



CERN's Campus Services CNPEM visit

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CERN, 4th of December 2023

Agenda

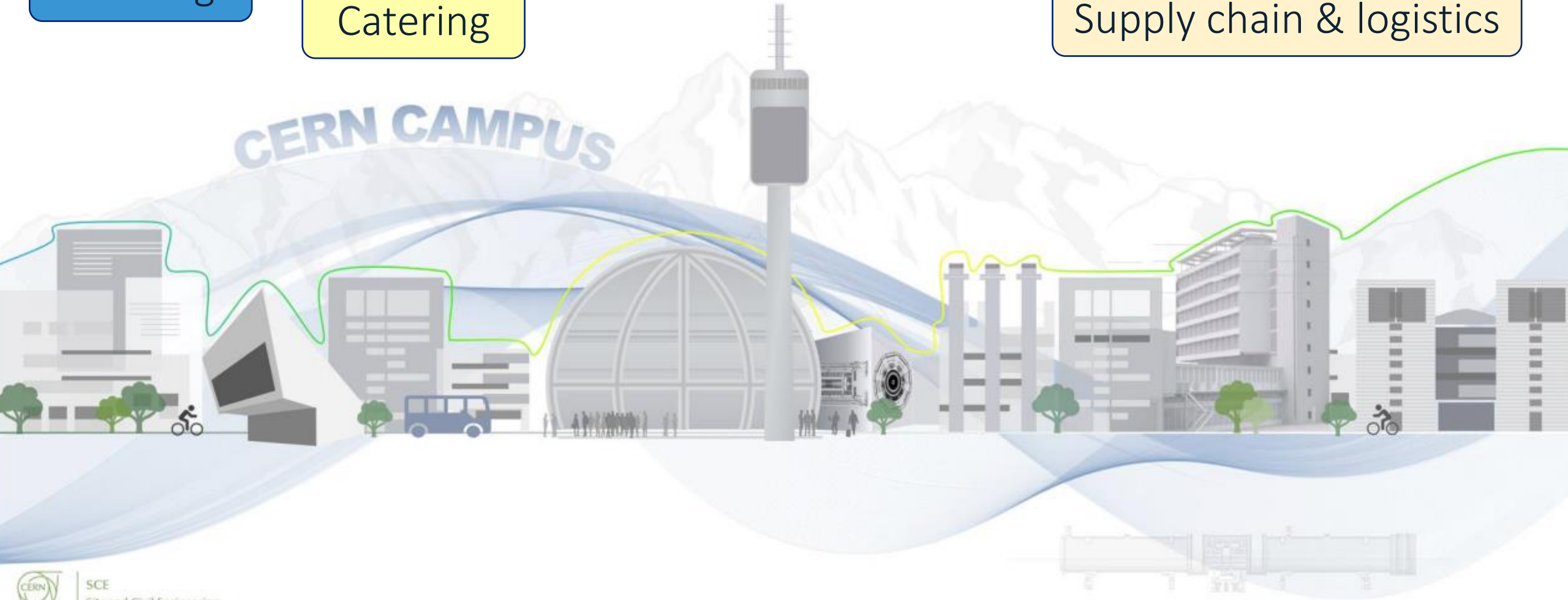
Housing

Catering

Mobility

Waste management

Supply chain & logistics



667

BUILDINGS

3

RESTAURANTS

450

HOTEL ROOMS

17.3km

TECHNICAL GALLERIES

64km

TUNNEL

9000

PERSONS/DAY

8500+

OFFICE WORKING STATIONS

54km

ROADS

111ha

GREEN SPACES

400ha

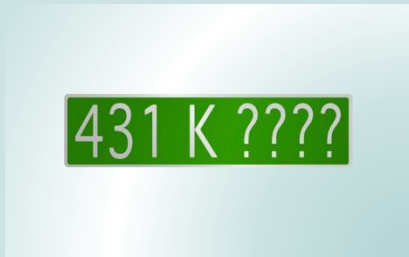
FIELDS & FORESTS

625ha

TOTAL AREA

Context: Services & Supply Chain group

Provides the CERN's community with **high standard campus experience** and **optimal industrial supply chain execution** by offering the following **rationalized, efficient, and transparent** services:



installation



housing



catering



mobility



shipping



storage



mail



cleaning



waste management



goods reception



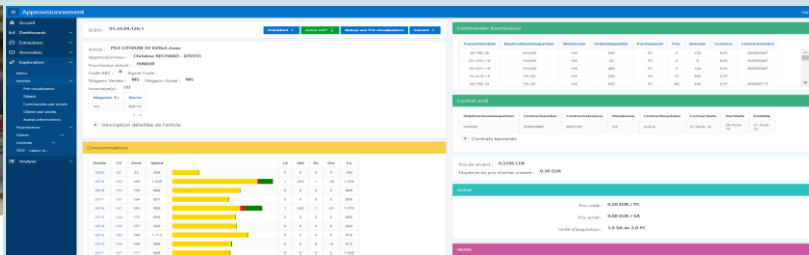
internal distribution



central stores



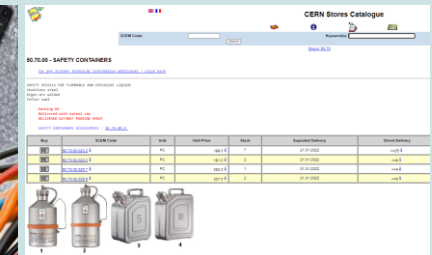
raw materials



replenishment



sales and recuperation



referencing

Housing

Hotels on Meyrin Site

Building 38 – 206 rooms
+ Shared kitchen, laundry room, vending machines



Building 39 – 120 rooms
+ Reception shared kitchen, laundry room, vending, infant feeding room



Building 41 – 98 rooms
+ Laundry room, vending machines



3 Shared kitchens (B38 & B39) – 78 seats
+ Fridges, stoves, ovens, utensils, selective waste sorting, etc.



3 Laundry rooms (one in each building)
8 washers & 8 dryers in total



Outside CERN

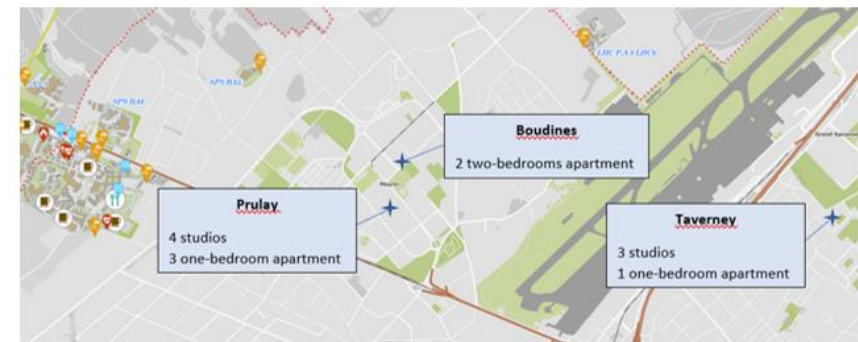
Foyer Residence Schuman

2 Buildings allocated to CERN – 151 rooms
Fiber optic internet connection, lounge room, shared kitchen (1 per floor for 10 bedrooms), laundry room



CERN Apartments

13 fully-furnished apartments
Sub-rental from 1 to 6 months



Catering

“CERN’s catering strategy and objectives are to provide, at a reasonable price, a range of options answering the catering needs of every person entering the CERN site. The term catering covers all forms of food and beverage in the broad sense.”

- OBJECTIVE: Increase the offer of vegetarian/vegan meals up to 50% of the total offer
- OFFER
 - 3 **restaurants** (R1, R2, R3), self-service + **service à table** (Glassbox @ R1; Brasserie @ R2) + Kiosk – *~2800 meals/day*
 - 8 **cafeterias** (Meyrin: 6, 13, 30, 40, 54 / Preveessin: 864, 774)
 - 70 **vending machines**
 - Water fountains (~160 connected with filter, and ~220 water bottles distributors)
 - **Click & Collect**
 - **Catering** for corporate and private events



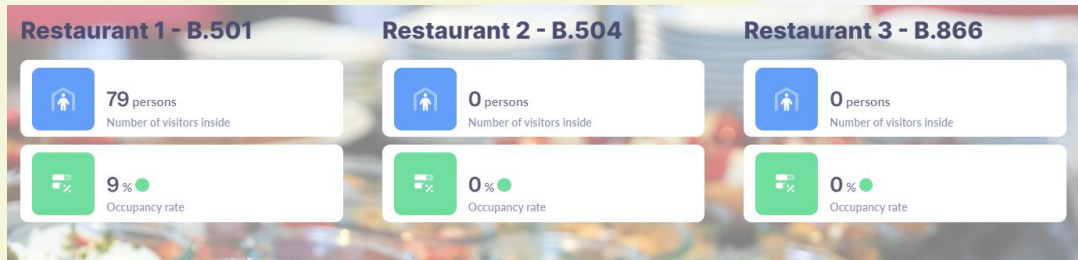
Catering: Recent Projects

➤ R1 renovation



➤ Counting systems [webpage](#) (R1, R2, R3)

- ❖ All 3 restaurants are now connected to the same system (Technis)

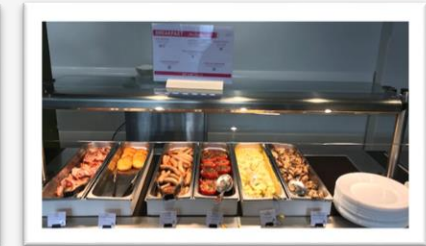


➤ SGW Big Bang Café

- ❖ Opening to public on October 8 / Tue-Sun 8am-5pm

➤ New / Alternative offers

- ❖ Hot savory breakfast back at R1



- ❖ "No Gaspi" initiative: Unsold daily menus and products closed to expiry date are sold at half price from 14:30, in R1, R2, and B40.

