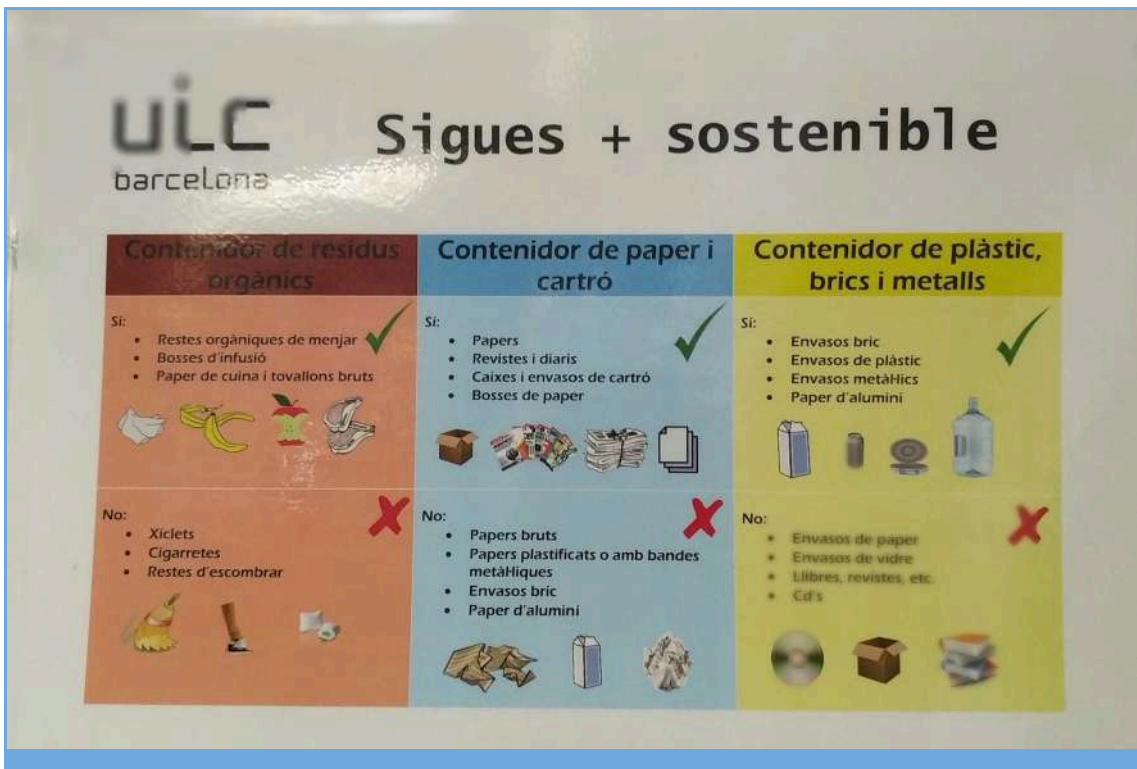


Reduce, Recycle, Reuse or Refuse



The reality of climate change and environmental degradation caused by the overuse of natural resources and excessive waste generation cannot be disputed from a scientific point of view. These effects are already present in people's daily lives.

In the section on Environmental Management in the [2023-2026 Strategic Plan for Sustainability and Social Commitment](#), the specific objective of promoting a programme to prevent the generation of waste and food waste, reducing single-use plastics and reusing and recycling goods that cannot be disposed of at source was established. To achieve this, a series of specific actions and measurable indicators were established to reduce waste and identify areas for improvement.

