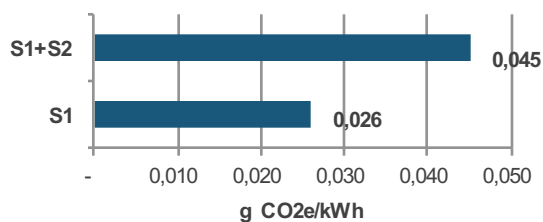
Diesel for emergency power plant
56,8%



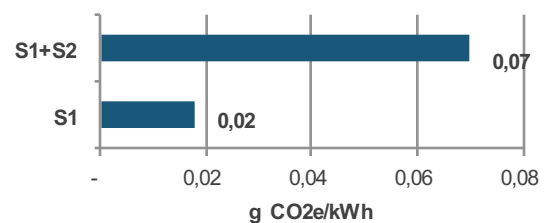
Electricity for Offices and Facilities
74,3%

Specific Emissions

Power generation HM 2015 → 129.847.264 KWh



Power generation RP 2015 → 88.585.958 KWh

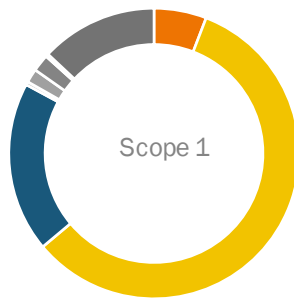


EPSA Assets

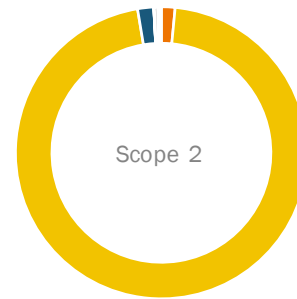


Results

Facilities	Emissions 2015 (ton CO2e/year)			%
	Scope 1	Scope 2	Total	
EPSA y CETSA Headquarters		895	1.081,7	1,73%
EPSA y CETSA Distribución	1.854	56.891	58.745,0	93,94%
Alto y Bajo Anchicayá	606	1.055	1.661,0	2,66%
Alto Tuluá	11,60	5,21	16,8	0,03%
Amaime + Nima I y II + Río Cali I y II	49,00	41,12	90,1	0,14%
Calima	60,85	211,22	272,1	0,44%
Hidroprado	2,56	127,44	130,0	0,21%
Río Frío I y II	5,93	187	6,5	0,01%
Rumor	1,65	0,78	2,4	0,00%
Salvajina	415,86	113,04	528,9	0,85%
Total	3.194	59.340,5	62.535	



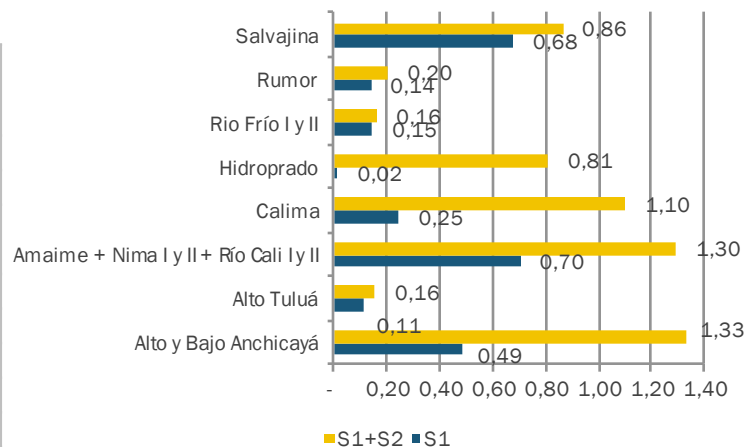
- EPSA y CETSA Administrativo
- EPSA y CETSA Distribución
- Alto y Bajo Anchicayá
- Alto Tuluá
- Amaime + Nima I y II + Río Cali I y II
- Calima
- Hidroprado
- Río Frío I y II
- Rumor
- Salvajina



Specific Emissions

g CO2e/kWh

Facilities	Power generation 2015 (kWh)
Alto y Bajo Anchicayá	1.245.796.308
Alto Tuluá	107.378.796
Amaime + Nima I y II + Río Cali I y II	69.582.279
Calima	246.387.653
Hidroprado	160.276.902
Río Frío I y II	40.354.214
Rumor	11.899.011
Salvajina	612.041.838



