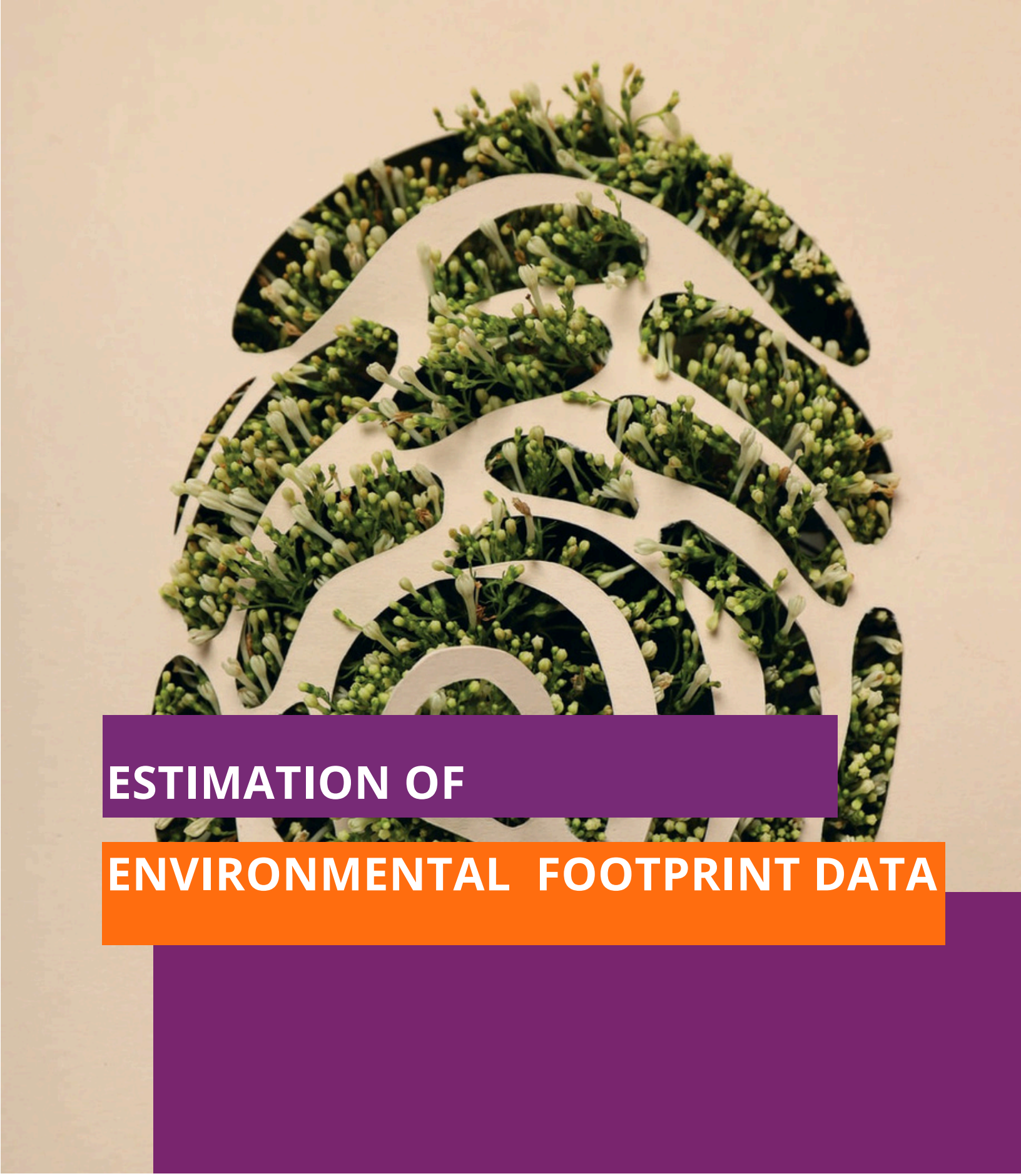


ESTIMATION OF ENVIRONMENTAL FOOTPRINT DATA

El Puerto de Liverpool

DEJANDO HUELLA

Estimation of Environmental Footprint data

A. OBJECTIVE

To establish the methodologies for estimating data on the company's environmental footprint (carbon and waste) for the month of December; and for the water footprint, this guide provides the methodology for estimations from January to December.

B.SCOPE

This guide is applicable to all EPL units and business formats.

C. INTRODUCTION

The environmental footprint (EGAEPL-PR-1501) is comprised of the environmental indicators generated by El Puerto de Liverpool locations, which are compiled and analyzed on a monthly basis. Because we often need to report these numbers in advance, this guide provides instructions on calculating projections, by area:

- Water footprint: January-December
- Carbon footprint: December
- Waste footprint: December

Estimation of Environmental Footprint data

The graphs presented in this file are generated from each work paper developed for the estimates.