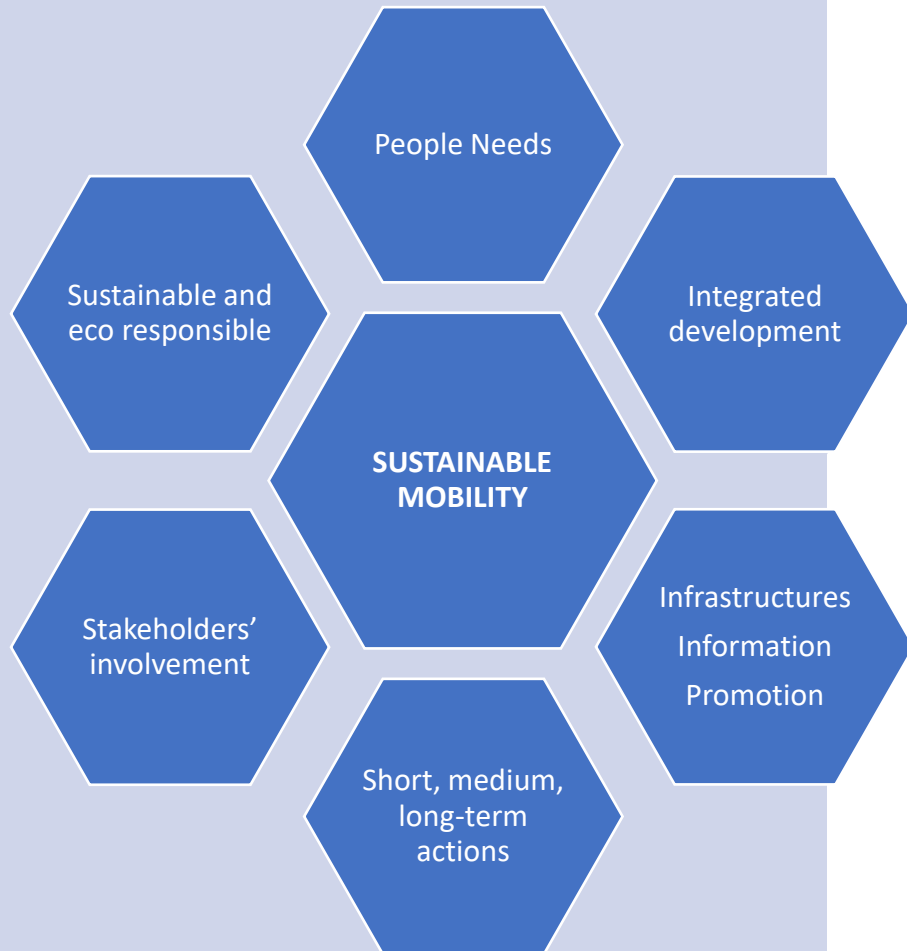


- ❖ Glacier des Particules – Pilot:

- An electric ice-cream cart is located on the Esplanade des Particules since September 4, until the end of October, depending on the weather
- Artisanal ice-creams and vegan sorbets
- Open from Tuesday to Saturday, starting at 12:30



SCE Mobility framework: Strategy



MANDATE

The CERN Site and Civil Engineering (SCE) Department is responsible for providing and maintaining the infrastructure and services necessary to ensure the mobility of all persons entering the Organisation in a transparent, efficient, and sustainable manner.

LONG TERM OBJECTIVES

- **Adapt the supply of work vehicles and the supply of parking** to the constraints of the different types of users and demand.
- **Promote accessibility to public/shared transportation** and monitor the **improvement** of the **accessibility** to the CERN sites **by bicycle**.
- **Strengthen the transport service offer for inter-site travel**.
- **Encourage soft modes of transport** by enhancing and improving dedicated infrastructure.