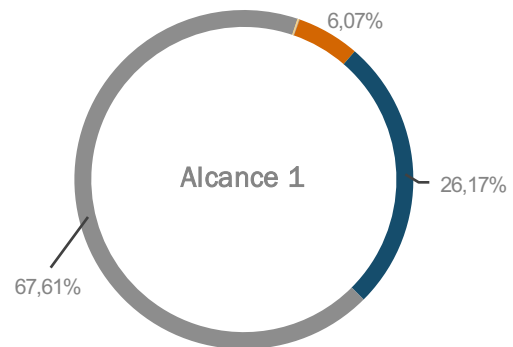
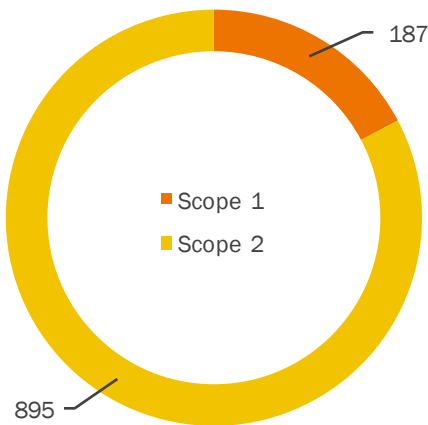
EPSA y CETSA Headquarters



Results

Total Emissions → 1.081,7 Ton CO₂e

Scope 1	Scope 2
187	895



- Comustible Diésel - Consumo de plantas eléctricas de emergencia
- Diesel - Vehículos propios
- Gasolina - Vehículos propios
- Recarga Extintores - CO₂
- Recarga Extintores - Solkaflam
- Fugas Refrigerantes - R134A
- SF₆ - Fugas y Mantenimiento en subestaciones y centrales