A. WATER FOOTPRINT

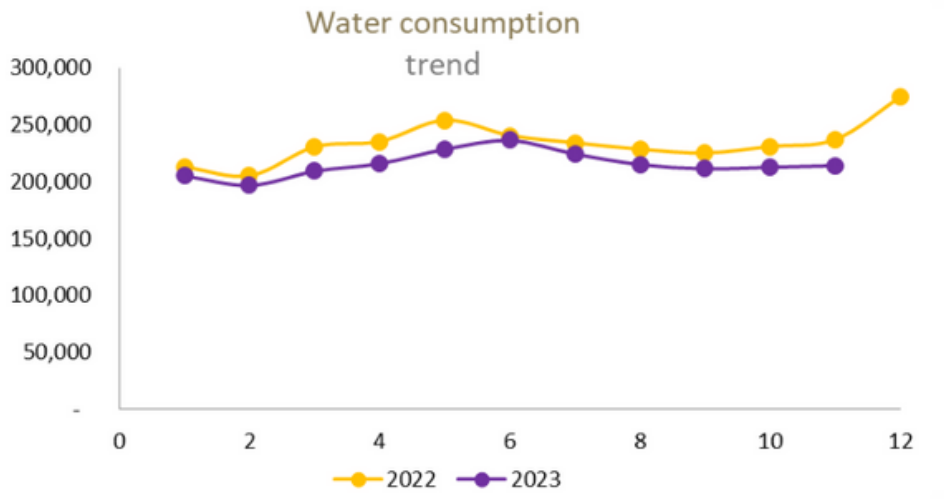
To estimate data on the water footprint, which includes consumption of treated and potable water and the amount of water directed to treatment, the following are included:

1. Locations with consumption in the month in question
2. Locations that do not report consumption for the month in question
3. Locations that directed water to treatment

I. Locations with water consumption in the month in question

For this exercise, we use as a reference the consumption reported in 2022 and 2023 (JAN-NOV) which are considered comparable years for operations (normal, post-pandemic operation).

1. The trend in water consumption throughout the year is compared and found to be similar in both years:



Note: In 2022, consumption peaks were record in MAY and DEC, attributable fully to operations. In 2023 the peak was in JUNE. This is attributed fully to a higher temperature at that time of the year. Both years, the trend is similar:

The categories of treated and potable water include potable municipal water, potable water from tanker trucks, treated water consumed, treated water from the mall or landlord, and well water

Estimation of Environmental Footprint data

.The percentage of monthly consumption in 2022 is obtained with respect to the total annual consumption of 2022 to select comparable months

$$Percentage\ monthly\ consumption\ in\ 2022\ (\%) = \frac{Monthly\ consumption}{Total\ consumption}$$

33. With these percentages, all the months are listed and the one with the least absolute difference against the month to be estimated are selected.
Note:This process is repeated for each month.

4. The percentage difference between 2022 consumption in the month to be estimated and 2022 consumption in the reference month is calculated, to obtain an incremental value between the two months.
Note: This process is repeated for each month.

$$Change = \left(\frac{2022\ consumption\ in\ month\ to\ estimate}{2022\ consumption\ in\ reference\ month} \right) - 1$$

5. The data on 2023 consumption in the reference month is multiplied by one plus the change calculated, to obtain the 2023 consumption for the month to be estimated. This estimate should be rounded off to two decimal points.
Note: This process is repeated for each month.

$$Consumption\ month\ to\ estimate\ (m3) = ROUND\ ((Consumption\ 2023\ reference\ month)^{*}\ (1 + change),\ 2)$$

II. Locations that do not report consumption for the month in question

For this section, the following variables are used in the estimation:

1. Linear regression
2. Opening without reference information (ASIR its acronym in Spanish
3. Fixed charge
4. Consumption by period
5. Assumptions at zero

Estimation of Environmental Footprint data

A.REGRESIÓN LINEAL

To perform this estimate, the same aspects used in the previous estimate are considered, plus: the business format, area in square meters (m2) of the unit, and water consumption in the reference month.

1. All locations of the same business format are taken into account, with m2 that are within the range of locations to be calculated
2. Consumption in the reference month is used.
3. A linear regression is performed where "x" is the m2 and the "y" axis corresponds to water consumption (m3).
4. The equation of the line and the value of R2 are obtained to confirm the degree of relationship between the data (an acceptable correlation is considered to exist at values ≥ 0.8); if R2 is less than 0.8, the outliers are eliminated until an acceptable correlation is obtained.
5. Once an acceptable correlation is obtained, to obtain the consumption data under comparable conditions, the values obtained from the regression are substituted in the straight-line equation.
6. The data on 2023 consumption in the reference month is multiplied by one plus the change calculated, to obtain the 2023 consumption for the month to be estimated. This estimate should be rounded off to two decimal points.

Note: This process is repeated for each month.