STRATEGIC PRINCIPLES

1. **Focus on people needs.**
2. **Integrate transport modes.** Adapting to the means used by the community and proposing modal services that can be combined together increasing flexibility.
3. **Adaptable to the future needs of the organization.**
4. **Sustainable and eco responsible** while respecting the individual needs.
5. **Communicate, cooperate with local actors, and involve the community.**

Mobility portfolio

& infrastructure

MOBILITY @ CERN

~45 vehicles
~90 reservations / day

50 e-bikes (+30 summer)
20 e-Scooter (summer only)
~200 trips / day

4 circuits
~380 passengers/day

CAR SHARING
Drive within CERN sites, and outside with mission order
Maximum duration: 4 hours
Free rental

e-SCOOTER
Ride on CERN site from June to September
Maximum duration: 4 hours
Free rental

BIKE AND e-BIKE SHARING
Ride within CERN sites
Maximum duration: 4 hours
Free rental

SHUTTLES
Free shuttles service on specific routes within CERN sites
Free access

SHORT-TERM RENTAL
Drive within CERN sites, and outside with mission order
Maximum duration: 3 months
Car rental prices: variable based

DEPARTMENTAL CAR FLEET
Drive within CERN sites, and outside with mission order
Minimum duration: 3 years
Car rental prices: variable based

BIKE RENTAL
Ride everywhere!
Initial duration is maximum 3 months, extendable to 6 months
Rental fees: 1 CHF per day from June to September (except for summer students)

ON DEMAND TRANSPORTATION
Transportation for visiting groups and/or specific events
Prices on demand (Mobility Centre)

CARS
~680 vehicles

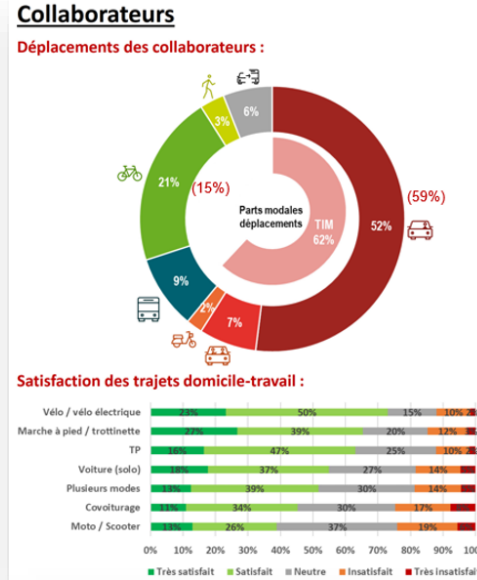
BIKES
~500 bikes
Winter: ~50%
Summer: Fully booked

TRANSPORTATION
~4 reservations / day



Mobility ongoing actions (highlights)

- Fleet optimization
 - Reduction -> -25%
 - Electrification -> 50%/50%
- Bike shelters, parkings and roads
- Carpooling



CERN partnerships with Mov'ici

[Try carpooling!](#)

Le CERN a un partenariat avec Mov'ici

[Covoiturez!](#)



CERN Waste management- Strategy

MANDATE

This service is responsible for the collection and disposal of conventional & dangerous waste (excluding radioactive ones) from the CERN's sites.

LONG TERM OBJECTIVES

- **Embrace the environmental transition** laid down in CERN's Environmental Protection Strategy and CERN's Masterplan 2040, fully aligned with priorities of CERN, communities surrounding the sites and Geneva international organizations. **Become an eco-exemplary campus.**
- **Maintain full compliance with France and Switzerland regulations** while operating waste management and waste disposal. Be an Align priorities to long-term plans of host states and local authorities.
- Per producer category (campus, industry, work site), **reduce the total quantity of waste generated by CERN, increase reuse and recycling rates.**

STRATEGIC PRINCIPLES

1. **Adhere to 3 'R's: Reduce, Reuse, Recycle.**
2. **Integrate internal and external actors** in a holistic and sustainable waste management flow.
3. **Consolidate equipment** and infrastructure related to waste management.
4. **Implement best-practices of the industry** and optimise waste management operations.
5. **Steer the service based on data.**
6. **Communicate, cooperate** with local actors, and involve the community.

CERN's Year of Environmental Awareness TAKE ACTION ON WASTE BY RESPECTING THE 3 Rs

REDUCE

What CERN does

- Limiting packaging of supplies
- Optimising equipment use through shares and loans (e.g. CERN electronics pool)
- Reducing single-use items

What you can do

- Take a critical look at your waste production
- Analyse your material and equipment needs
- Share equipment whenever possible
- Avoid single-use items (e.g. bring your own mug and cutlery)

REUSE

What CERN does

- Providing centralised storage areas for equipment reuse
- Offering used equipment for private reuse (e.g. IT equipment)
- Reusing materials whenever possible (e.g. accelerator components, shielding blocks, transportation packages, etc.)

What you can do

- Bring or pick up surplus materials from the Storage, Recuperation and Sales service (Bldg. 133)
- Send Lyreco boxes back to the CERN stores
- Ask for refills whenever possible (e.g. hydro-alcoholic gel, etc.)