Relevant Emission Sources



Electricity for Offices and Facilities
82,7%



Fuels for owned vehicles
17,3%

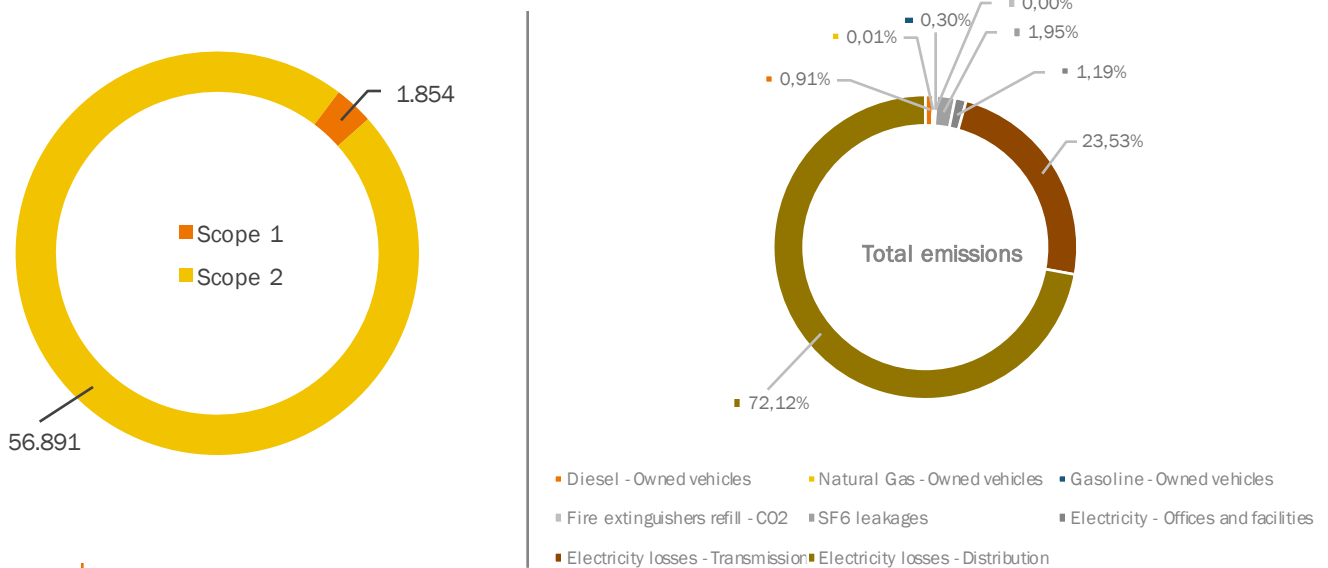
EPSA Distribución



Results

Total Emissions → 58.745 Ton CO₂e

Scope 1	Scope 2
1.854	56.891



Relevant Emission Sources



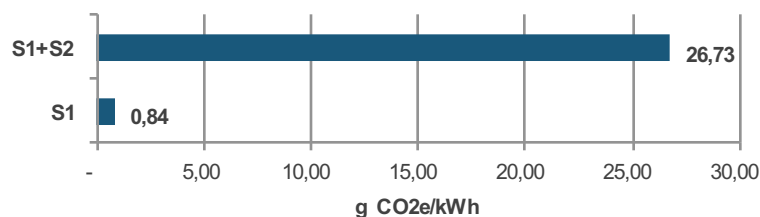
Electricity losses by
Transmission
23,5%



Electricity losses by
Distribution
72,1%

Specific Emissions

Distribución 2015 → 2.197.900.489 KWh



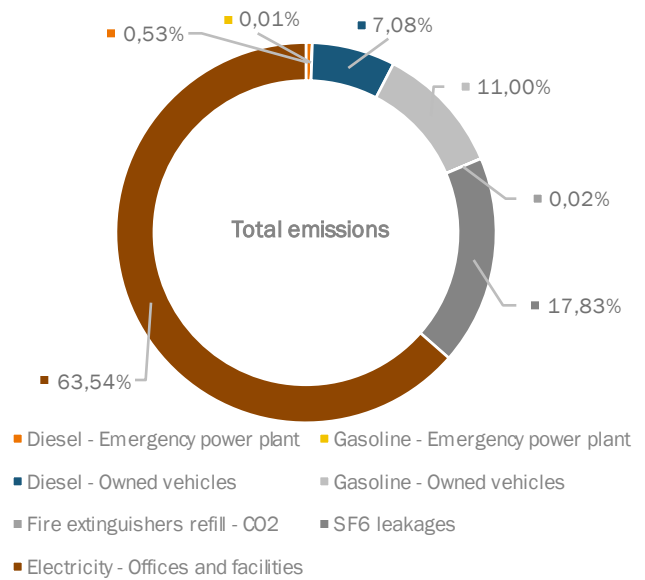
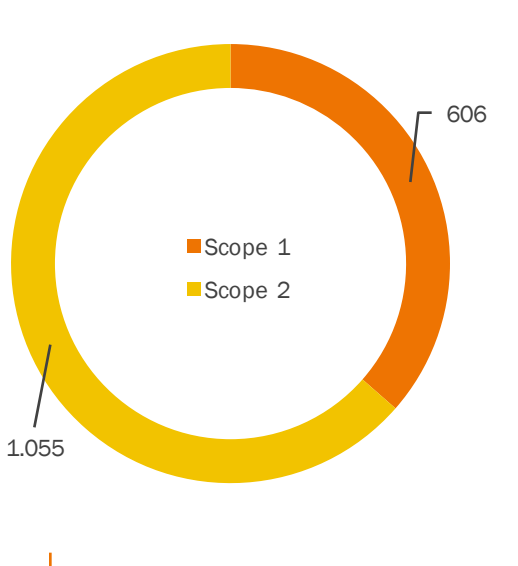
Alto y Bajo Anchicayá