*Consumption 2023 month to estimate = ROUND ((2023 consumption in reference month) * (1+ change), 2)*

Note: this process is applicable to locations that are unmetered or where the meter was out of order for a period of time.
If a location has two supply sources, this methodology will be applied to total consumption which is then multiplied by the percentage that each supply source represents.

b) OPENING WITHOUT REFERENCE INFORMATION

For locations that consumed water for the first time in the months of NOV-DEC 2023 and have no comparable reference information, the following methodology is used:

1. The average water consumption in JAN-OCT 2023 by this specific business format (FN its acronym in Spanish) is divided by 10 to obtain the average monthly consumption:

2. An outlier value is considered, for example: Consumption at "0", N/A or values outside of the mean.

$$\text{FN } monthly\ average = (Average\ JAN\ 2023 - OCT\ 2023) / 10$$

2. This is divided by the total number of locations of this business format. The estimate must be rounded off to two decimal points

$$Consumption\ DEC\ 2023 = ROUND\left(\frac{FN\ monthly\ average}{Total\ FN\ locations}\right), 2$$

Note: this process is also applicable to locations in which the linear regression resulted in a negative value, regardless of whether it is a opening or operating location.

. **c. Fixed charge**

For estimating consumption by locations that pay a fixed charge, the immediately preceding value that is not zero is taken into account.

d. Consumption by period

For locations that report consumption by periods in 2023, the following methodology is used:

1. Average consumption for the location is obtained on the months where consumption is reported.

$$Average\ consumption\ 2023 = Average\ (Consumption\ month1,\ Consumption\ month2,\ ...,\ Consumption\ month\ n)$$

2. The difference between consumption in JAN-NOV 2023 and the same period in 2022 is calculated.

$$Change = \left(\frac{Consumption\ JAN\text{-}NOV2023}{Consumption\ JAN\text{-}NOV\ 2022} \right) - 1$$

3. Average consumption in 2023 multiplied by one plus the change. This estimate should be rounded off to two decimal points.

$$Consumption\ DEC\ 2023 = ROUND\ (Average\ consumption\ 2023 * Change, 2)$$

e. Assumptions at 0

1. When consumption is zero, and does not correspond to the main supply source, the DEC 2023 data will be assumed to be zero, because it is considered to be intermittent consumption and its use cannot be reliably determined for the month to be estimated.

2. For locations that report no consumption during the year, consumption in DEC 2023 from this supply source is assumed to be zero.
3. For consumption calculated bimonthly starting in JANUARY, the December value is zero.

III. Locations that direct water to treatment

This calculation considers locations that treat wastewater. The methodology for estimating this data is as follows:

1. Wastewater treatment is assumed to correlate fully with water consumption, so for locations that treat wastewater, the percentage treatment in the JAN-OCT period is obtained using the following formula:

$$\text{Amount of water sent for treatment} = \text{ROUND (Estimated water consumption DEC 2023} * \%\ \text{wastewater treated, 2)}$$

2. The estimated water consumption for the month of DEC 2023 (obtained in the previous step) is multiplied by the % treatment value. This estimate should be rounded off to two decimal points.

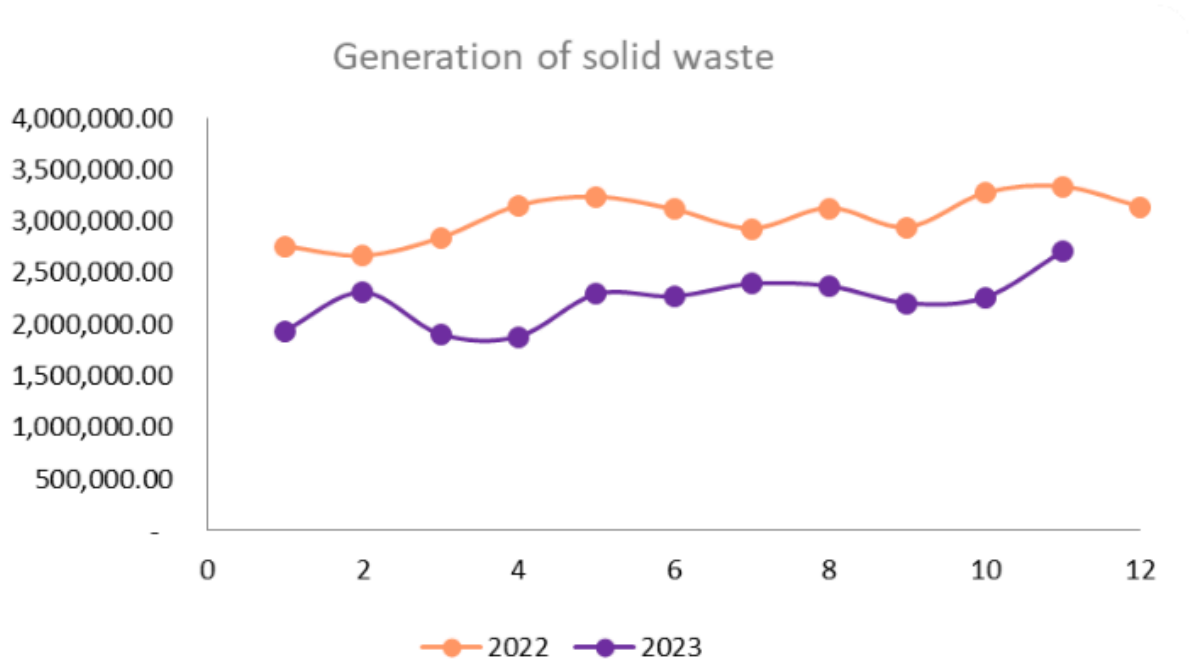
$$\%\ \text{wastewater treated} = \frac{\text{Amount of water sent for treatment (JAN-OCT2023)}}{\text{(Water consumption JAN-OCT 2023)}}$$

