



# Site and Civil Engineering Department

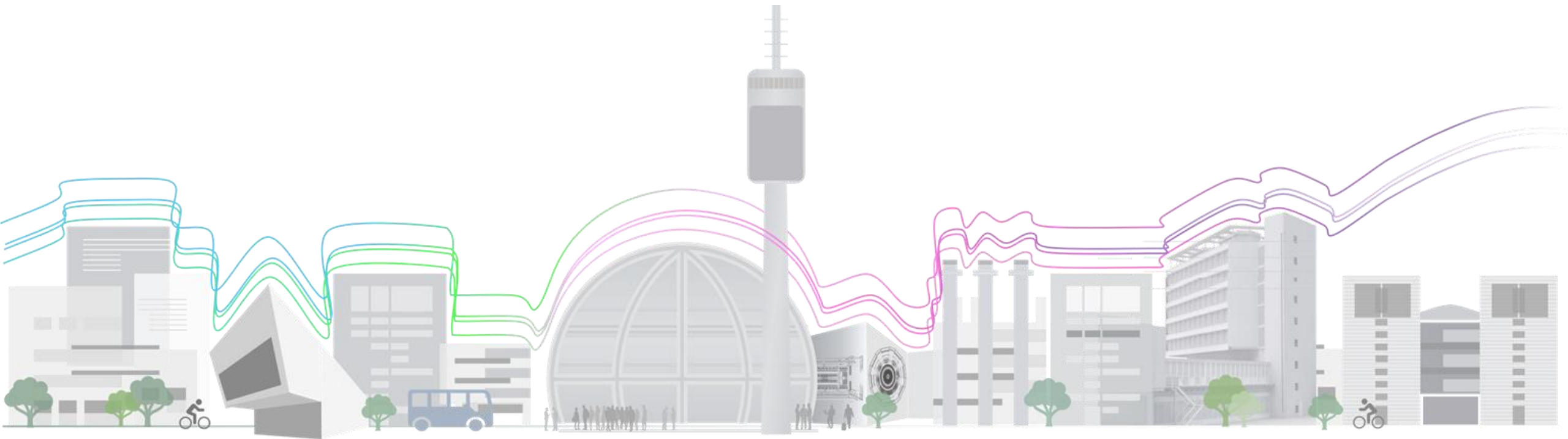
Site consolidation and new buildings programme  
Campus Services

G.Bollinger, Mar Capeans, D.Constant, A.Martinez (CERN SCE)

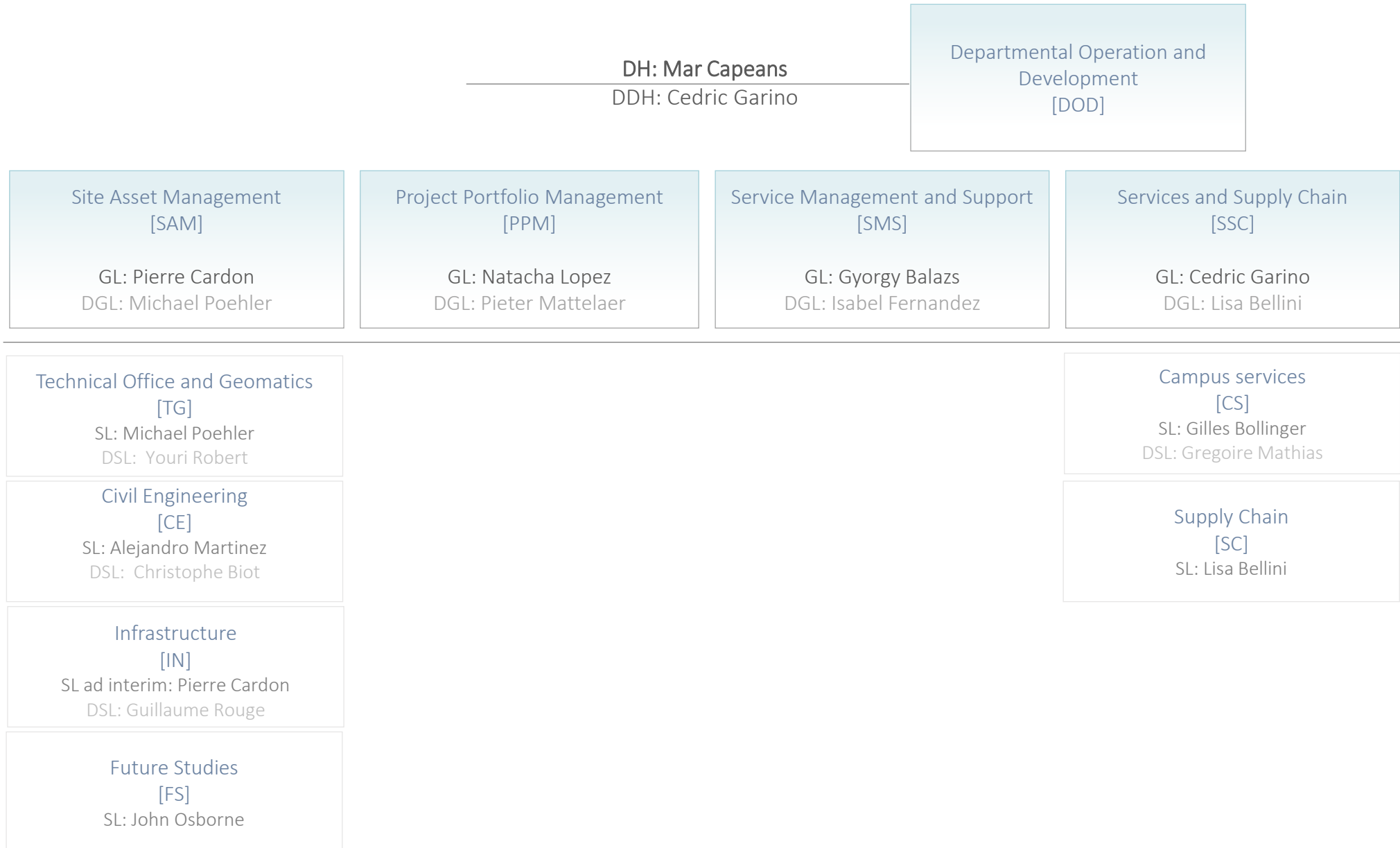
26 November 2024

# Site and Civil Engineering Department

The Site and Civil Engineering (SCE) Department manages and develops CERN's real estate assets and infrastructures in agreement with CERN's scientific strategy, as well as all the services related to the caretaking and operation of the CERN site.



# SCE Organization today



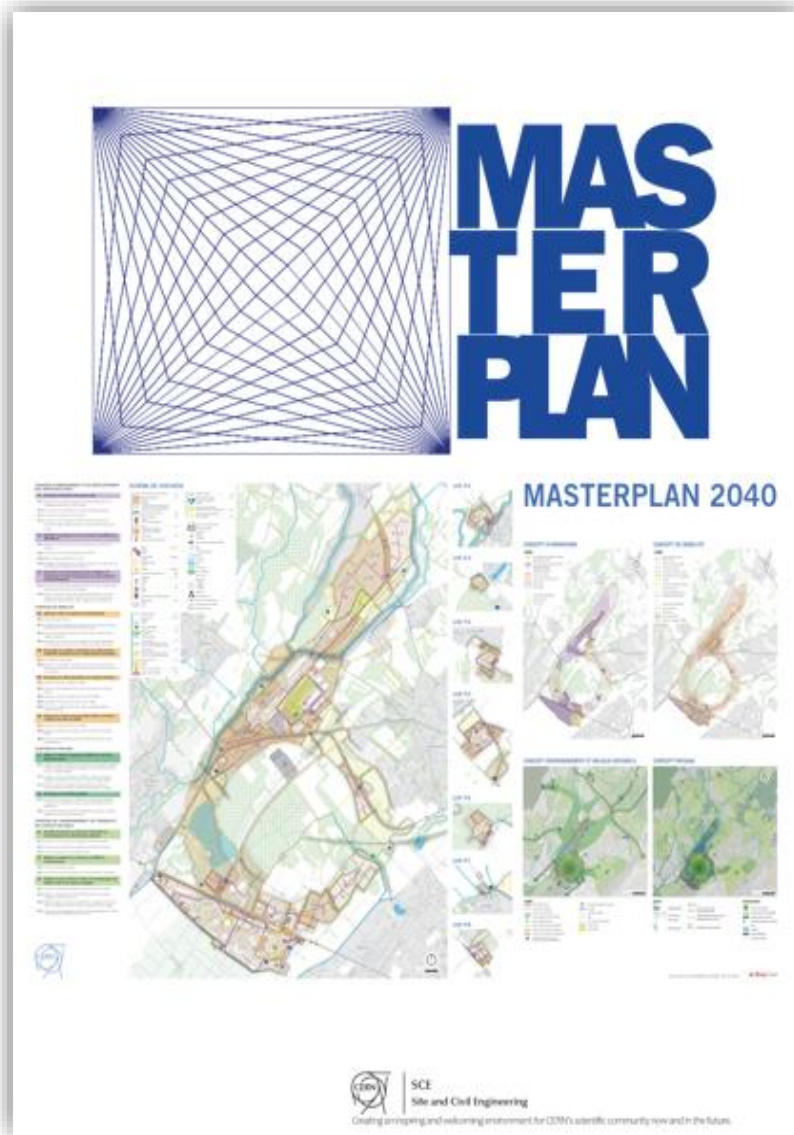
# CERN Campus

- 590 ha (220 fenced)
- 2 main sites and 15 satellite sites
- 670 buildings from 10 m<sup>2</sup> to 20.000 m<sup>2</sup>
- 65% built before the 70's
- 70 km tunnels and 80 caverns
- 30 km roads
- 1000 km technical galleries and trenches
- 7000 persons/daily
- 490 hostel rooms
- 8500 working places
- 4300 parking places in Meyrin, 1400 in Prévessin
- 25000 daily movements to- and inter-sites
- Public transport links in CH, not in FR