Results

Total Emissions → 1.661 Ton CO₂e

Scope 1	Scope 2
606	1.055



Relevant Emission Sources



Electricity for Offices and Facilities
63,54%



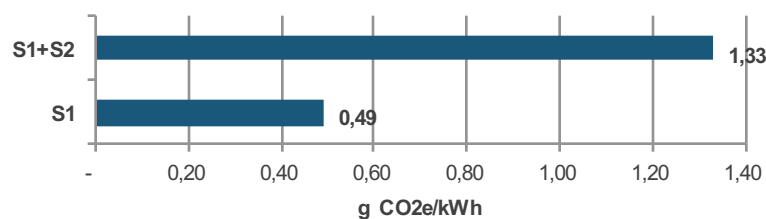
Fuels for owned vehicles
18,08%



SF₆ leaks at substations and facilities
17,83%

Specific Emissions

Power generation 2015 → 1.245.796.308 KWh



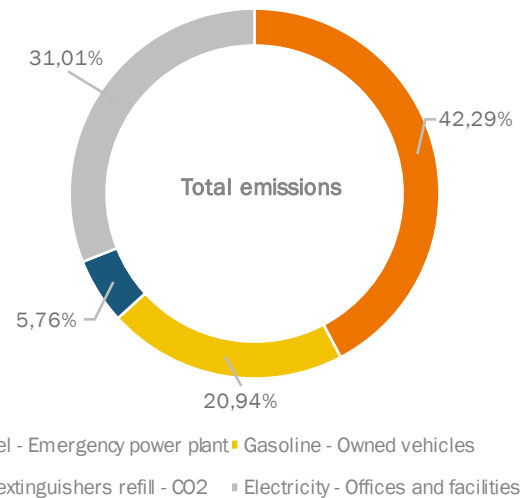
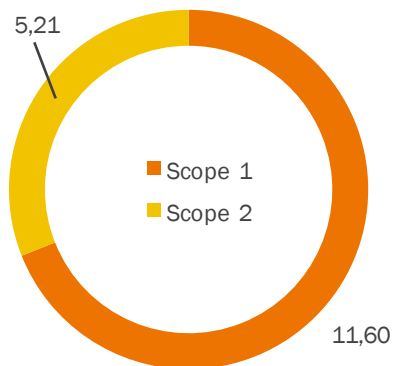
Alto Tuluá



Results

Total Emissions → 16,8 Ton CO₂e

Scope 1	Scope 2
11,60	5,21



Relevant Emission Sources



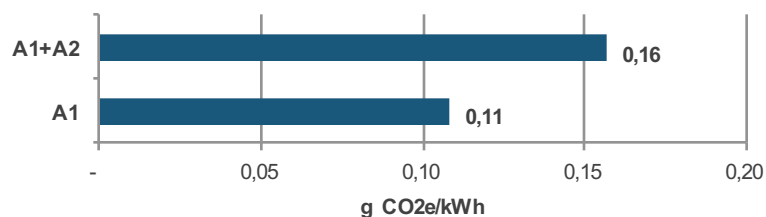
Diesel for emergency power plant
42,29 %