Notes:
- In the DEC 2023 estimate, the formula where values from metered consumption of treated water are added together and multiplied by 1.3 is not used, because we use instead the average for the same year, which already reflects this impact.
- For stores that do not report treatment values in the year, consumption for DEC 2023 is assumed to be zero.

B. WASTE FOOTPRINT

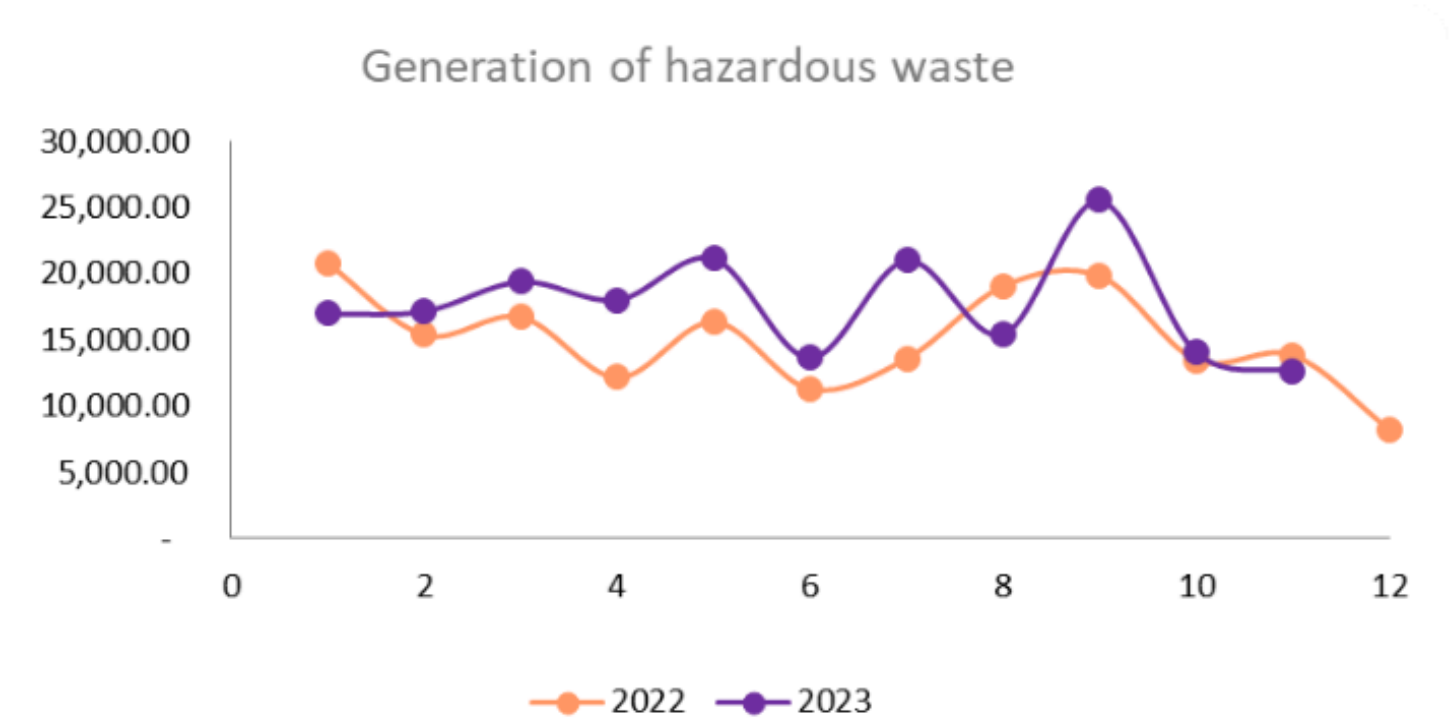
To estimate the data on our waste footprint for the month of December, which includes both waste generated (solid urban, special handling and hazardous) and waste recycled, we use the following methodology:
For this exercise, we use as a reference the data on generation and recycling in 2022 and 2023 (JAN-OCT), which are considered comparable years for operations (normal, post-pandemic operation).