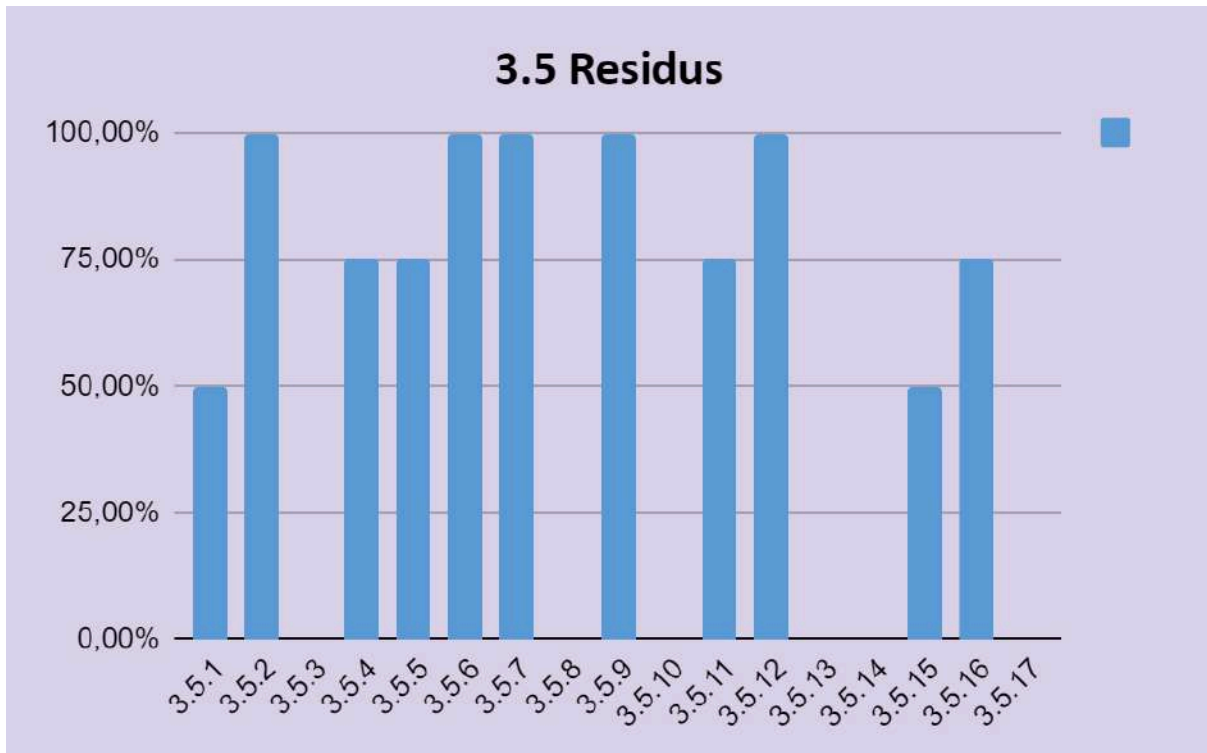


Figure 1. Waste indicators of the Strategic Plan for Sustainability and Social Commitment

The UIC Barcelona **3Rs programme: Reduce, Recycle, Reuse or Refuse**, is an initiative developed to incorporate a **circular economy** with the objective of reducing the waste we generate in all our personal activities and at the university.

To this end, a **series of initiatives** have been set up within the university to raise awareness among the university community of the importance of reducing, recycling and reusing or rejecting material.

Reduce

Reducing means decreasing the amount of waste we produce. To do this, we present the measures that have been established at UIC Barcelona to significantly reduce our environmental footprint:

1. Establishing environmental guidelines that help educate the university community on how to reduce and recycle paper: only print documents when absolutely necessary, use recycled or used paper whenever possible, print on both sides and in black and white, recycle paper that cannot be reused in the correct bin and deposit confidential documents in their corresponding containers.

2. Adhering to sustainability criteria within the current contracts of the printing Xerox service: set up printers to print double-sided and in black and white by default.
3. Introducing CercaUIC: the UIC Barcelona university library's discovery search tool where all the information related to the resources that are part of the library collection including digital content can be found. It received the Customer Sustainability Award from Lyreco Iberia thanks to its continuous effort to optimise purchases, either by increasing the size of online orders or by grouping orders together. This helps reduce the use of paper and ink and avoids deliveries of single products.
4. Reducing the volume of printed posters and information leaflets and has opted to generate online resources and introduce informational screens in strategic zones (Figure 2).
5. Asking PhD students if they want their doctoral thesis in an online format so as not to print it and waste paper.
6. Developing initiatives to reduce the consumption of plastic bottles such as:
 - a) Discounts on the price of the university menu corresponding to the cost of a plastic bottle of water.
 - b) Installation of new water fountains in the Barcelona campus cafeteria and the introduction of water jugs.
 - c) Introduction of "Bezoya" water bottles, which are made of 100% recycled material, in all vending machines on the Barcelona campus.
 - d) On-screen awareness campaigns around the university to reduce the use of plastic bottles.
7. Joint actions with other universities and entities (Conference of Rectors of Spanish Universities (CRUE) , Residuo Zero , etc ...) to promote policies aimed at reducing waste, including plastic packaging.
8. The Barcelona campus canteen (Eurest) has a specific programme to reduce food waste. Powered by the Compass Group, "Stop Food Waste" seeks to fight food waste and raise global awareness of the importance of reducing the amount of food that goes unused (Figure 3).