Electricity for Offices and Facilities
31,01%

Specific Emissions

Power generation 2015 → 107.378.796 KWh



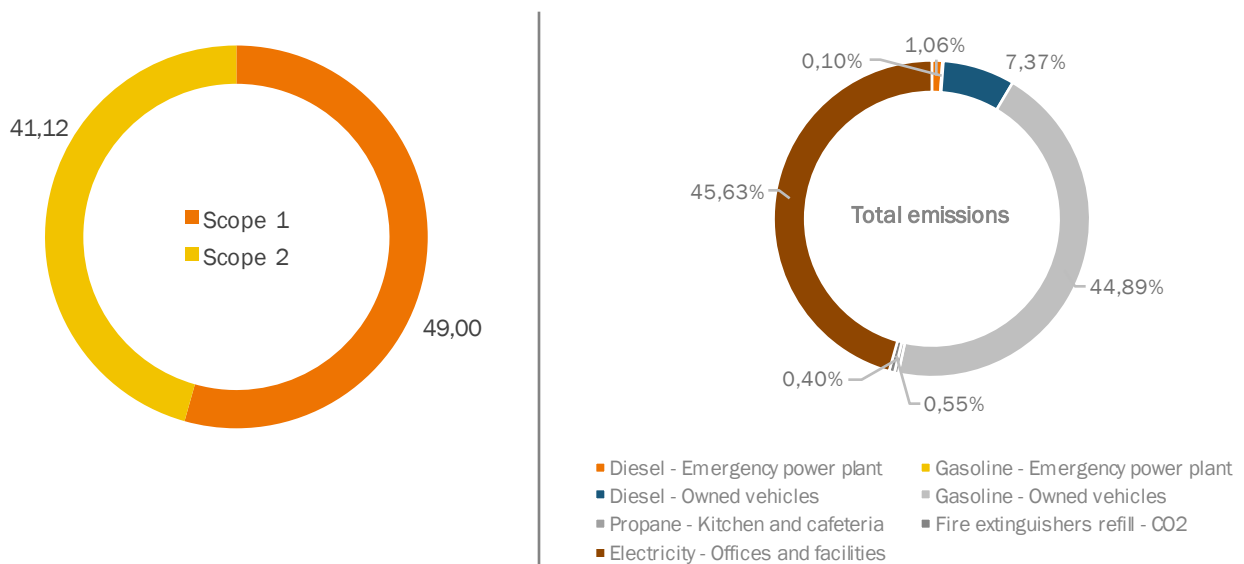
Amaime , Nima I y II y Rio Cali I y II



Results

Total Emissions → 90,1 Ton CO₂e

Scope 1	Scope 2
49,00	41,12



Relevant Emission Sources



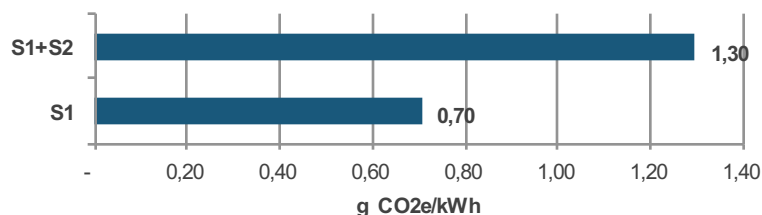
Electricity for Offices and Facilities
45,6%