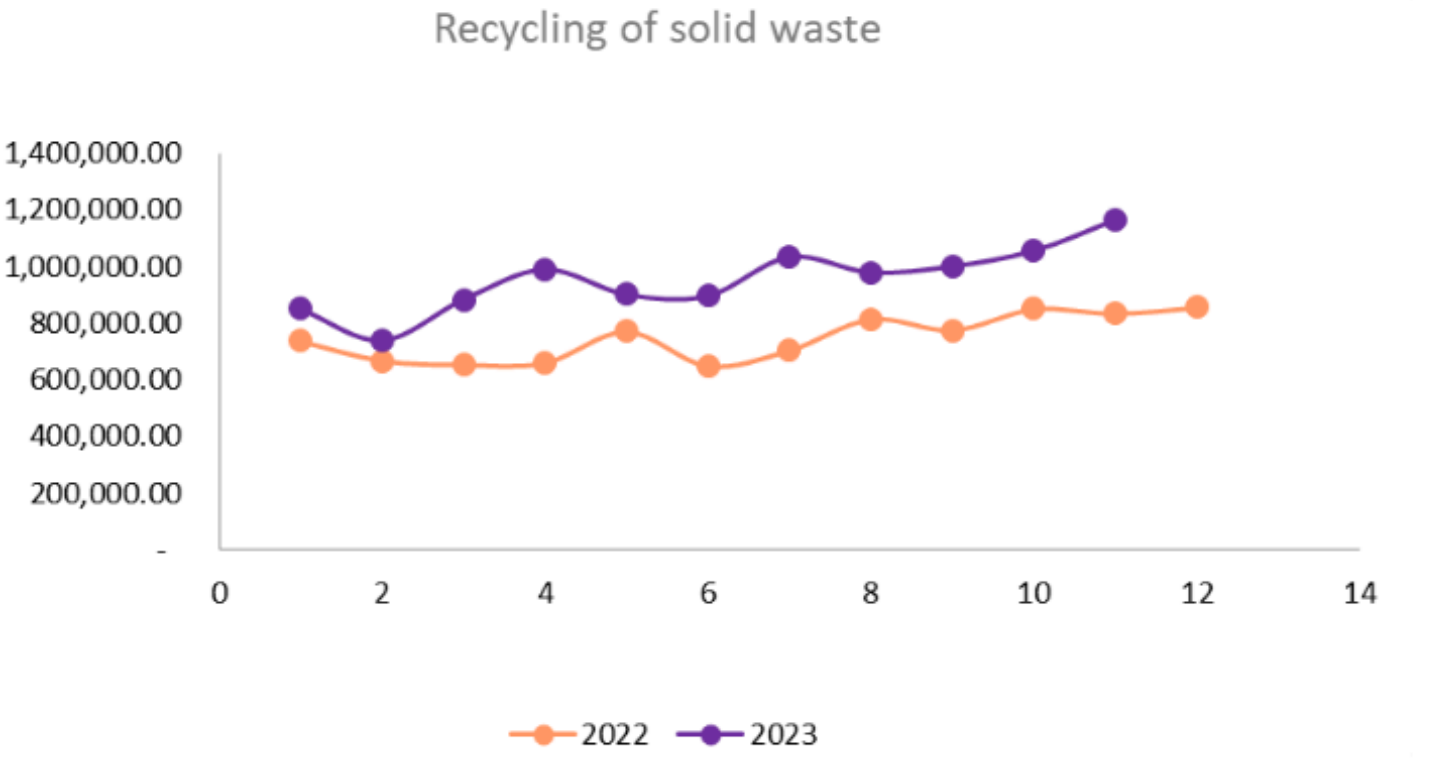
1. The trend in waste generation and recycling over the course of these two years is compared, with the following result:



3 This exercise considers “recycled” type waste which includes the classification of recyclable special handling waste, recyclable solid urban waste, and waste processed by ORCA biodigesters

Estimation of Environmental Footprint data





Estimation of Environmental Footprint data

2. Based on this information, the average amounts of waste generated, waste recycled and hazardous waste in JAN-OCT 2023 are used as a reference.