Figure 2. Informational screen announcing the University's current activities



Figure 3. "Stop Food Waste" poster in the Eurest canteen on the Barcelona campus

Recycle

Recycling involves processing materials like paper, glass, and plastics so they can be transformed into new products. This helps conserve resources and reduces the volume of waste sent to landfills. (Figure 4).

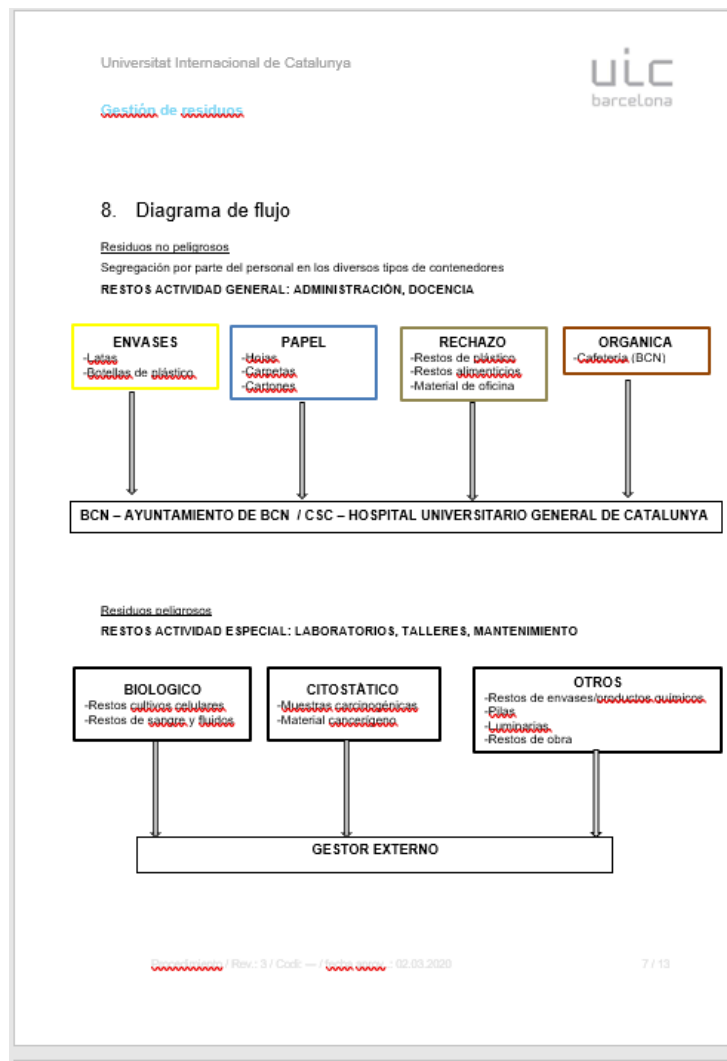


Figure 4. Flow Chart for Material Recycling

1. The University has implemented recyclable containers in both the Barcelona and Sant Cugat campuses, allowing students and faculty to easily determine what and how they can recycle. Additionally, this programme allows the main types of recyclables (plastic, paper, and organic) to be placed in different containers, making it easier to divide materials. (Figure 5)
2. Establish sustainability criteria in University material: the advertising brochures have an FSC paper certificate (chlorine free) and are printed with

ecological ink.