Fuels for owned vehicles
52,3%

Specific Emissions

Power generation 2015 → 69.582.279 KWh



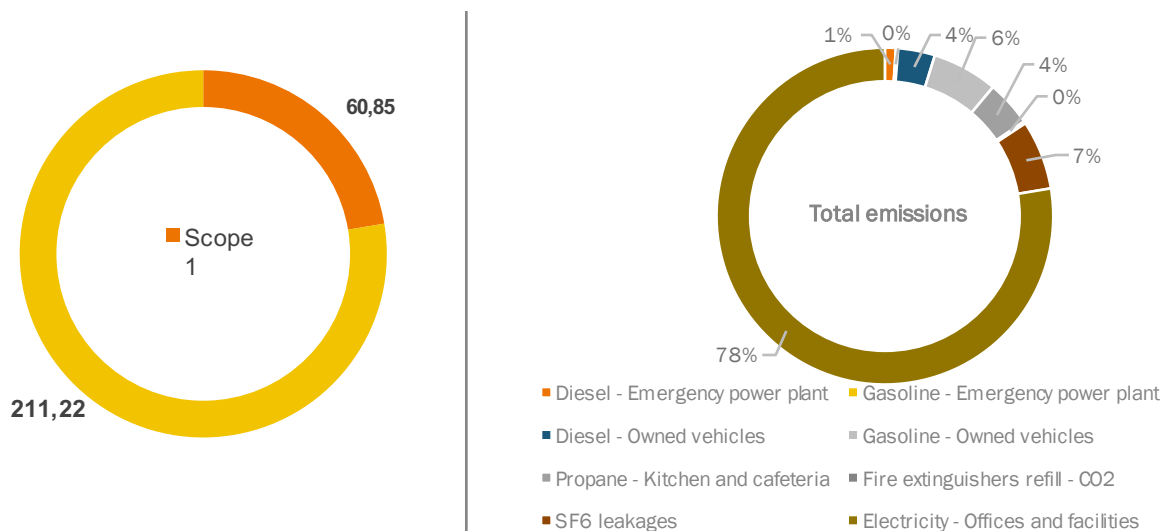
Calima



Results

Total Emissions → 272,1 Ton CO₂e

Scope 1	Scope 2
60,85	211,22



Relevant Emission Sources



Electricity for Office:
and Facilities
77,6 %



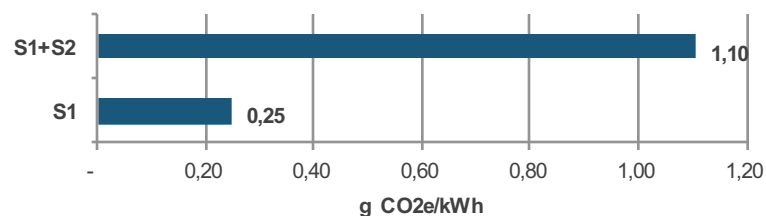
Fuels for owned
vehicles
9,8 %



SF₆ leaks at
substations and
facilities
6,7 %

Specific Emissions

Power generation 2015 → 246.387.653 KWh



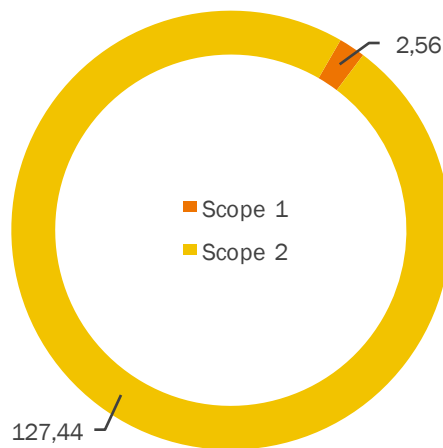
Hidroprado



Results

Total Emissions → 130 Ton CO₂e

Scope 1	Scope 2
2,56	127,44



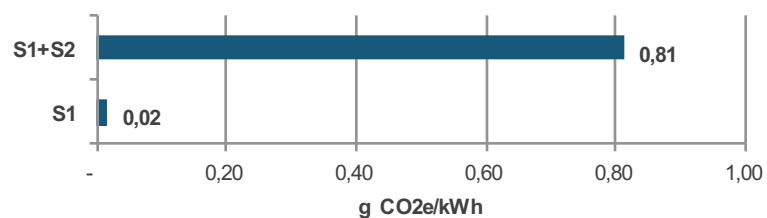
Relevant Emission Sources



Electricity for Offices and Facilities
98 %

Specific Emissions

Power generation 2015 → 160.276.902 KWh



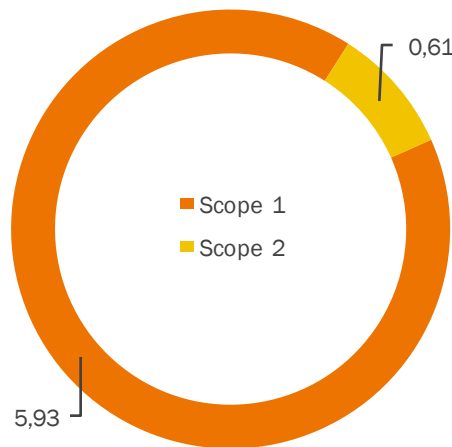
Rio Frio I y II



Results

Total Emissions → 6,5 Ton CO₂e

Scope 1	Scope 2
5,93	0,61



Relevant Emission Sources



Gasoline for owned vehicles
46 %



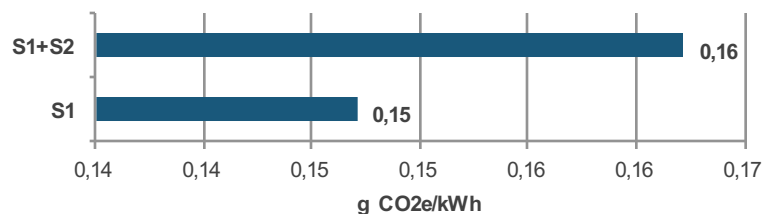
Diesel for emergency power plant
38 %



Electricity for Offices and Facilities
9 %

Specific Emissions