# CERN Masterplan 2040




[CERN's Masterplan 2040](#) est un document destiné à informer et à inspirer un dialogue raisonné et significatif sur la gestion et la mise à jour du site du CERN. Il s'agit donc d'un document clé pour **guider et améliorer la gestion et l'utilisation du sol et de l'espace au CERN.**



# CERN Masterplan 2040




Canton de Genève  
Office de l'urbanisme








## Guide interne pour le développement du site de Meyrin du CERN et des terrains mis à disposition par la Confédération suisse dans le cadre du contrat de superficie de 1998

**Rapport explicatif**



Version finale  
29 novembre 2021

### 7.3 Secteur potentiel B



#### Contraintes

- > Axe principal de circulation à reconvertir.
- > Environ 350 places de stationnement existantes.
- > Bâtiment pollué (102 – en cours de dépollution).

#### Opportunités

- > Espace mobilisable pour une densification à court terme.
- > Offrir un nouvel espace central proposant des cafés, restaurants et services de proximité autour d'une place aménagée et arborée.
- > Affirmer la centralité du site par une concentration de bâtiments administratifs complétée d'un bâtiment haut perceptible dans le paysage urbain du CERN.
- > Libérer en partie l'espace du stationnement de surface et réaliser des aménagements extérieurs.
- > Profiter de la relocalisation du traitement de surface dans le bâtiment 107 pour initier la mutation du secteur.

#### Potentiel B :

Affectations préférentielles	Administratif, recherche
Densité cible	élevée
Nombre de niveaux hors sol	R+5 à R+14
Surface de planchers potentiels	*32'000 m <sup>2</sup>
Surface existante à relocaliser	*6'700 m <sup>2</sup>
Surface de planchers supplémentaires	*25'300 m <sup>2</sup>



Fig. 43 : Image du possible à terme (horizon 2030)

#### Principes de mise en œuvre

La densification pourrait s'initier par la démolition et reconstruction des bâtiments (B1 et B2) en 1 ou 2 étapes, y compris un stationnement de surface à côté du bâtiment B1, accessible directement depuis le réseau principal. La démolition du bâtiment 108 permettrait la réalisation d'un nouvel espace végétalisé en front d'esplanade. Dans le même esprit, et à plus long terme, un autre bâtiment (B4) pourrait prendre place sur le bâtiment 72.

#### Processus et étapes de mise en œuvre intentionnels :

- 1) Démolition de l'ensemble de bât. 155, 166, 102...
- 2) M2 ou plan d'affectation permettant la réalisation de bâtiment haut (> 21 m. de la zone 3)
- 3) Réalisation bât. B1 et B2 y compris stationnement B1, B2
- 4) Aménagement de l'esplanade (modération trafic)
- 5) Éventuellement démolition bâtiment 168, relocalisation en B3 et réalisation des aménagements paysagers et espaces verts B3
- 6) Démolition bâtiment 72 et réalisation bâtiment B4 B4

ESMS NO. 246205  
REV. VALIDITY 0.1  
DRAFT

# WASTE

## CERN WASTE MANAGEMENT ROADMAP

**Abstract**  
This document enumerates CERN's long-term objectives, strategy, and action plan to ensure an optimal waste management fully aligned with local regulations and CERN's environmental objectives.

Prepared by: C. Garino	Date: 2022-06-XX
Verified by: SCE Group Leaders	Date: 2022-MM-00
Approved by: M. Caporaso	Date: 2022-MM-00
Distribution: N.Surname (DEP/SRP) (in alphabetical order) can also include reference to committees	

**HISTORY OF CHANGES**

Rev. No.	Date	Description of Changes (major changes only, minor changes in EDMS)

Page 1 of 4  
Template (ESMS No.: 246205)

ESMS NO. 246206  
REV. VALIDITY 0.1  
DRAFT

# STORAGE

## CERN STORAGE MANAGEMENT ROADMAP

**Abstract**  
This document enumerates CERN's long-term objectives, strategy, and action plan to ensure an optimal use of CERN storage capacity.

Prepared by: C. Garino	Date: 2022-05-XX
Verified by: SCE Group Leaders	Date: 2022-MM-00
Approved by: M. Caporaso	Date: 2022-MM-00
Distribution: N.Surname (DEP/SRP) (in alphabetical order) can also include reference to committees	

**HISTORY OF CHANGES**

Rev. No.	Date	Description of Changes (major changes only, minor changes in EDMS)

Page 1 of 3  
Template (ESMS No.: 246206)

ESMS NO. 246203  
REV. VALIDITY 0.1  
DRAFT

# MOBILITY

## CERN MOBILITY ROADMAP

**Abstract**  
This document enumerates CERN's long-term objectives, strategy, and action plan to ensure the mobility of all persons entering the Organisation in a transparent, efficient, and sustainable manner.

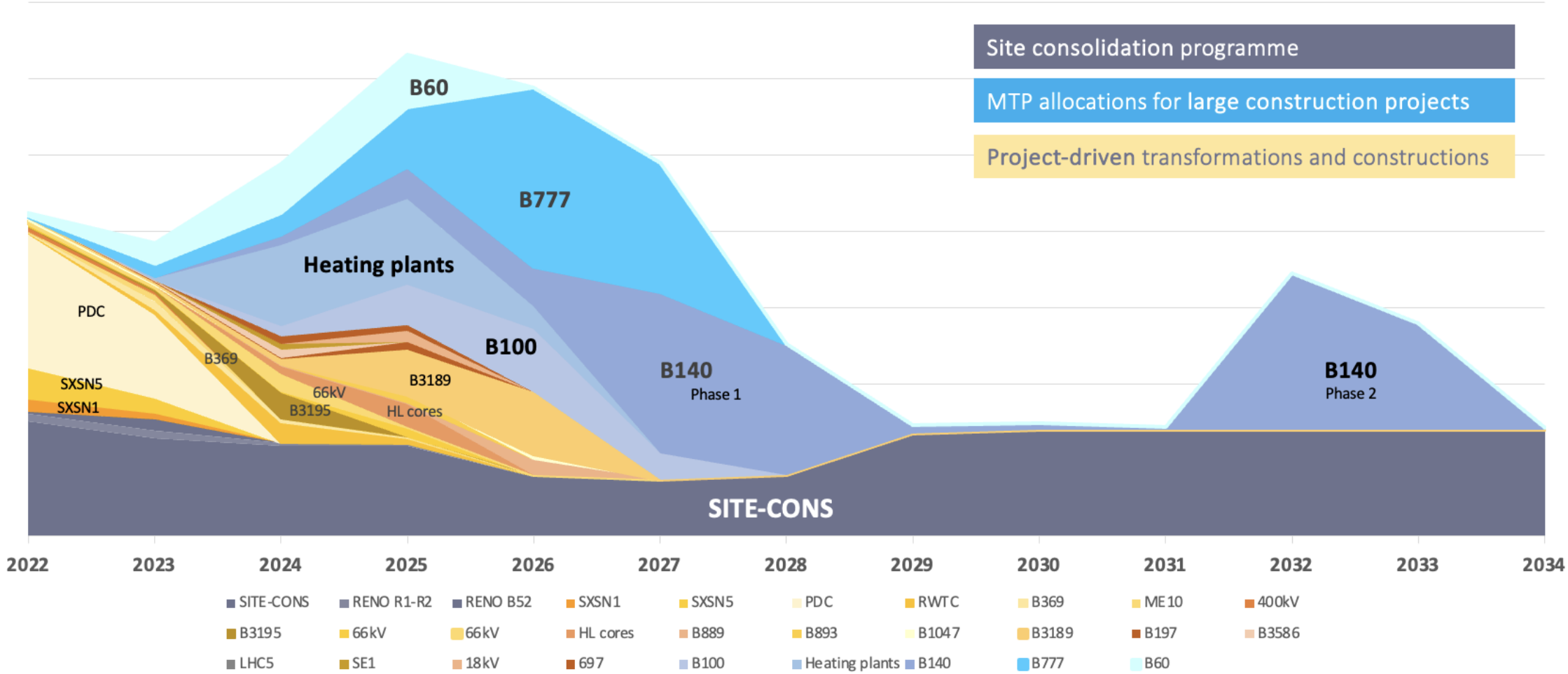
Prepared by: I. Bugar Alonso, M. Pfeiffer	Date: 2022-03-26
Verified by: SCE Group Leaders	Date: 2022-MM-00
Approved by: M. Caporaso	Date: 2022-MM-00
Distribution: N.Surname (DEP/SRP) (in alphabetical order) can also include reference to committees	