3. The university agendas are also made of recycled paper with FSC certificate.
4. The university diaries handed out at the beginning of the academic year have been changed, replacing the plastic cover with one made from recycled cardboard.
5. An Advent calendar for disabled people at UIC Social Day made of recycled rolls of toilet paper (Figure 6).
6. Promotion of recycling plastic bottle caps and batteries by placing specific containers (Figure 7).
7. Water cycle simulation and a greenhouse with water bottles. Education Sciences course subject: Teaching of Experimental Sciences (Figure 8 & 9).



Figure 5. Containers for different types of recyclables on both Barcelona (left) and Sant Cugat (right) campuses



Figure 6. A recycled Advent calendar



Figure 7. Containers for plastic bottle caps and batteries



Figures 8 & 9. Water cycle simulation and a greenhouse with water bottles.
Education Sciences course subject: Teaching Experimental Sciences

Reuse

This principle encourages finding new ways to use items instead of discarding them. By repurposing or donating items, we extend their lifecycle and decrease the demand for new products.

1. The University's promotional bags are made of fabric so they can be reused (Figure 10).
2. Cloth bags, which are reused instead of plastic, are used to send packages between campuses, reducing the consumption of plastic bags.
3. Plant residues from the magnolia trees on campus are reused to create floral decorations (Figure 11).
4. UIC Barcelona rents all its computers to promote the reuse of digital services.



Figure 10. The university's promotional bags



Figure 11. Reuse plant waste from the magnolia trees for floral centres

Refuse

Refuse is also included as a fourth R, which emphasises the importance of rejecting unnecessary items and single-use products to further minimise waste.

1. Conduct research to replace chlorinated paper in the university. The contract signed with the university's paper supplier (Xerox) was renegotiated to introduce ecological paper in all UIC Barcelona photocopiers.
2. Internal mailing of documents between campuses has been digitalised with a platform to avoid wasting paper.
3. Change single-use material for more sustainable material in the Barcelona campus canteen, such as cups, straws, coffee stirrers, lids and salad bowls. The paper for the trays and the napkins are made of recycled paper and plastic

cups have also been replaced by cardboard cups in all university vending machines (Figure 12).

4. Initiative to eliminate plastic water bottles from academic meetings and events is already in force.
5. The plastic university card has gone digital, reducing the use of plastic and facilitating its use and portability via mobile phones.



Figure 12. Sustainable cardboard cups (cafeteria and vending machines)

Waste Actions and Indicators of the Strategic Plan for Sustainability and Social Commitment

| WASTE | SDG | Action number | Shares | Indicator number | Indicators | unity | Responsible people | Origin and number of the indicator | Expected milestone of achievement: - Quarterly - Semesterly - Annually - Academic year 2023-24 - Academic year 2024-25 - Academic year 2025-26 Note: You can specify a semester of a course. | Priority 1:Short-term achievement: Quarterly, Half-yearly and Annually. Priority 2:Mid-term achievement: 2023-2024 Priority 3:Long term achievement: 2024-2025 Priority 4:Final achievement: 2025-2026 | Status / achievement |
|-------|-----|---------------|---------------------------------------|------------------|---------------------------------------|-----------------|--------------------|------------------------------------|--|---|----------------------|
| | | 3.5.1 | Implement the Waste Management policy | 3.5.1 | Review of the Waste Management policy | Prevention Unit | responsible | JESUS 2021 9 | Academic year 2024-2025 | 2 | 50% |

| | | | | | | | | | | | |
|--|--|-------|---|-------|--|-----------------|-------------|--------------------------------------|-------------------------|---|------|
| | | 3.5.2 | Establish basic operational procedures for external companies | 3.5.2 | Contracts that include a set of conditions to respect our Environmental policy | Prevention Unit | responsible | | annually | 3 | 100% |
| | | 3.5.3 | Establish a line of action to obtain some kind of environmental certification for waste management such as ISO 14001 or EMAS. | 3.5.3 | Obtaining a waste management certification at the university | Prevention Unit | responsible | JESUS V.4.1 2023 9.1 | Academic year 2024-2025 | 3 | 0% |
| | | 3.5.4 | Update basic operational procedures for the management of chemical and hazardous waste. | 3.5.4 | Updated procedures in a technical sheet. | Prevention Unit | responsible | JESUS V4.1 2023 9.2 | annually | 1 | 75% |
| | | 3.5.5 | Develop a household waste minimisation plan throughout the university and when events are held (paper and cardboard, light packaging, plastics, glass, WEEE, cartridges, etc.). | 3.5.5 | There is a plan to minimise domestic waste and when events are held (paper and cardboard, light packaging, glass, WEEE, cartridges, etc.). | sustainability | responsible | GESU V.4.1 2023 9.3 Green Metric 3.2 | Academic year 2024-2025 | | 75% |