Power generation 2015 → 40.354.214 KWh



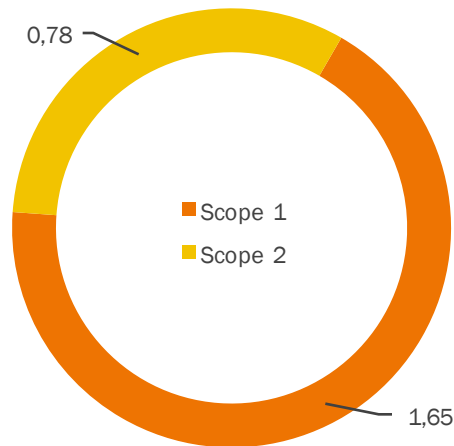
Rumor



Results

Total Emissions → 2,4 Ton CO₂e

Scope 1	Scope 2
1,65	0,78



Relevant Emission Sources



Diesel for emergency power plant
54 %



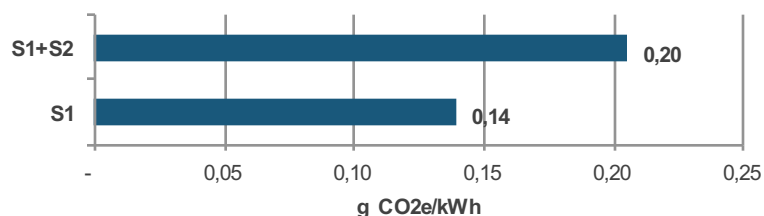
Fuels for owned vehicles
12 %



Electricity for Offices and Facilities
32 %

Specific Emissions

Power generation 2015 → 11.899.011 KWh



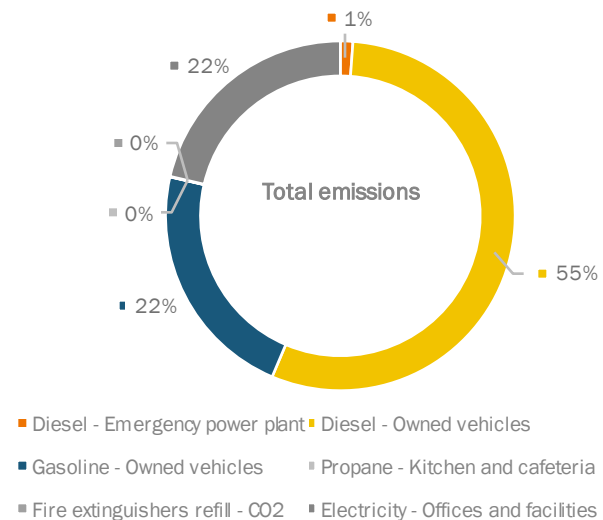
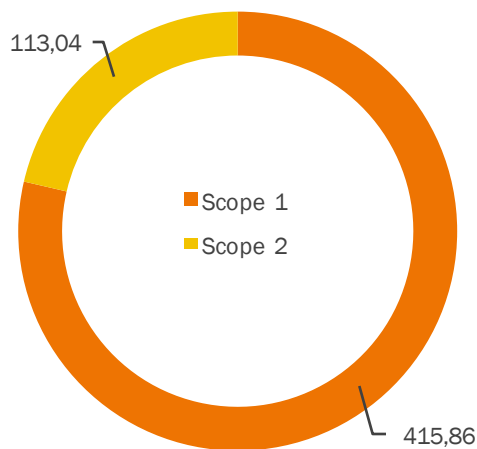
Salvajina



Results

Total Emissions → 528,9 Ton CO₂e

Scope 1	Scope 2
415,86	113,04



Relevant Emission Sources



Diesel for owned vehicles
55,2 %



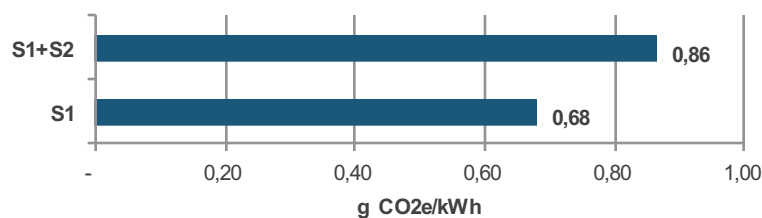
Gasoline for owned vehicles
22,2 %



Electricity for Offices and Facilities
21,4 %

Specific Emissions

Power generation 2015 → 612.041.838 KWh

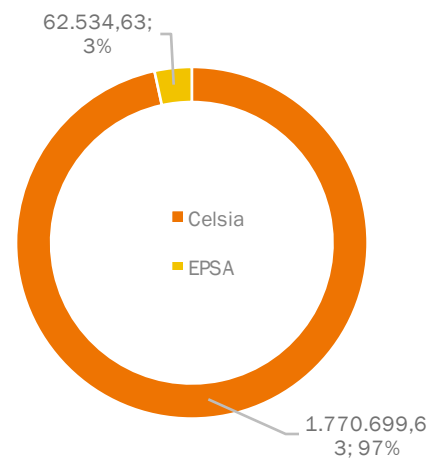
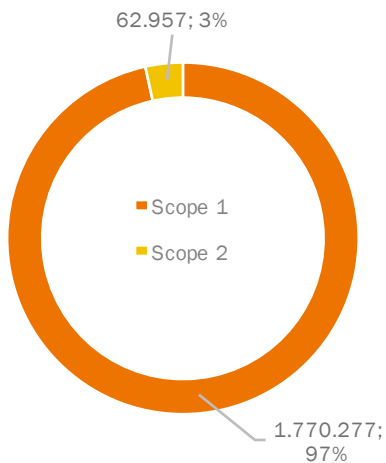


Total Celsia S.A. E.S.P



Results

	Emissions 2015 (ton CO2e/year)			
	Scope 1	Scope 2	Total	%
Celsia	1.767.082,69	3.616,93	1.770.699,63	96,59%
EPSA	3.194,09	59.340,54	62.534,63	3,41%
Total	1.770.277	62.957	1.833.234	



Evolution

2012 - 2015