3. The percentage difference between the average amounts of waste generated, waste recycled and hazardous waste between JAN-OCT 2022 and DEC 2022 is calculated.

$$\text{Change in generation} = (\text{Generation DEC22}/\text{Average generation JAN-OCT 2022}) - 1$$

$$\text{Change in recycling} = (\text{Generation DEC22}/\text{Average recycling JAN-OCT 2022}) - 1$$

$$\text{Change in hazardous waste (HW)} = (\text{Generation DEC22}/\text{Average HW JAN-OCT 2022}) - 1$$

4. The average obtained in step 2, above, is multiplied by one plus the change calculated in step 3 for each type, to obtain the estimated amount of waste generated and recycled in DEC 2023. This estimate should be rounded off to two decimal points.

$$\text{Generation DEC 2023} = \text{ROUND}((\text{Average generation JAN-OCT 2023}) * (1 + \text{change in generation}), 2)$$

$$\text{Recycling DEC 2023} = \text{ROUND}((\text{Average recycling JAN-OCT 2023}) * (1 + \text{change in recycling}), 2)$$

$$\text{Generation HW DEC 2023} = \text{ROUND}(\text{Average HW JAN-OCT 2023} * (1 + \text{change in HW}), 2)$$

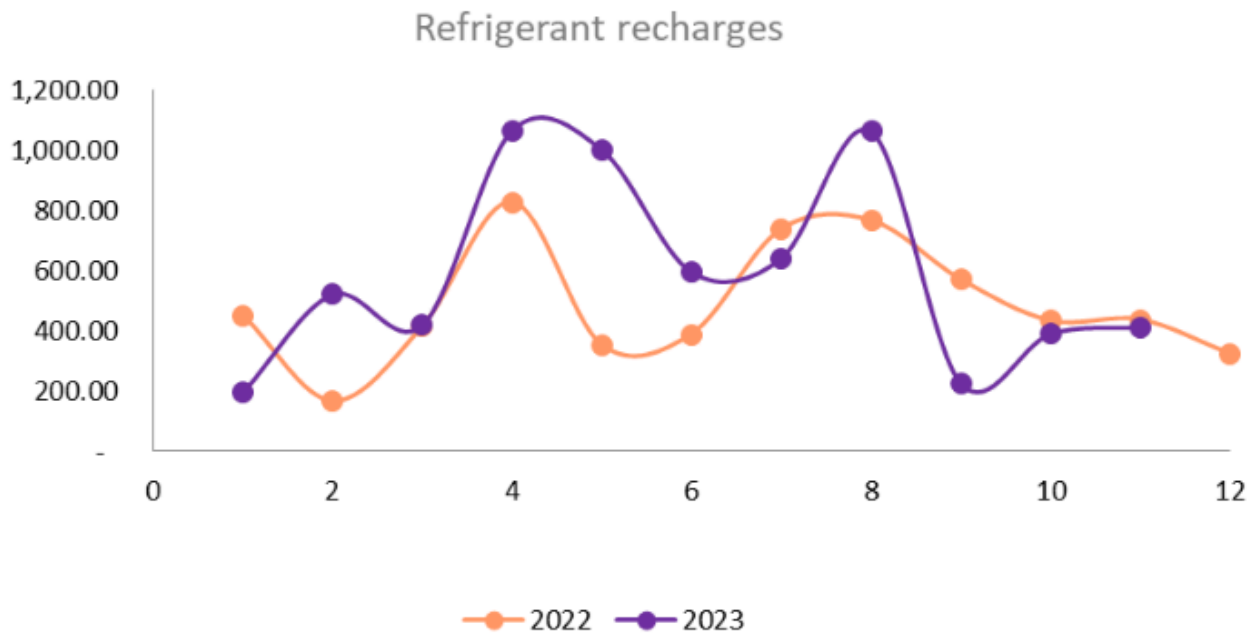
C. CARBON FOOTPRINT

Data on El Puerto de Liverpool´s carbon footprint are calculated, according to the nature of the data, in the following categories:

1. Refrigerants
2. Fuel (diesel, LP gas, gasoline and natural gas)
3. Electricity (Renewable and nonrenewable energy

a) Refrigerants

1. The trend in refrigerant recharges over the course of the years 2022 and 2023 is compared, showing little similarity.



Refrigerant recharges
2. On this basis, the average for JAN-NOV 2023 is used as a basis for calculation.

3. The difference between total recharges in JAN-NOV 2023 vs. the same period of 2022 is calculated.

$$Change = \frac{Total\ recharges\ JAN\text{-}NOV2023}{Total\ recharges\ JAN\text{-}NOV2022} \quad -1$$

The average for JAN-NOV 2023 is multiplied by one plus the change calculated in step 3. This estimate should be rounded off to two decimal points.

$$Recharges\ DEC\ 2023 = ROUND\ ((Average\ JAN\text{-}NOV\ 2023) * (1 + change), 2)$$