RECYCLE

What CERN does

- Installing recycling points in office buildings ("Green office" pilot project)
- IT-waste collection campaign
- Providing over 500 waste sorting containers (indicated on the GIS portal)

What you can do

- Complete the e-learning module on waste management
- Sort your waste
- Encourage recycling in your work environment







Waste recycling:
What goes where?



CERN Waste management- Service overview

Regular collect tours




- Other wastes (incinerable)  x2  x1
- Paper/carboard  x2  x1
- Metals  x2  x1

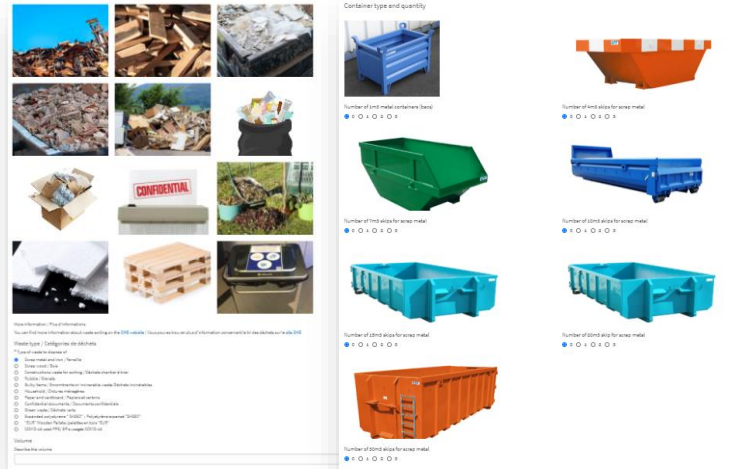
Recycling areas :

- PET, aluminium cans
- Glass
- Nespresso capsules

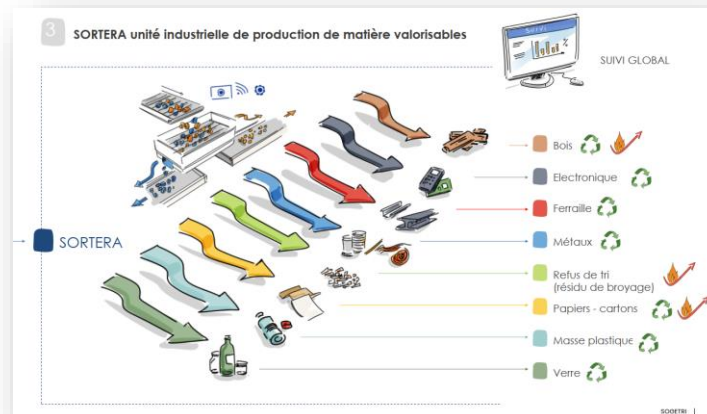
Others:

- Organic (R1 & R2)  x3 / week
- Printer toner cartridges
- Scrap wood (near buildings) ~1/month

On-request skips



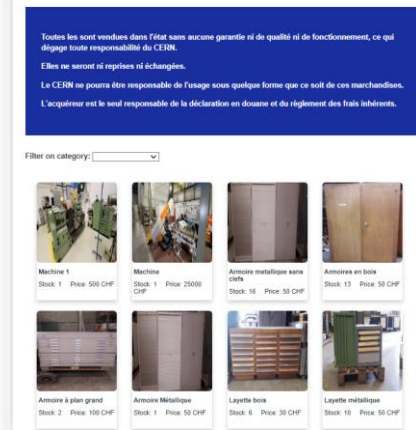
Treatment



Recuperation & sales

- Any equipment or material with value can be bring or [transported](#) there
- Containers for electronics (blue) and computer equipment (red)
- Containers for metals (stainless steel, aluminium, copper, steel, brass, lead, copper cables, aluminium cables)
- All batteries