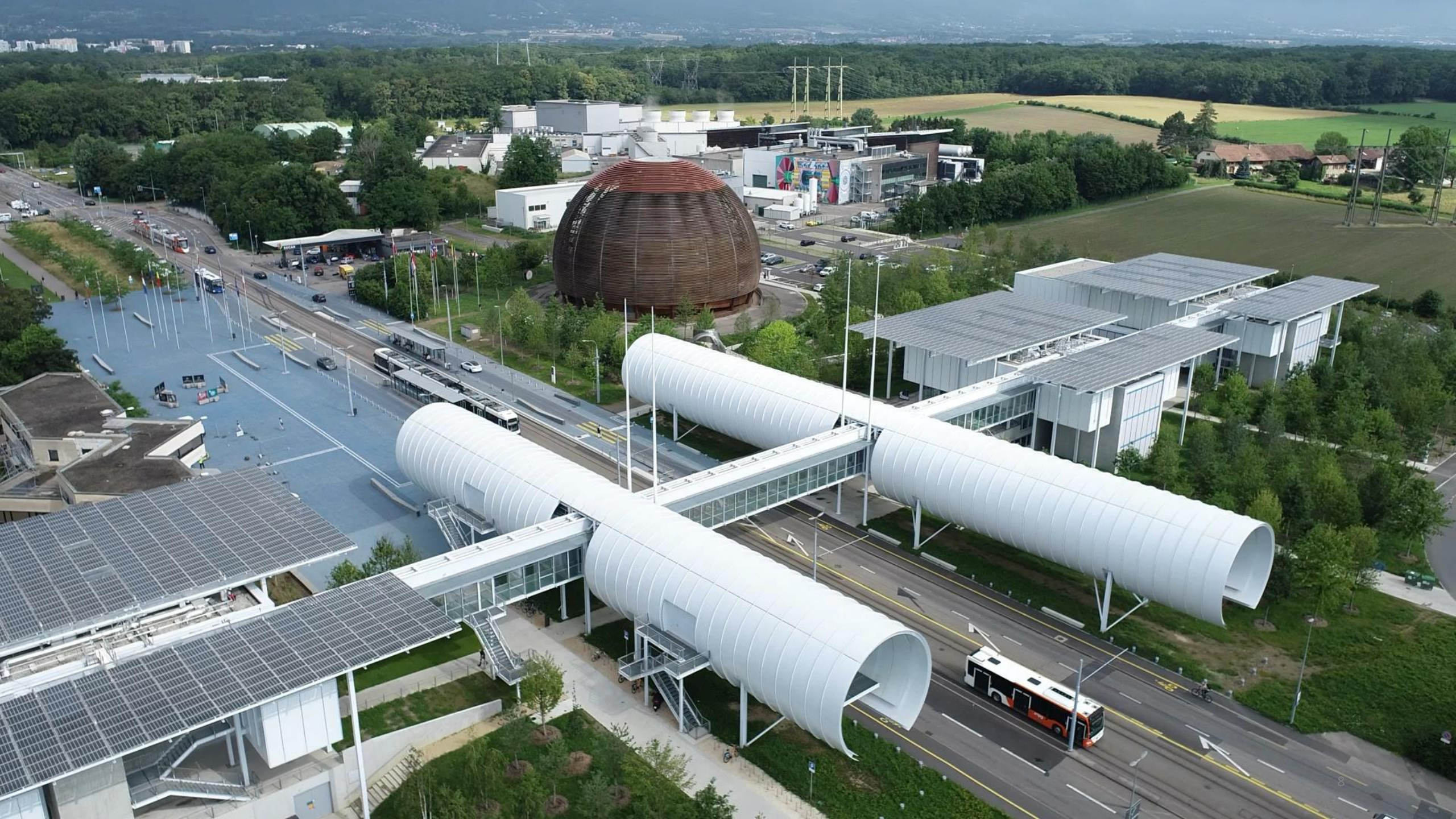
**HISTORY OF CHANGES**

Rev. No.	Date	Description of Changes (major changes only, minor changes in EDMS)

Page 1 of 3  
Template (ESMS No.: 246203)