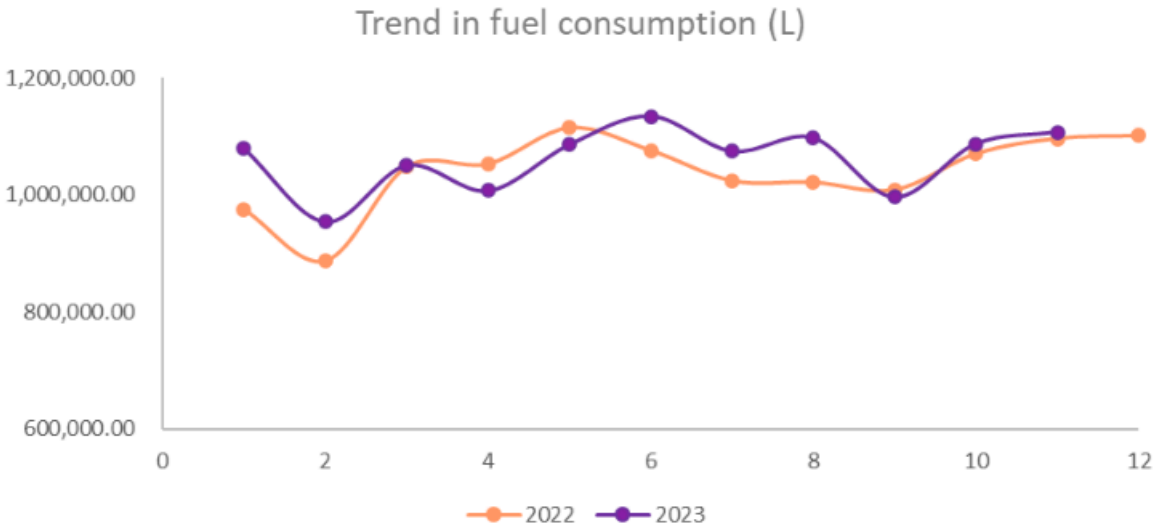
4. The average for JAN-NOV 2023 is multiplied by one plus the change calculated in step 3. This estimate should be rounded off to two decimal points.

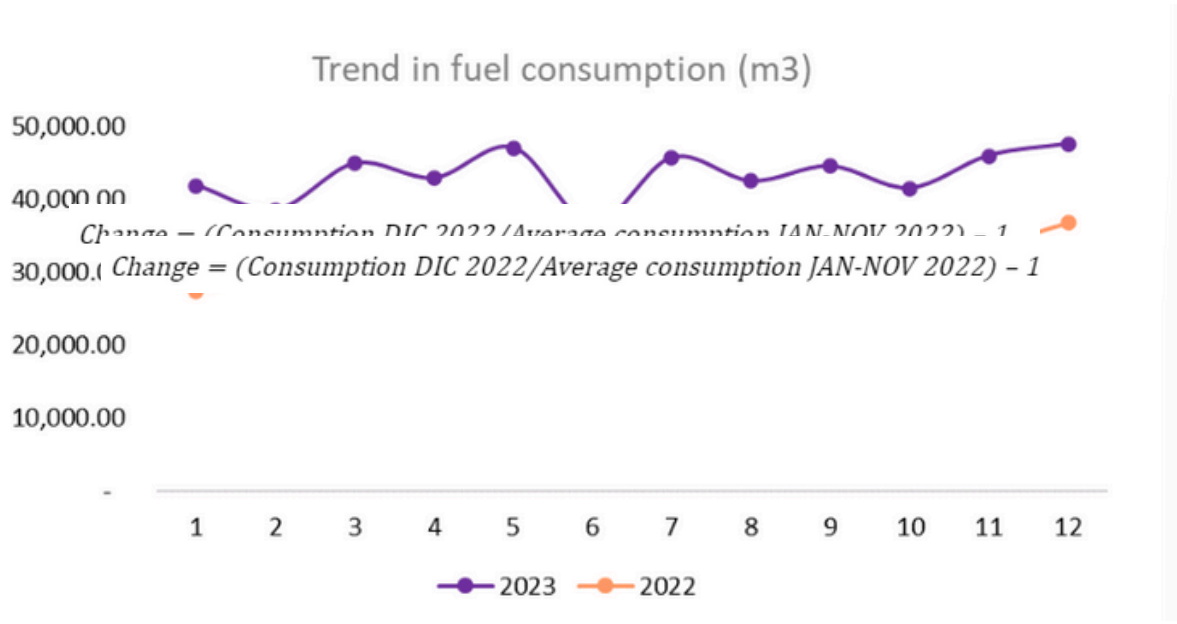
b) Fuel (diesel, LP gas, gasoline and natural gas)

PFor this exercise, we use as a reference the data on consumption 2022 and 2023 (JAN-NOV), which are considered comparable years for operations (normal, post-pandemic operation).

1. The trend in fuel consumption by unit of measurement (liters and m3), observed separately, over the course of these two years is compared, showing a similar pattern:

Estimation of Environmental Footprint data





$$Change = (Consumption\ DIC\ 2022 / Average\ consumption\ JAN\text{-}NOV\ 2022) - 1$$

2. According to the consumption trend, we take average consumption in the JAN-NOV 2023 period as a reference.

3. The percentage difference between average fuel consumption in JAN-NOV 2022 and the month of DEC 2022 is taken to establish a differential between the two values.