Catalogue



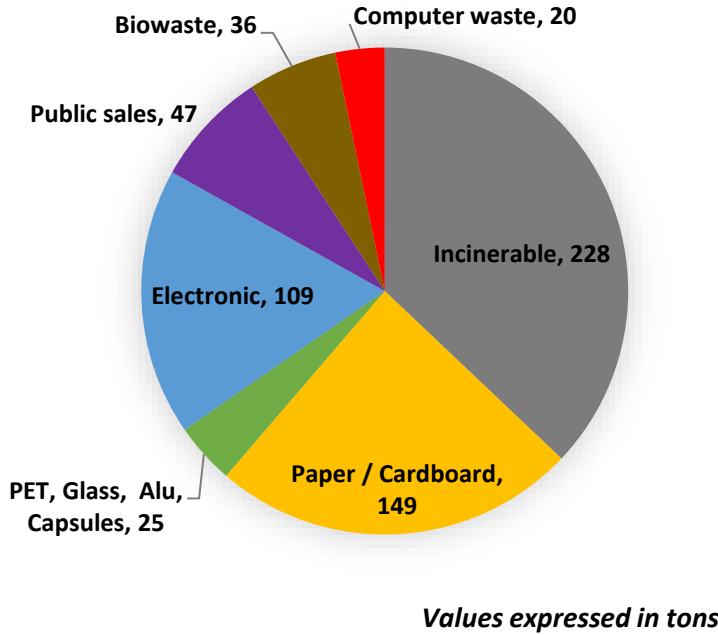
Special wastes

- Upon [transport request](#)
- [Battery collection points](#)
- Chemical & laboratory wastes, neons & all types of lamps, [etc...](#)

CERN Waste management- Key figures

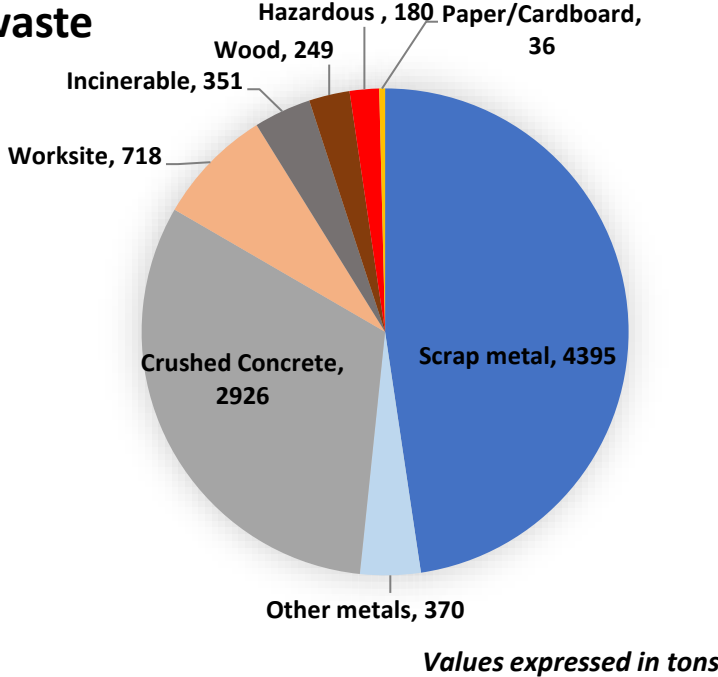
2022: 614 tons of waste from Campus

Campus waste is all waste from users present on site. It mainly concerns waste related to office activities as well as catering, household and hotel waste.



2022: 9'225 tons of waste from industry and work site

Waste from worksite and industry includes all waste associated with research, and construction. The majority of this volume is due to the renewal of buildings and experience (Metals and Concrete).



CERN Waste management- On-going actions

- Electro-composter
- Visual harmonization
- Infrastructure
- KPIs & objectives
 - Maintain a recycling rate (product and material recovery) within the objectives of the Canton of Geneva (currently 80%)
 - Increase the tonnage of product recovery (reuse, reemployment, repurposing) by 10% between 2025 and 2030
 - Reduce the tonnage of campus waste per person on site by 5% between 2025 and 2030



We collect your old binders !
Nous récupérons vos anciens classeurs !

Containers are available in your building from 16th November to 1st December.
Les bacs sont disponibles du 16 novembre au 1^{er} décembre.

Locations Emplacements :
30/1-202, 30/2-202, 30/5-202, 30/6-202
112/1-204, 112/3-204, 112/4-204.

Contact : cern.dechets@cern.ch



DÉCHETS D'ATELIER

Comment trier dans mon atelier ?
Les ateliers génèrent des déchets spécifiques hautement valorisables, pour éviter que ces derniers ne finissent à l'incinération, nous vous proposons de les trier !
Comment ? Choisissez parmi les matériaux mentionnés, ceux que vous produisez. Nous vous fournissons alors une petite poubelle à mettre dans votre atelier.
Une fois pleine, que faire de ma poubelle ?
A l'entrée de votre bâtiment vous trouverez un bac d'1m3 où seront déposés des petites poubelles vides étiquetées par matériaux. Posez la votre pleine et récupérez-en une vide.

Poubelles Disponibles :

Cable Cu Copper wire	Cable Al Aluminium	COPPER Cuivre	Al Aluminium
STEEL Acier	PLASTIC Plastique	LEAD Plomb	BRAKES Freins

contact@cern.ch : cern.dechets@cern.ch

Supply Chain & Logistics: Strategy

MANDATE

Provides CERN's community optimal logistics services associated to goods/material/mail inbound and outbound flows, long-term storage & CERN stores management (referencing, replenishment and warehousing operations).