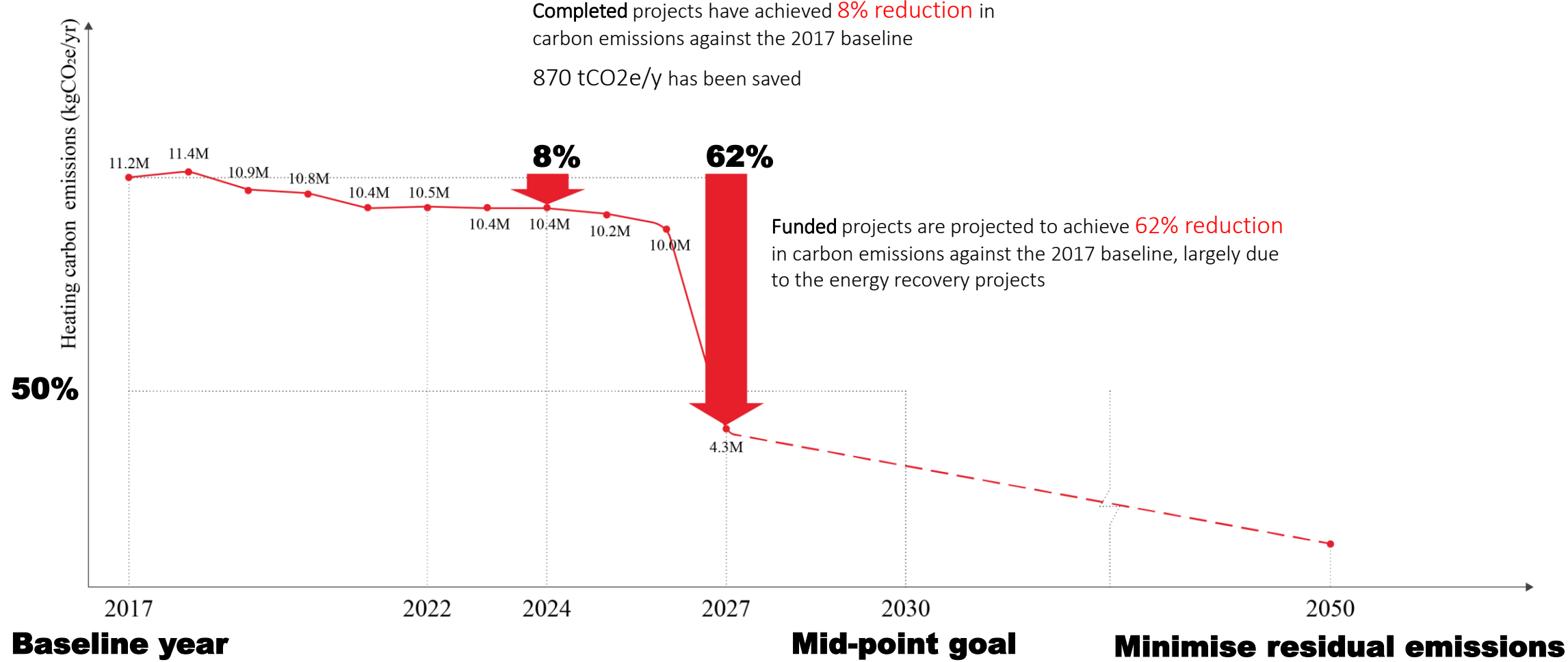
# Buildings programme timeline





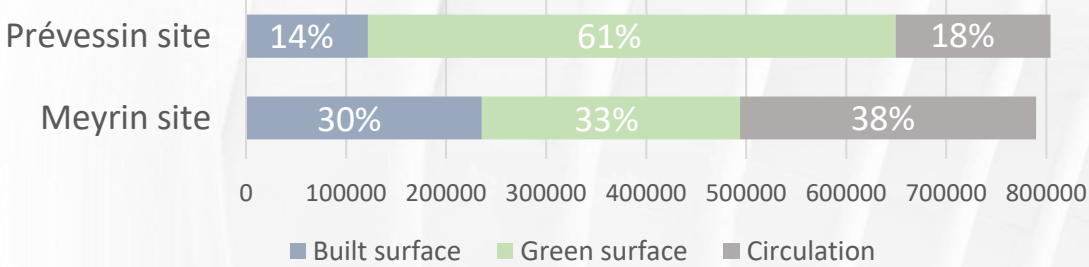


# Progress to date reducing heating's carbon emissions



# CERN Sites

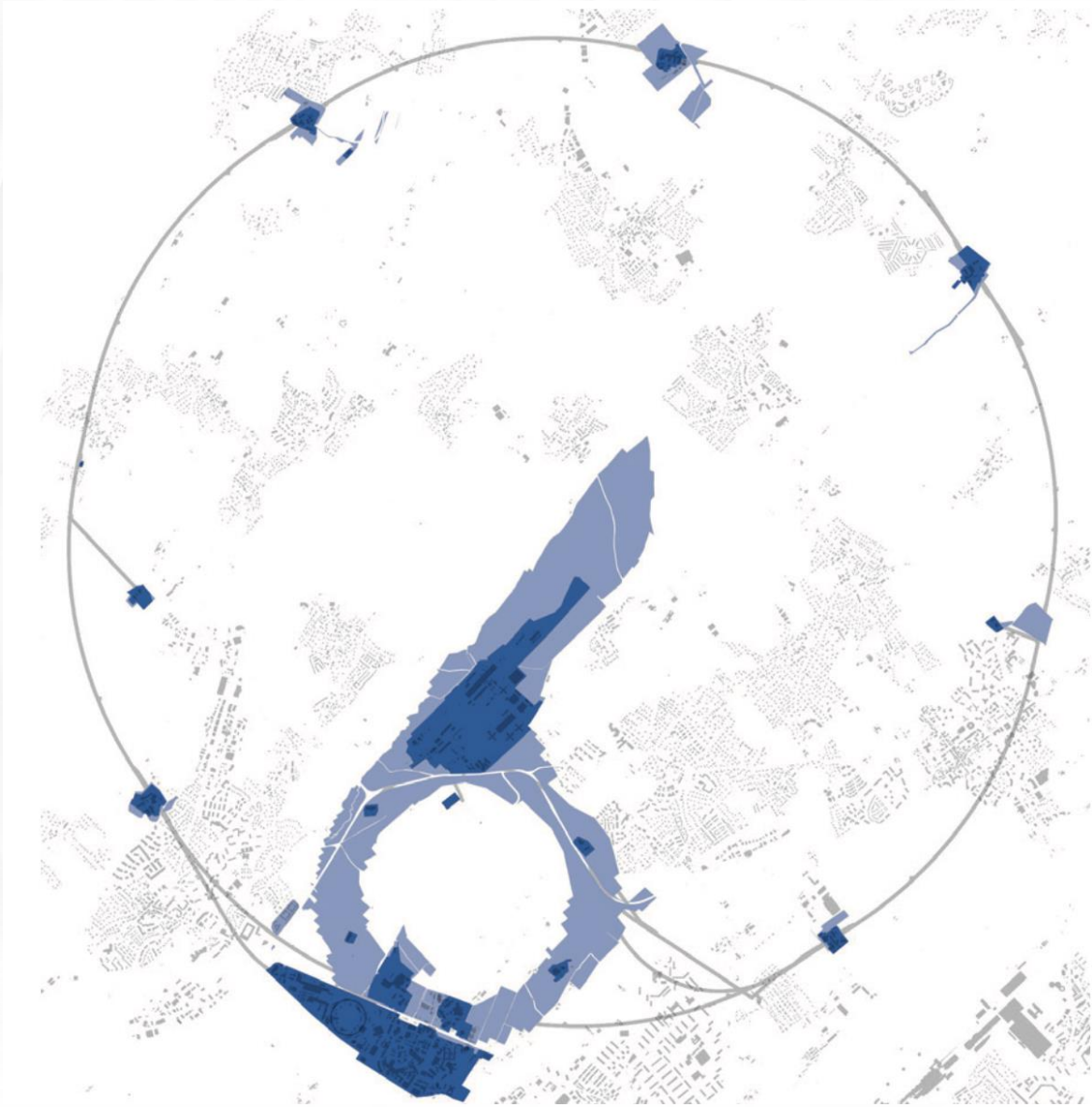
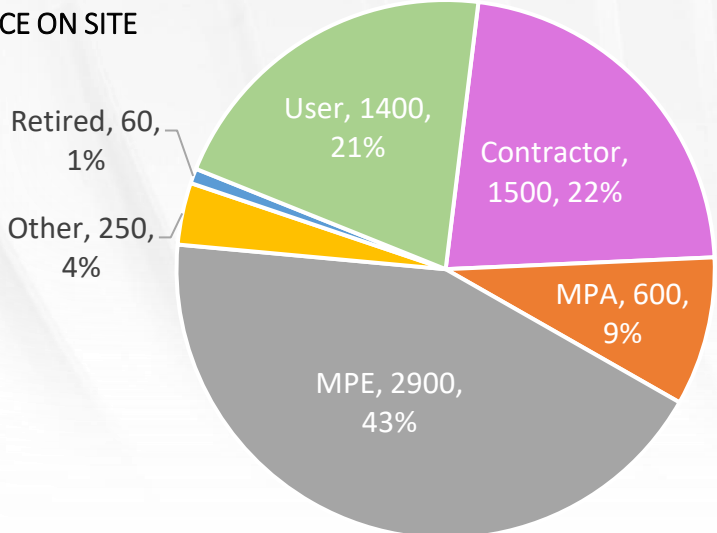
## FENCED SITE



## TERTIARY INFRASTRUCTURES AT CERN (m²)

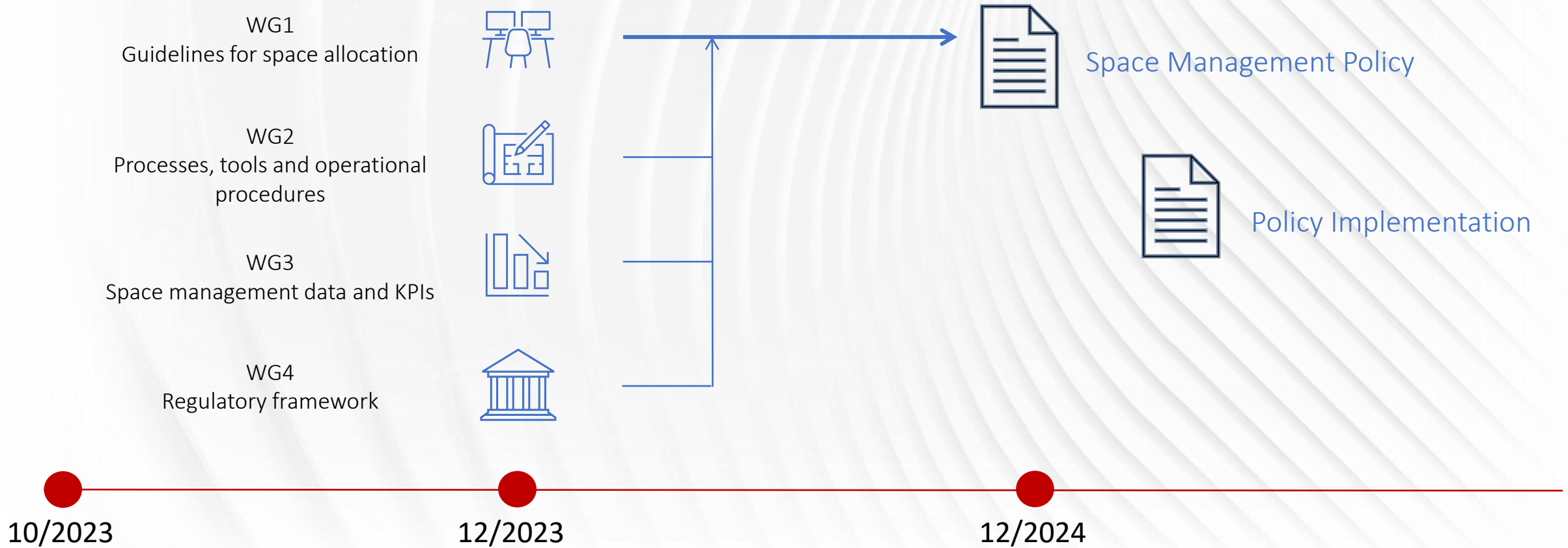


## TYPICAL PRESENCE ON SITE



# Efforts towards a Space Management Policy

**Collaborative effort:** dedicated Working Groups integrating the diverse CERN community



# Efforts towards a Space Management Policy

## Principles

1. **Space as a Valuable Resource:** The physical space required for CERN personnel to work is a precious resource that **should be managed similarly to financial and personnel resources**.
2. **Applies to All Personnel:** Space management applies to **all persons** working at CERN, regardless of status.
3. **Equitable Allocation:** Space belongs to CERN and should be allocated equitably and transparently to activities and services based on a justified and continued need, and **subject to regular reviews**.
4. **Adaptability to Changing Needs:** Space allocation should **adapt to the changing needs of activities and services**, while considering the needs of others, ensuring an appropriate and equitable distribution.
5. **Shared Use to Avoid Duplication:** Wherever possible, space should be shared to avoid duplication of surfaces, equipment, and services.
6. **Applicability across CERN space:** Space management applies to all existing and future physical spaces: offices, conferences and meeting rooms, technical and operational workspaces such as laboratories, workshops, assembly halls, etc., storage areas, and common spaces. It is not concerned with underground accelerators, experiment equipment, beamlines, technical galleries, tunnels, and roads. Although not directly involved, space management has a vested interest in site layout, site development (Master Plan), and building maintenance to ensure safety, hygiene, and well-being are upheld.

## Objectives

1. **Maximize Space Utilization:** Periodic reviews of space allocation are conducted to confirm or reallocate space, ensuring that CERN's priorities and needs are continually met.
2. **Efficient Use of All Spaces:** Space management ensures optimal use of all types of physical spaces to support the organization's evolving requirements.
3. **Transparent Space Allocation:** Space allocation is done transparently at all levels in the Organization with regular reviews to ensure consistency and equity.
4. **Publication of Guidelines:** **Guidelines are published to ensure fair and equitable space allocation across departments and units, considering HSE guidelines and rules, as well as the roles, functions and work models of the concerned personnel.**
5. **Stakeholder in Development and Maintenance:** space management has a direct link with site development (Master Plan).
6. **Safety and Security Prioritization:** **Security of people and goods and safety** are major drivers of space management and guidance.

Endorsed by SMF on 8.10.24

# Guidelines, working on

## Governance model:

- **Enhanced SMF Role:** Departments will actively manage space, allowing flexibility for specific needs.
- **Aligned Space Allocations:** Assign spaces to projects and activities from the beginning for efficient utilization.