4. The data on average fuel consumption in JAN-NOV 2023 is multiplied by one plus the change by type, to obtain estimated consumption in DEC 2023. This estimate should be rounded off to two decimal points.

$$Consumption\ DEC\ 2023 = ROUND\ ((Average\ consumption\ JAN\text{-}NOV\ 2023) * (1 + change), 2)$$

c) Electricity

To estimate data on electricity consumption in the month of December, which includes the consumption renewable and nonrenewable energy, two methodologies are considered:

I. Methodology for locations reporting consumption the month of **November**

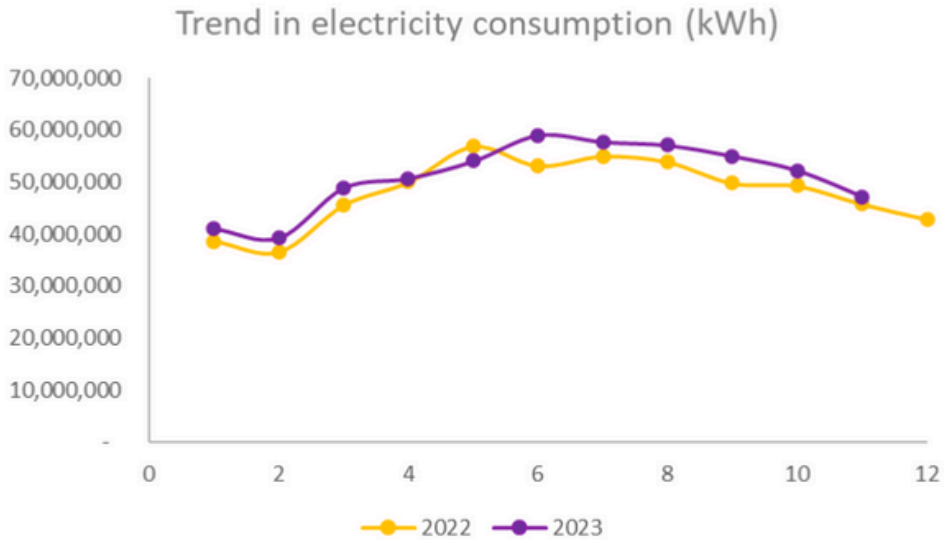
II. Methodology for locations that do **not** report consumption in the month of November, and which use the month of **October** as a reference instead.

I. Methodology for locations reporting consumption the month of November

For this exercise, we use as a reference the data on consumption 2022 and 2023 (JAN-NOV), which are considered comparable years for operations (normal, post-pandemic operation).

1. The trend in electricity consumption over the course of these two years is compared, showing a similar pattern:

Estimation of Environmental Footprint data



2. According to the trend in consumption, we use the month of NOV 2023 as a reference.
3. The percentage difference in nonrenewable energy consumption between the months of DEC 2022 and NOV 2022 is calculated, to establish a differential value between these months.

Change in non renewable energy = (Consumption DEC 2022 / Consumption NOV 2022) – 1

4. The percentage difference in renewableenergy consumption between the months of DEC 2022 and NOV 2022 is calculated, to establish a differential value between these months.

Change in renewable energy = (Consumption DEC 2022 / Consumption NOV 2022) – 1

5. The data on electricity consumption by type in NOV 2023 is multiplied by one plus the change by type, to obtain estimated consumption in DEC 2023. This estimate should be rounded off to two decimal points.

*Consumption non renewable energy DEC 2023 = ROUND ((Consumption NOV 2023) * (1 + change), 2)*

*Consumption renewable energy DEC 2023 = ROUND ((Consumption NOV 2023) * (1 + change), 2)*

Estimation of Environmental Footprint data

II. Methodology for locations that do not report consumption in the month of November, and which use the month of October as a reference instead.

1. The percentage difference in nonrenewableenergy consumption between the months of DEC 2022 and OCT 2022 is calculated, to establish a differential value between these months.

$$\text{Change in non renewable energy} = (\text{Consumption DEC 2022} / \text{Consumption OCT 2022}) - 1$$

2. The percentage difference in renewableenergy consumption between the months of DEC 2022 and OCT 2022 is calculated, to establish a differential value between these months.

$$\text{Change in renewable energy} = (\text{Consumption DEC 2022} / \text{Consumption OCT 2022}) - 1$$

3. The data on electricity consumption by type in OCT 2023 is multiplied by one plus the change by type, to obtain estimated consumption in DEC 2023. This estimate should be rounded off to two decimal points.

$$\text{Consumption nonrenewable energy DEC 2023} = \text{ROUND}((\text{Consumption OCT 2023}) * (1 + \text{change}), 2)$$

$$\text{Consumption renewable energy DEC 2023} = \text{ROUND}((\text{Consumption OCT 2023}) * (1 + \text{change}), 2)$$

Note: For locations that do not report consumption for either of the two reference months mentioned above, consumption shall be assumed to be zero because another reference month is available given the differences in consumption that exist in other months of the year.