VISION

Professional and integrated Supply Chain to support all CERN's community advancing the scientific program.

LONG TERM OBJECTIVES

- **Simplify** material request and fulfilment experience for all CERN's community & reshape distribution of demand fulfilment routes.
- **Reduce inventory value and contain operational costs.**
- **Avoid the construction of new storage buildings in the future.**
- **Reduce environmental impact of all SC activities.** Feed circular economy.
- **Leverage the added value of a central stores service through a higher degree of collaborative integration with key partners** (internal and external with suppliers).
- **Limit duplication of local storage service resources.**
- Maintain a **healthy, safe and pleasant working environment** to sustain high team engagement.

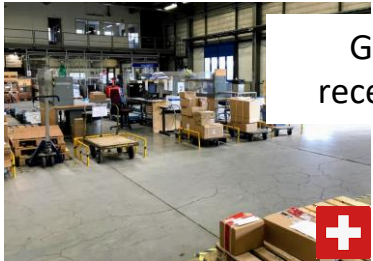
STRATEGIC PRINCIPLES

1. **Collaboration:** Foster goal alignment aiming for structured collaboration and create dedicated partnerships with key stakeholders.
2. **Process & organisation.**
3. **Technology:** Leverage technology and digitalization to modernize the entire SC.
4. **Service:** Adapt and evolve the service offer to CERN's community needs.
5. **Integration:** Increase maturity of the SC integration, internally and externally.
6. **Sustainability:** Implement sustainable procurement and eco-responsibility guidelines.
7. **High professional standards:** Apply industry best-practices ensuring a sustainable economic model.

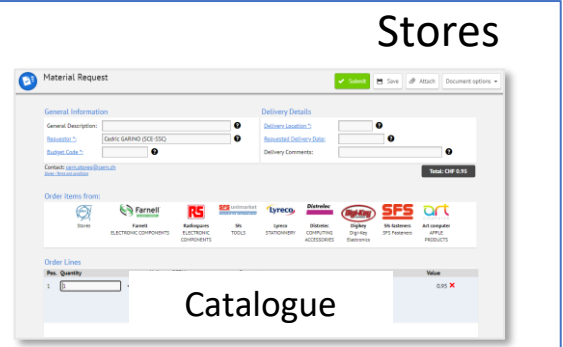
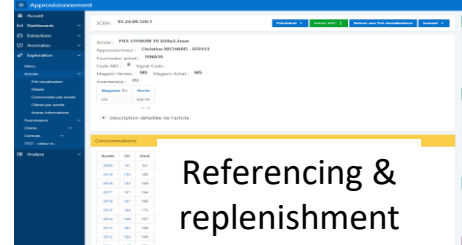


Supply Chain & Logistics: Service & functions overview

Import/export formalities & customs + VAT (~4k expeditions/y). Control of goods received. Packaging.



Web catalogue (~12.5k refs, ~65k sales/y), referencing, replenishment, warehousing operations, cuttings, PPEs.



Collect & distribution (~110k/y), mail inbound & outbound, removal of offices (~1,5k/y), long-term storage of accelerator equipment (20k m2)



Internal removals



CERN Campus App

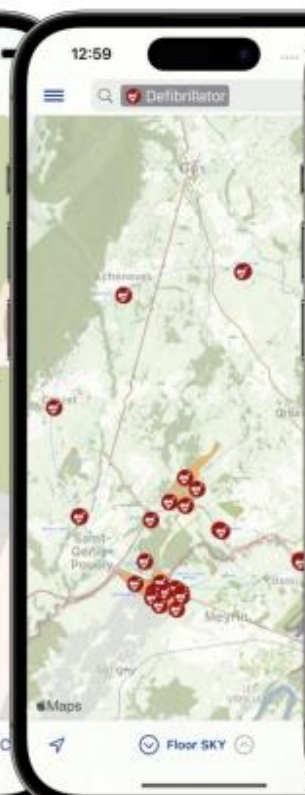
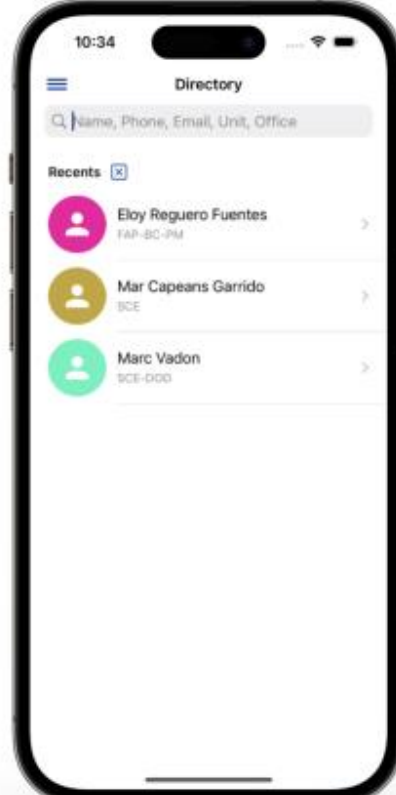
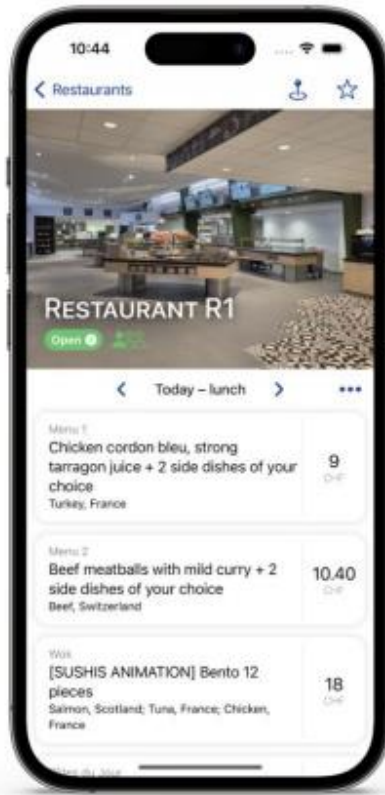