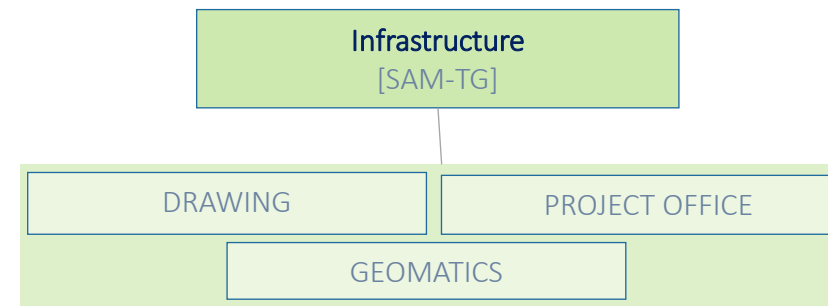
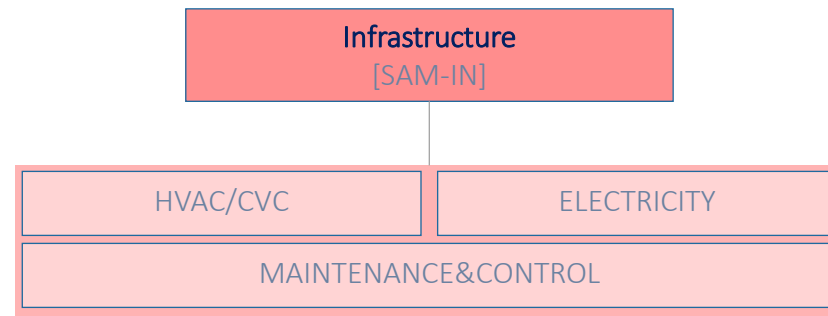
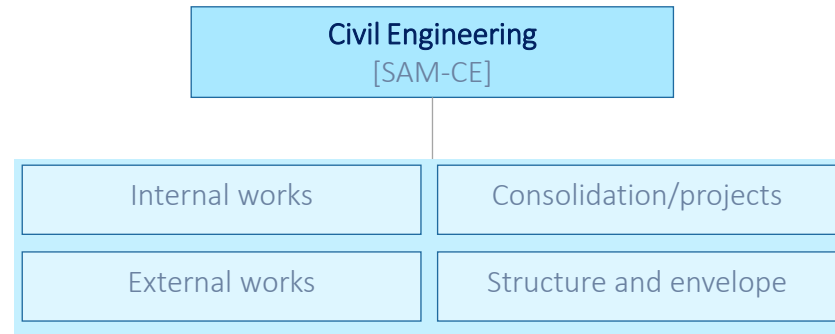
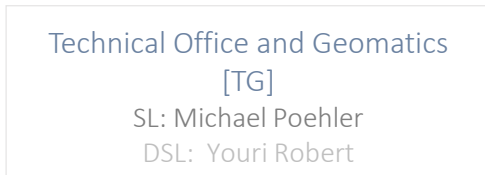
## Transparency:

- **Optimized Tools:** Streamline existing tools and test new ones to support dynamic, department-driven space allocation.
- **Record-Keeping:** Maintain a detailed history of space allocations
- **Quasi-Real-Time flexibility:** monitor capacity dedicated to experimental teams.

## Implementation:

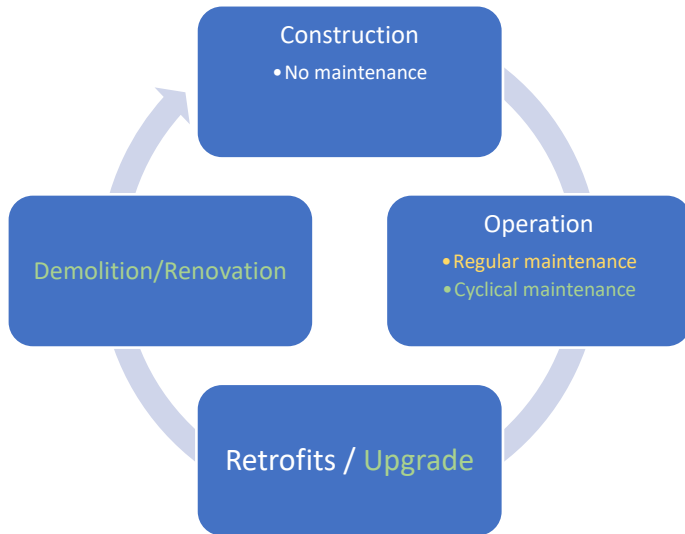
- **Phased Rollout:** Begin gradual implementation of the policy, guidelines, and tools with 2-3 pilot projects in interested departments throughout 2025.

# SCE-SAM Organization today



# MAINTENANCE/OPERATION and CONSOLIDATION

## Infrastructure lifecycle



## Maintenance

- Corrective maintenance
- Preventive regular maintenance
  - Roofs
  - Buried networks
  - Machine building's exterior doors
  - Smoke extraction systems
  - Green spaces
- Safety verifications to technical installations
- Emergency intervention

## Consolidation

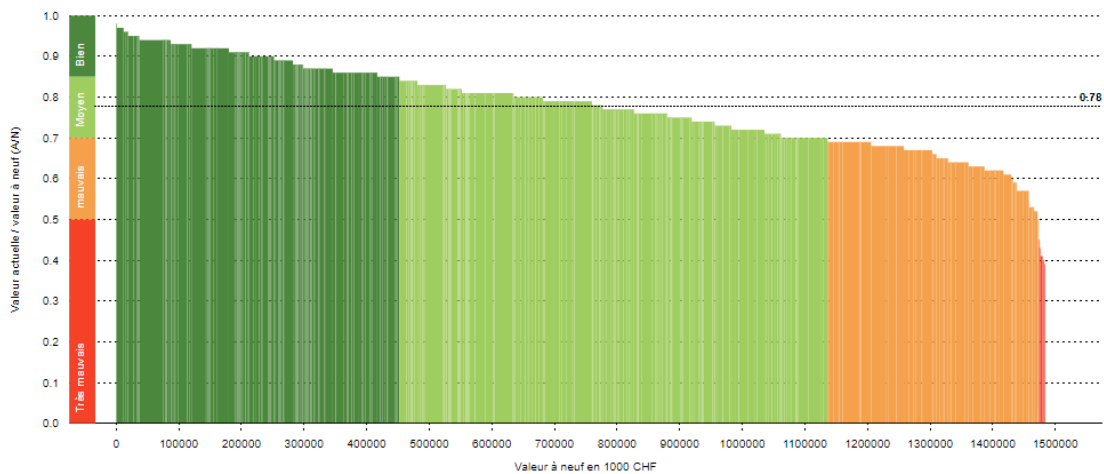
- Planification cyclical maintenance
- Well identified set of works planned to 10-years time
- Group activities in the same area
- Aim: full renovation
- Emergencies that cannot be covered by Operation budget
- Safety works : asbestos removal, compliance with fire standards, roof access, etc.

# Site Consolidation - Technical assessment (STRATUS)

## STRATUS tool

As a real state assets management tool, STRATUS is used to monitor the buildings' conditions and keep updated data about the buildings' construction elements renovation optimal due dates, as well as a very rough preliminary renovation cost estimate.

## Overall conditions of CERN buildings



## Example : Building 13

Evaluation de l'objet | Année d'évaluation 2023  
Etat parc Immobilier CERN 01/12/2022  
Cern

### Données de base

#### Batiment bureaux laboratoires



N° de bâtiment	13
Identification	13
Rue/N°	Site de MEYRIN
NPA/localité	1217 Meyrin
Pays	Schweiz
Manager d'objets	admin
Manager de portefeuille	admin
Série d'éléments de construction	Bât. bureaux complexe
Genre de bâtiment	06 Commerce et administration
Type de bâtiment	03 Immeubles de bureaux simples
Département	EP
Libre1	Tertiaire
Libre2	-
Libre3	-
Libre4	-
Stratégie	Standard
Année de construction	1965
Volume	12400 m3
Surface	3641 m2
Valeur d'assurance	6676 kCHF   Année 2022
Facteur de correction	1.13
Parties non assurées (*)	0 kCHF   Année 0
Propriété de tiers (-)	0 kCHF   Année 0

### Saisie de données sur le terrain

Éléments de construction	Descriptif	Valeur d'assurance	Sollicitation	Résistance	Renouvellement	Élévation	Coût part
Gr. oeuvre massif	Structure en BA	2012	0.90	24			
Gr. oeuvre autre		2012	0.00	0			
Toit en pente		2012	0.00	0			
Toit plat	Étanchéité bitumeuse.	2012	0.93	5			
Façades	Plaques Eternit, béton peint	2012	0.80	10			
Fenêtres	Hétérogène.	2012	0.75	9			
Install. de courant fort		2012	0.84	23			
Install. de courant faible	DI	2012	0.87	2			
Générateur de chaleur	Sous-station renouée en 2022	2022	1.00	1			
Distribution de chaleur	Radiateurs	2012	0.75	1			
Centrale installation de clim.	Refroidisseur sur toiture (2012), sous-station	2012	0.95	1			
Réseau distrib. install. de clim.	Refait en 2012	2012	0.95	2			
Sanitaires	Installations sanitaires renouées en 2011	2012	0.95	4			
Install. de transport	Monte-charge	2012	0.75	0			
Aménag. int. substance	Hétérogène.	2012	0.80	12			
Aménag. int. surfaces	Hétérogènes.Faux plafond et peintures circulation refait en 2012	2013	0.86	6			
Dispon. long terme		2012	0.00	0			
Dispon. moyen terme		2012	0.00	0			
Dispon. court terme		2012	0.00	0			
<b>Total</b>							<b>100</b>

### Remarques

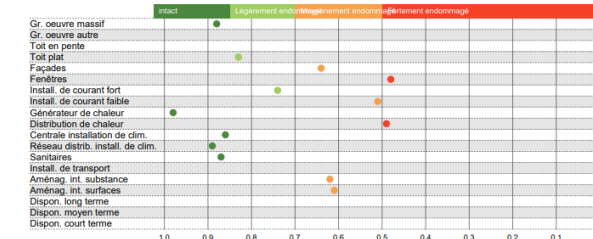
Travaux en sous-sol en cours. Travaux installations froide en cours (pour laboratoire). Froide probablement aussi pour bâtiment 14.

