

Carbon Footprint Calculation

2023

Calculation and registration of municipal carbon footprints and carbon dioxide absorption projects.



FEDERACION ESPAÑOLA DE
MUNICIPIOS Y PROVINCIAS





This report is the result of all the information gathering work carried out in 2023 by the participating entities, which addresses all the aspects that form part of the carbon footprint calculation.

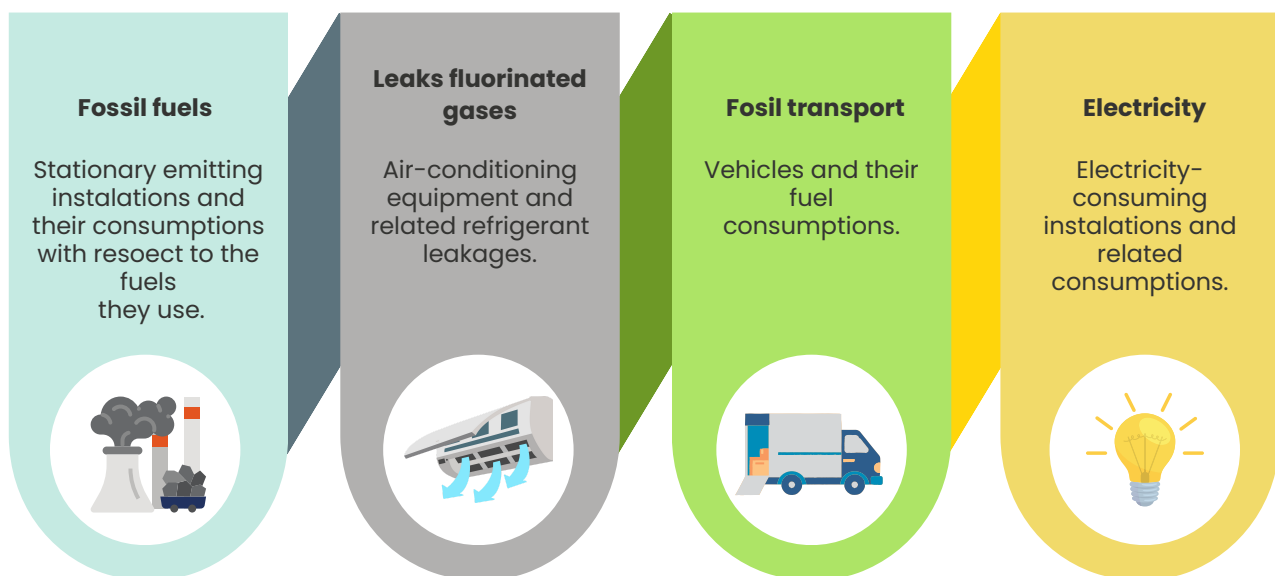
The year 2022 is taken as the reference year for the study, as most of the entities have opted to calculate the footprint for that period, but it should be noted that two have opted to calculate the footprint for previous periods for which they had all the information they needed to carry out the calculations.

The first step was to assess the energy situation of the local authorities, with the invaluable participation of the Local Government Technicians.

To carry out this assessment, disaggregated data on consumption in fixed installations, transport and electricity, as well as data on renewable energy generation, were calculated.

Once the assessment has been carried out, the local authorities are able to design proposals for improvement that can be carried out in the municipal facilities, drawing up a reduction plan for each municipality. All this has been documented with the Calculation Tool available and provided by MITECO, which is accessible to all Local Governments.

All of them were asked for aggregated information on the following aspects:

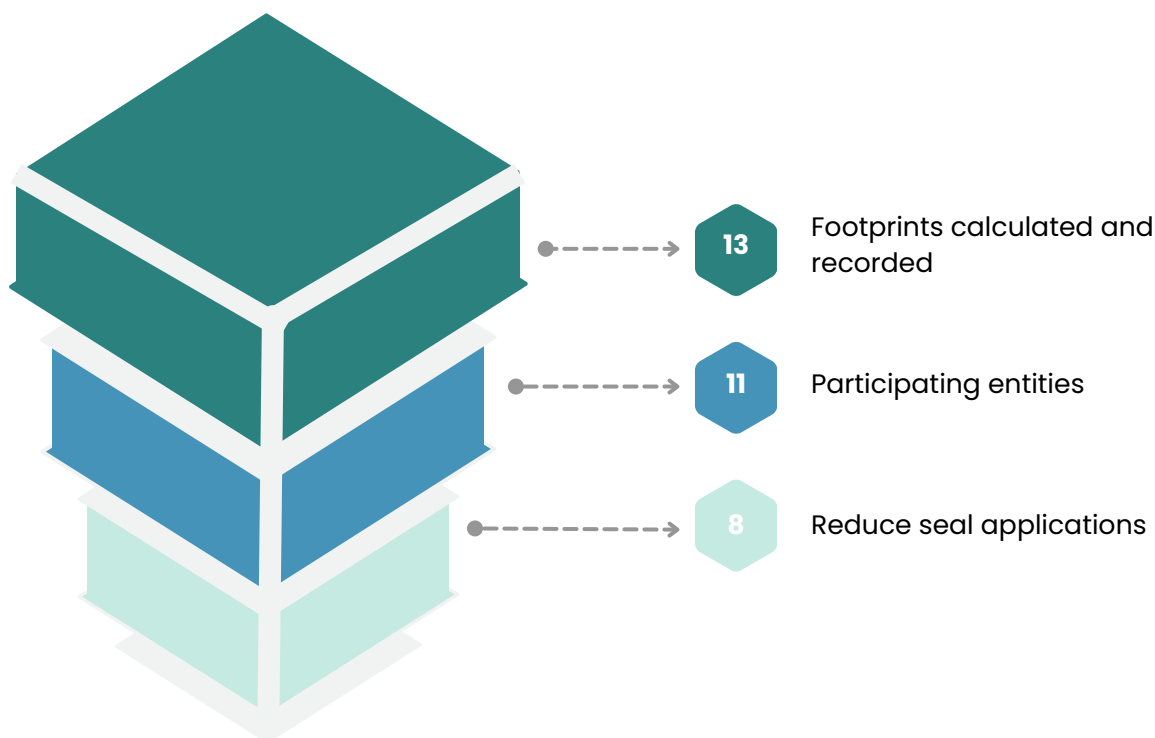


Of the initial 19 local authorities, 11 managed to collect aggregated information on the above aspects. It was not possible to collect information on air conditioning equipment and refrigerant leaks in all cases, as in most cases this is an activity carried out by subcontracted companies and it is very difficult for Local Bodies to obtain this information.

Regarding the aggregate information, Local Bodies were asked to go down a level and disaggregate it. In other words, to provide information broken down by facilities and vehicles. Although a positive evolution has been noted in the organisation and systematisation of the obtaining of the information by the local entities that have already carried out the calculation in previous periods, this part of the project continues to be the one that represents one of the greatest efforts for the participants, with special relevance in relation to vehicles and their consumption.



The result obtained is the following one:



Of the total number of applications submitted to the register, almost 75% have been successful, since although all the local entities have managed to gather all the necessary information to apply for the Cálculo seal and, therefore, to apply for registration in a favourable manner, in some of them the verification process has been lengthy and a final resolution is pending.

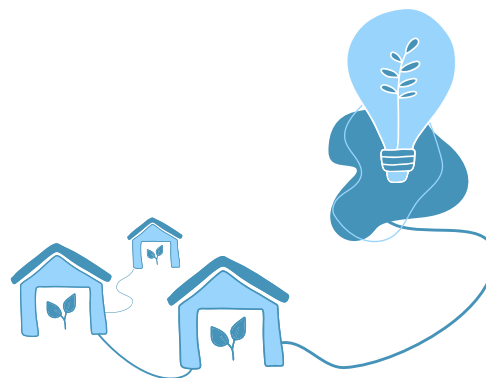
It is important to point out that of the 11 local entities that finally calculated their carbon footprint, all of them, to a greater or lesser extent, had improvement measures in place to reduce their energy consumption. In many cases, these measures arise from the incorporation of the RECC and the implementation of programmes related to the Covenant of Mayors. The municipalities that had more real and disaggregated data have obtained higher t CO₂ eq/habitant ratios than those that did not have such disaggregated data, and therefore, a footprint with higher quality and reliability (see Annex I).

In any case, all of them formalised reduction plans in accordance with the MITECO requirements for the registration of the calculated footprint (see Annex II).

Specifically, the following local entities participated in this edition:



- Ayuntamiento de Ayamonte (Huelva)
- Ayuntamiento de Calviá (Illes Balears).
- Ayuntamiento de Fuenlabrada (Madrid).
- Ayuntamiento de Gavà (Barcelona).
- Ayuntamiento de Málaga .
- Ayuntamiento de Onda (Castellón) .
- Ayuntamiento de Rivas-Vaciamadrid (Madrid).
- Ayuntamiento de Torrent (Valencia).
- Ayuntamiento de Xirivella (Valencia).
- Diputación Provincial de Jaén.
- Diputación Provincial de Pontevedra.



The average activity index has been 0.00289t CO₂ eq/habitant and year, in the case of the Deputation de Pontevedra, the calculation of t C CO₂ eq/worker has been carried out for its registration.

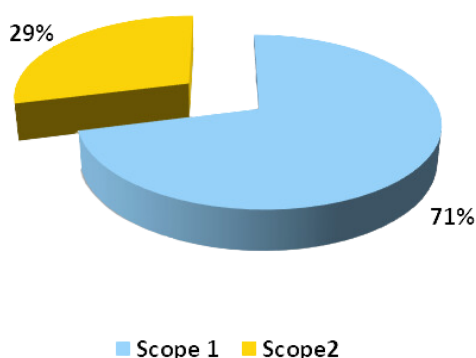
55% of the municipalities participating in this call have electricity supply with Guarantee of Origin from renewable sources (GdO). In the case of not having GdO on the electricity supply, an average of 0.032 t CO₂ eq/habitant and year is obtained, which represents a reduction of 41% over the average of 0.079 t CO₂ eq/habitant and year. While for municipalities that do have a GdO, the average emissions per habitant decrease by 48% to 0.025 t C CO₂ eq/habitant and year.

73% of the local authorities indicated that they have renewable energy installations, mainly solar panels, and biomass-pellet boilers in some of their facilities.

With respect to the targets established in the reduction plans designed in coordination with the Local Entities, an average of 26% over 13 years is highlighted.

Average Municipalities	0,029 t CO ₂ /habitante
Average Scope 1	0,020 t CO ₂ /habitante
Average Scope 2	0,009 t CO ₂ /habitante

% RANGE EMISSIONS



The Town Councils of Ayamonte, Calvià, Gavà, Málaga, Torrent y Xirivella have additionally plied for the "Calculo + Reduce" seal.