| | | | | | | | | | | | |
|--|--|--------|---|--------|--|---|------------------------|------------------|-------------------------|---|------|
| | | 3.5.6 | Promote the use of recycled paper throughout the university system | 3.5.6 | Contract with a supplier company that works with recycled paper | Operations Management | Director of Operations | | annually | 1 | 100% |
| | | 3.5.7 | Minimise paper shipments and promote digital shipments both in marketing actions and in UIC Barcelona's internal communication. | 3.5.7 | Software for digital processing and reservation of spaces | Operations Management | Director of Operations | | annually | 1 | 100% |
| | | 3.5.8 | Draw up the location plans for containers ensuring that they are in all the spaces of the UIC | 3.5.8 | Increase or decrease in the use of containers and segregation. | Management of Operations and Environmental Management | responsible | | Academic year 2024-2025 | 2 | 0% |
| | | 3.5.9 | Know the consumption of supplies and waste by building and the generation flows. | 3.5.9 | Number of monthly segregated containers. Calculation of generated volume. | Prevention and Operations Management Unit | responsible | | annually | 1 | 100% |
| | | 3.5.10 | Track food waste on campuses. | 3.5.10 | Amount of food waste in tons generated by the food served at the university. | Environmental Management | responsible | THE Impact 2.2.1 | Academic year 2024-2025 | 2 | 0% |

| | | | | | | | | | | | |
|--|--|--------|--|--------|---|--|------------------------------------|--------------------------------------|----------|---|------|
| | | 3.5.11 | Have the definitive containers that are necessary. | 3.5.11 | There are the necessary number of containers in each area of UIC Barcelona and as a whole. | Prevention Unit | responsible | | annually | 1 | 75% |
| | | 3.5.12 | Proper segregation of waste by campus staff. | 3.5.12 | Percentage of organic, inorganic and toxic waste treated correctly. | Prevention Unit | responsible | | annually | 2 | 100% |
| | | 3.5.13 | Selectively collect, measure and treat pruning and garden waste. | 3.5.13 | Pruning and garden waste is collected selectively and measured. | Operations Management | responsible | GESU V.3.1 2023 9.4 Green Metric 3.3 | | | 0% |
| | | 3.5.14 | Carry out composting of pruning and garden waste and organic waste on the same campuses. | 3.5.14 | Composting of pruning and garden waste and organic waste is carried out on the same campuses. | Operations Management | responsible | JESUS 2023 9.5 | | | 0% |
| | | 3.5.15 | Implement 3R programmes (Reduce, Reuse and Recycle). | 3.5.15 | A 3R (Reduce, Reuse and Recycle) programme has been implemented and published | Environmental Management / Prevention Unit | Director of the Responsible Office | Green Metric 3.1 | | | 50% |

| | | | | | | | | | | | |
|--|--|--------|--|--------|--|--|--|----------------------|----------|---|-----|
| | | 3.5.16 | Have a policy on the management and disposal of waste to measure the amount that is sent to the landfill and recycled. | 3.5.16 | There is a policy on the correct management of waste | - Management - Board of Governors - Prevention Unit - Operations Directorate | members | THE Impact 12.2.4 | annually | 3 | 75% |
| | | 3.5.17 | Carry out periodic surveys on waste in the university community. | 3.5.17 | Waste surveys are done periodically in the university community. | - Environmental Management - Prevention Unit | - Director of the Office - Responsible | JESUS V 4.1 2023 2.4 | annually | | 0% |