Date d'impression: 16.01.2023, 09:37 | Alejandro Martinez

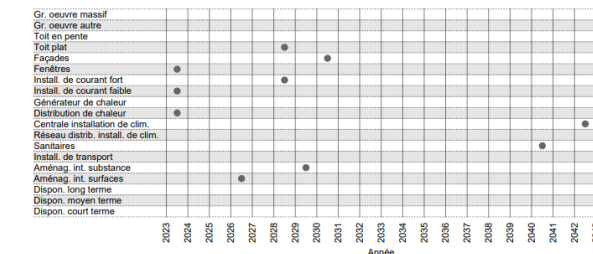
Page 1/3



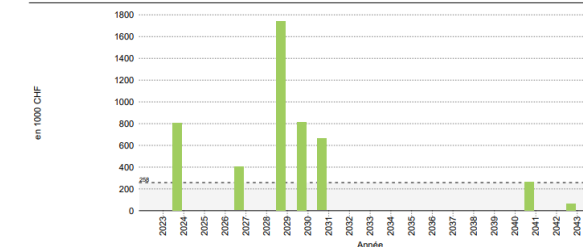
### Etat constructif



### Échéance de réfection



### Frais de maintenance et de réfection





# Site Consolidation - Technical assessment (STRATUS)

## STRATUS tool - input for each building

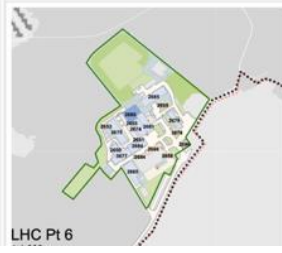
Données de base	Eléments de construction	Images	historique	Stade de l'élaboration	Documentation
N° de bâtiment	2885			Désignation	Batiment pour experience
Identification	SX8			Rue/N°	Site de POINT 8 LHC/LEP
Manager d'objets	admin			NPA	01210
Manager de portefeuille	admin			Localité	Ferney-Voltaire
Année de construction		1988		Pays	France
Monnaie	CHF			Série d'éléments de construction	Halle de product.
Valeur d'assurance	kCHF	3839	2022	Genre de bâtiment	03 Industrie
Facteur de correction		0.83		Type de bâtiment	06 Halles industrielles
Parties non ass. (+)	kCHF	0	0	Departement	EP
Propriété de tiers (-)	kCHF	0	0	Libre1	Machine
Volume	m3 SIA	19231		Libre2	
Surface	m2	1553		Libre3	
Libre4					
Saisie effectuée par	Wolfgang Bastien			Mutation effectuée par	admin
Date de saisie	11.05.2021			Date de mutation	
Ne pas recalculer	<input type="checkbox"/>	0		Stratégie	Priorité moyenne

Données de base	Eléments de construction	Images	historique	Stade de l'élaboration					
Nom élément	1.00	0.95	0.90	0.85	0.80	0.70	0.60	0.50	0.20
Elément de construction	Descriptif	Année	A/N	Ant.	Sollicitation	Résistance			
Gr. oeuvre massif	Structure BA : radier	2021	0.95	8	+ -	+ -			
Gr. oeuvre autre	Structure metal	2021	0.93	18	+ -	+ -			
Toit en pente	Revêtement tole profile	2021	0.90	1	+ -	+ -			
Toit plat	Etanchéité bitumineuse + gravie Verrière endommagé	2021	0.85	6	+ -	+ -			
Façades	Cassette métallique ventilé + pe Partie polycarbonate en mauvai	2021	0.85	15	+ -	+ -			
Fenêtres	PVC d'origine double vitrage	2021	0.75	2	+ -	+ -			
Inst. électriques	Element usuel	2021	0.90	0	+ -	+ -			
Générateur de chaleur		2021	0.00	0	+ -	+ -			
Distribution de chaleur	Réseau de distribution 0.85	2021	0.85	0	+ -	+ -			
Sanitaires		2021	0.00	0	+ -	+ -			
Inst. techniques	Clim : monobloc d'origine 0.6	2021	0.60	0	+ -	+ -			
Aménag. int. substance	Cloison amovible + Faux planct	2021	0.83	10	+ -	+ -			

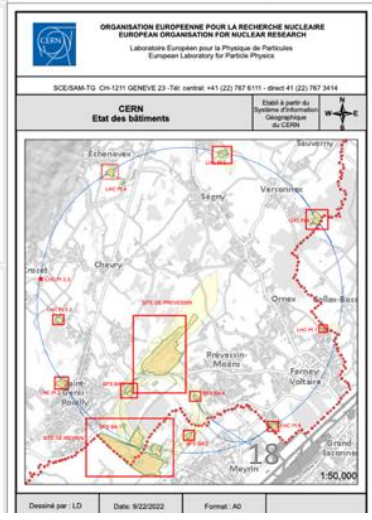
# Site Consolidation - Technical assessment (STRATUS)

Condition of Assets  
Stratus Update 2023  
451 buildings

- < 0.61 : Candidate to demolition
- 0.61 - 0.68 : Candidate to global renovation
- 0.69 - 0.76 : Candidate to partial renovation
- 0.77 - 0.84 : Candidate to deep maintenance/light renovation
- 0.85 - 1 : Good status
- Not classified



- Etat des bâtiments
- Full renovation is required
  - Rather important renovation is required
  - Some elements require renovation
  - No renovation needed
  - Bâtiment non renoué



# Site Consolidation

## Strategy

Entry into the SITE CONS programme

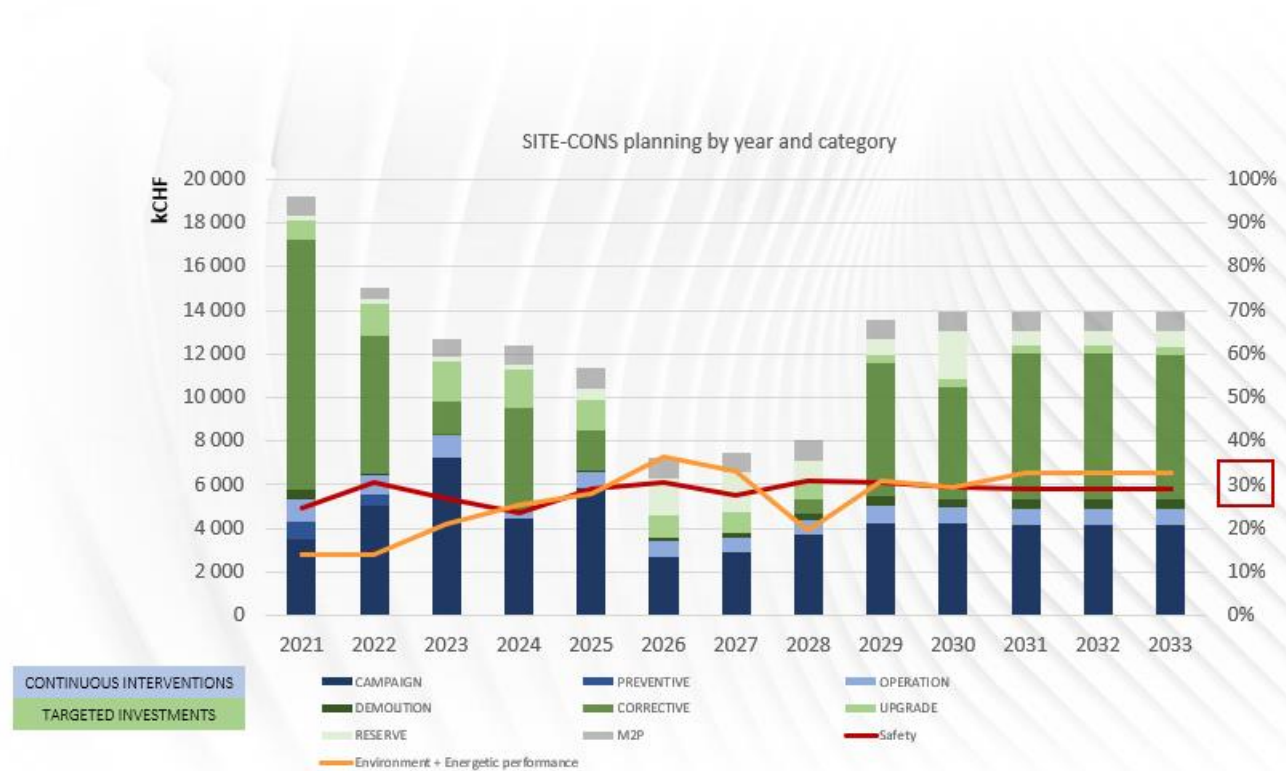
Stratus outcome (<0.8) x 3S Factorization:

- Strategy
- Safety
- Sustainability

Quarterly Steering committee – Decision gate



## Capital investment plan



# Site Maintenance

## INFOR EAM

**DETAILS**

Description\* Peinture

Equipment\* K5-4-MUR-PEINTURE 4 - MUR PEINTURE

Location 4/R-017 LABORATOIRE

Dep./Service Unit\* KFM63 GENIE CIVIL S249 - Peinture, platerie & revetement de sols

Type\* T1 - Work - Various, Divers

Status\* T - Completed, Terminé

Priority M - Moyenne

Class KT1-M Travaux de Maintenance

Standard WO K-T1M Travaux de Maintenance

Budget Code 31513 Building maintenance

Target Value 1543.600000

Parent Work Order

Service-now Number RQF2541025

EDH Doc. Number 10137139

Warranty

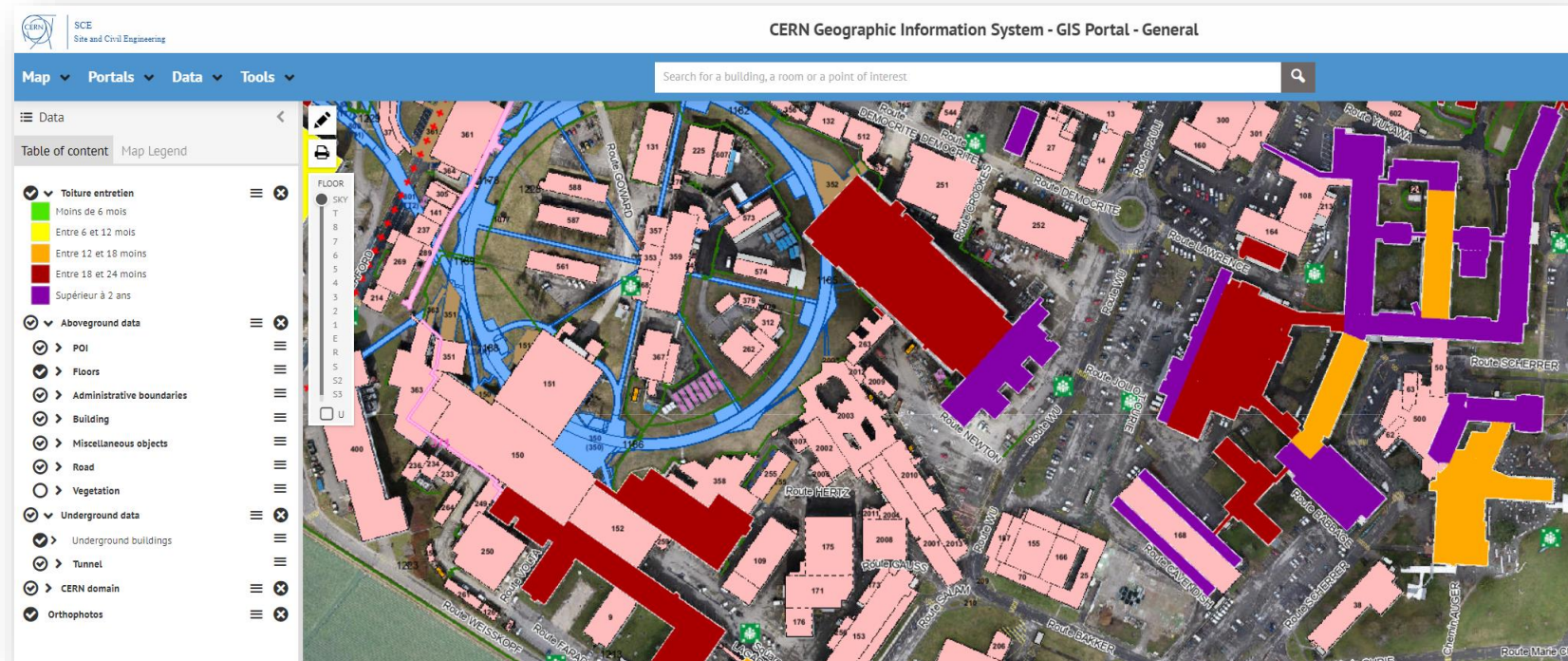
Downtime Hours

**SCHEDULING**

Created By	SNOWEAM Service-Now to Infor	Date Created	25-Jan-2024
Reported By	74174 CASENOVE SONIA		

## GIS

- GIS layers for roofs, buried networks, roads and green spaces maintenance



# Services and Supply Chain mandate

The Services and Supply Chain Group (SCE-SSC) provides the CERN community with high standard campus experience and optimal supply chain execution by offering the following rationalized, efficient, and transparent services:

- Campus Services (CS)
  - Person mobility: mobility center, shuttle busses, cars, bicycles
  - Housing: managing CERN's hotel, CERN's apartments, Foyer Schuman's reservations
  - Catering: restaurants, cafeterias, vending machines, water fountains (network-fed)
  - Cleaning & waste management in surface buildings and undergrounds premises, Special waste
- Logistics
  - Shipping: goods transport organization
  - Goods and material logistic flow including goods reception, internal distribution and internal removals
  - Mail distribution: diplomatic mail, inbound, outbound and intra flows
  - Storage of accelerator equipment
  - VAT, fiscal, customs, export control advisory
  - Installation: removals, special car plates, diplomatic privileges
- Supply Chain
  - CERN stores warehousing operations including central stores, raw material workshop inbound and outbound
  - Standardization of materials
  - Replenishment of standard materials

## 3 RESTAURANTS

R1

~1600 meals per day

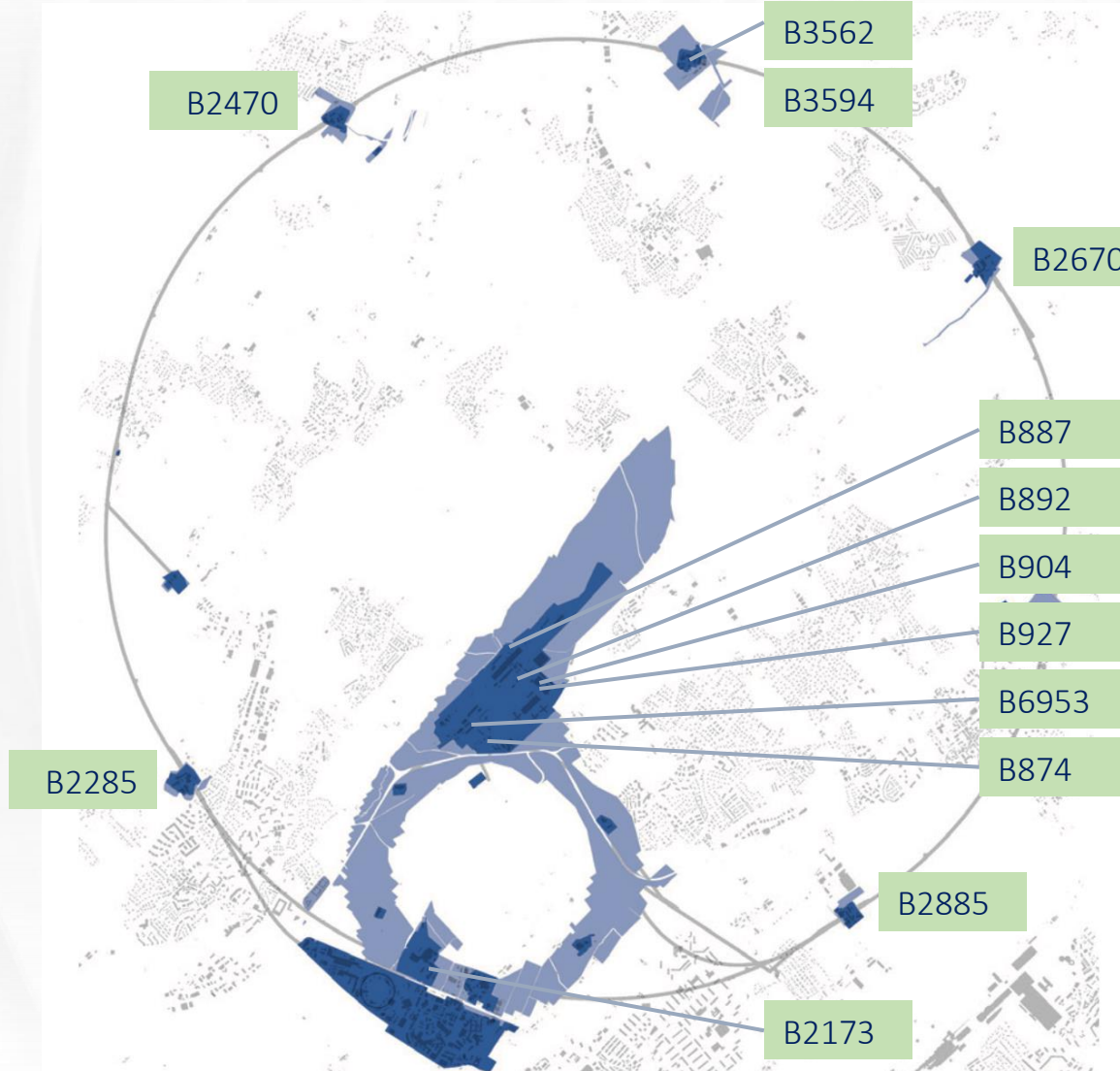
R2

~600 meals per day

R3

~300 meals per day

## 70 VENDING MACHINES



## 300 WATER POINTS

150 bottled water coolers



THE WATER & COFFEE COMPANY

150 network-fed water coolers



**1 three-building hotel**

450 bedrooms (single or twin-bedded room, with desk and closet  
(no fridge, no tv)  
3 shared kitchen & laundry rooms  
14 chf – 58 chf per person and per night  
70% annual occupancy rate  
7 nights average length of stay  
50/50 booking engine / direct booking  
Operated by ext. company under CERN supervision.