News Feeds

Restaurants
Menus & Occupancy

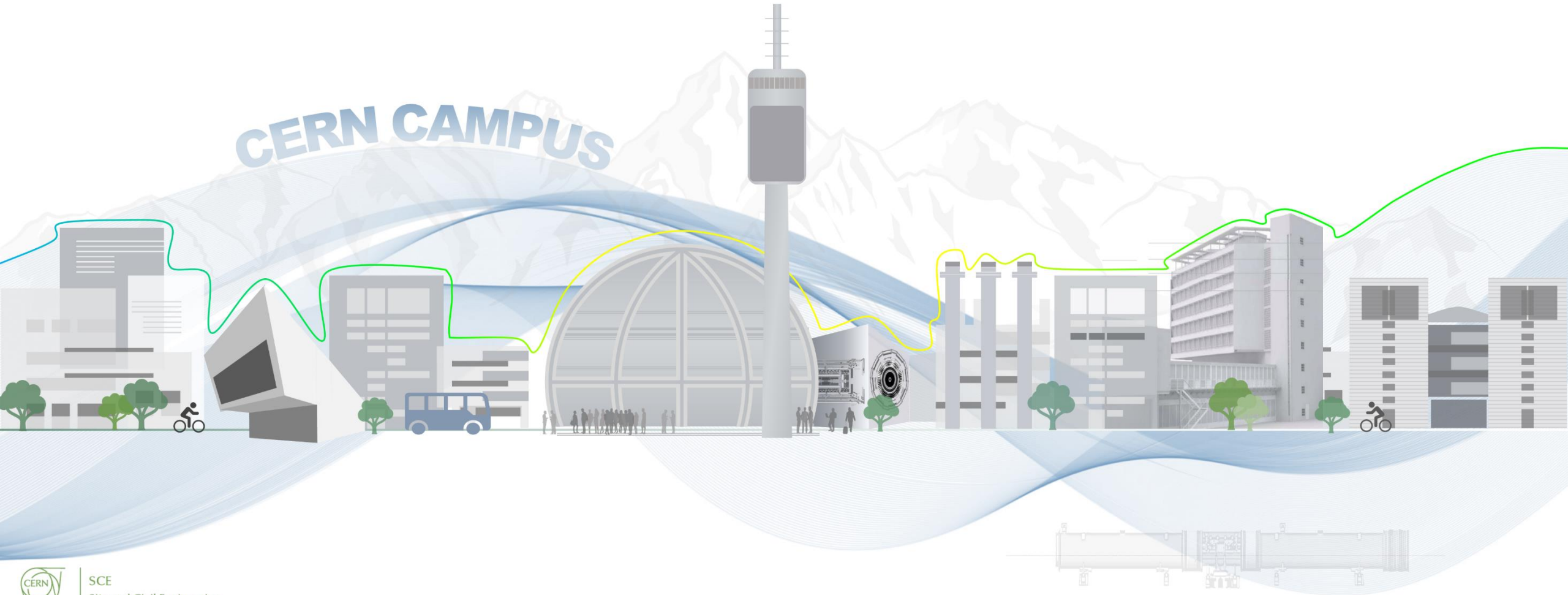
Phonebook
Calls, Email, Location

Maps
Search, Floors, Points of Interest



Thank you!

Questions?



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667

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