**+ 150 bedrooms reserved for CERN in external residence**

**13 furnished apartments**

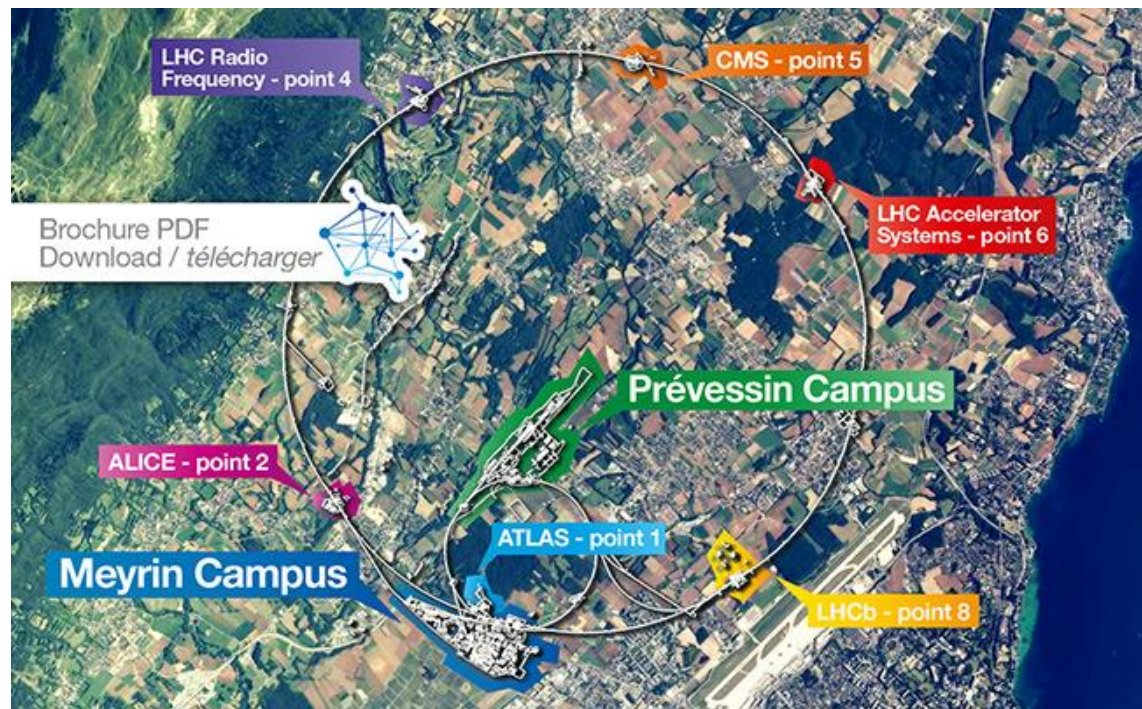
< 6kms from CERN  
Studio, 1 or 2 bedrooms  
1230 chf – 2533 chf per month  
85% annual occupancy rate  
Operated by external company under CERN supervision



# Cleanliness, Waste & Recovery

## Cleaning Service

- 600 cleanable buildings across all sites
- Total cleanable area of 340,000 m<sup>2</sup>
- Surface and underground areas (including offices, public areas, workshops, warehouses, technical zones, with radioprotection)



### Recuperation and Sales

Recycles and sells all equipment that the CERN no longer needs, such as outdated or surplus items

### Conventional waste service

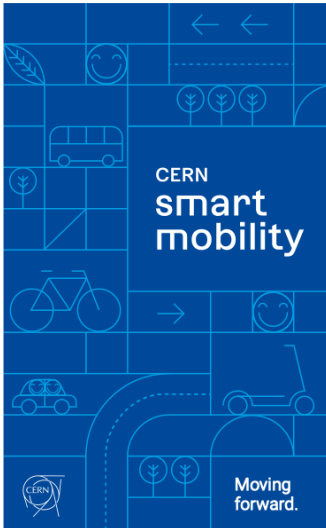
Ensure contract management

### Ext. company

Performs collection services and provides staffing



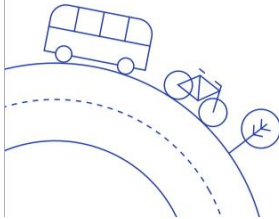
# CERN smart mobility



## Your individual commitment will allow us to go further.

While considering the specific mobility constraints of our activities and our sites, let's fill our journeys with a dimension of eco-responsibility, in line with CERN's commitments to environmental protection.

Together, let's accelerate the mobility of tomorrow.



## Bicycle or electric scooter. Quickly by the handlebars.

CERN has a fleet of self-service electric bicycles and scooters, which can be used free of charge to travel within or between the Meyrin and Prévessin sites. Install the Mobility Parc application on your smartphone, locate a nearby vehicle, and off you go!

### Available vehicles

<b>80</b> electric bicycles	<b>20</b> electric scooters	Usable for 2 hours 24/7
		Protective equipment required.
Install the Mobility Parc application		

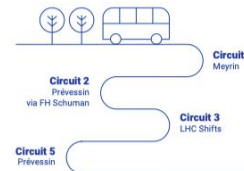
### DID YOU KNOW?

500 regular bikes are available all year round on site. During the summer months, they can be rented for 1 CHF per day so that cyclists can enjoy them from morning to evening, and also for their private trips.

## Internal bus shuttles. Close to your office.

If you choose internal bus shuttles, particularly for your trips between sites, you help reduce the traffic load on the local road network as well as emissions harmful to the environment and the climate. Take advantage of the journey to work or relax. Our 4 lines will take you safely to your destination.

### Shuttle lines



### DID YOU KNOW?

CERN is well served by public transport networks with, in France, two TGV lines and three lines on demand and, in Switzerland, five tram and bus lines.

## Mobility Centre. Your internal mobility partner.

To facilitate the transfer from one mode of transport to another, the Mobility Centre brings together in one place the mobility services offered to all CERN users: scooters, bicycles and cars on loan, rental or self-service.

The managers of the Mobility Centre can answer your questions about travelling within or between sites. They will be happy to advise you on the different eco-responsible mobility options adapted to your situation.

A workshop offers cyclists valuable recommendations for maintaining and servicing their bicycles, to guarantee safe journeys.

The Mobility Centre is located near entrance A of the Meyrin site.

### DID YOU KNOW?

CERN is well served by public transport networks with, in France, two TGV lines and three lines on demand and, in Switzerland, five tram and bus lines.

### Services

Self-service electric bikes and scooters

Loan and rental of bicycles

Self-service and rental cars

Organisation and coordination of buses for group visits

Hours

Open Monday to Friday  
8 a.m. to 5 p.m.

Tel: +41 22 767 22 28  
E-mail: [mobility.service@cern.ch](mailto:mobility.service@cern.ch)

QR code for more information

## By car, travel with others. A good choice to make.

Do you have colleagues participating in the same session in a remote location? Or who live near you and travel to and from CERN every day? To contribute to decarbonization efforts, organise shared trips, with your private vehicle or with self-service cars.

### Play the carpooling card

CERN has partnered with the carpooling platforms **Movici** and **HéLéman**. These offers are available in the Auvergne-Rhône-Alpes region and French-speaking Switzerland. Sign up!

QR code for Movici

QR code for HéLéman

### DID YOU KNOW?

CERN's self-service thermal vehicles will gradually be replaced by electric cars. By 2030, the Organization's fleet will be mostly decarbonised.

## Do you come by bike? Showers and parking are provided.

CERN brings together a large community of cyclists who commute to work every day using leg strength. They can count on an infrastructure adapted to their needs: 68 showers, 2,600 parking spaces, including 1,100 covered shelters, 15 repair stations, reserved lane, and dedicated access doors on the various sites.

### Find friends and resources

The CERN cycling community  
[bike-to-cern.web.cern.ch](mailto:bike-to-cern.web.cern.ch)

Pumps locations map  
[maps.cern.ch/mobility/pump](https://maps.cern.ch/mobility/pump)

Showers locations map  
[maps.cern.ch/showers](https://maps.cern.ch/showers)



### DID YOU KNOW?

Every year, the Organization engages in the #BikeWork challenge. In 2023, 1,011 cyclists from the Organization took up the challenge. For the second year in a row, CERN was the largest participant in French-speaking Switzerland.

## CERN smart mobility in figures.

**64 km** of pedestrian networks

**4** internal bus lines

**15** electric cars in service  
50% of the fleet electrified by 2030

**13 km** of cycle paths



**80** self-service electric bikes

**500** regular bicycles

**2,600** bicycle parking spaces, including 1,100 covered

**15** bicycle repair stations

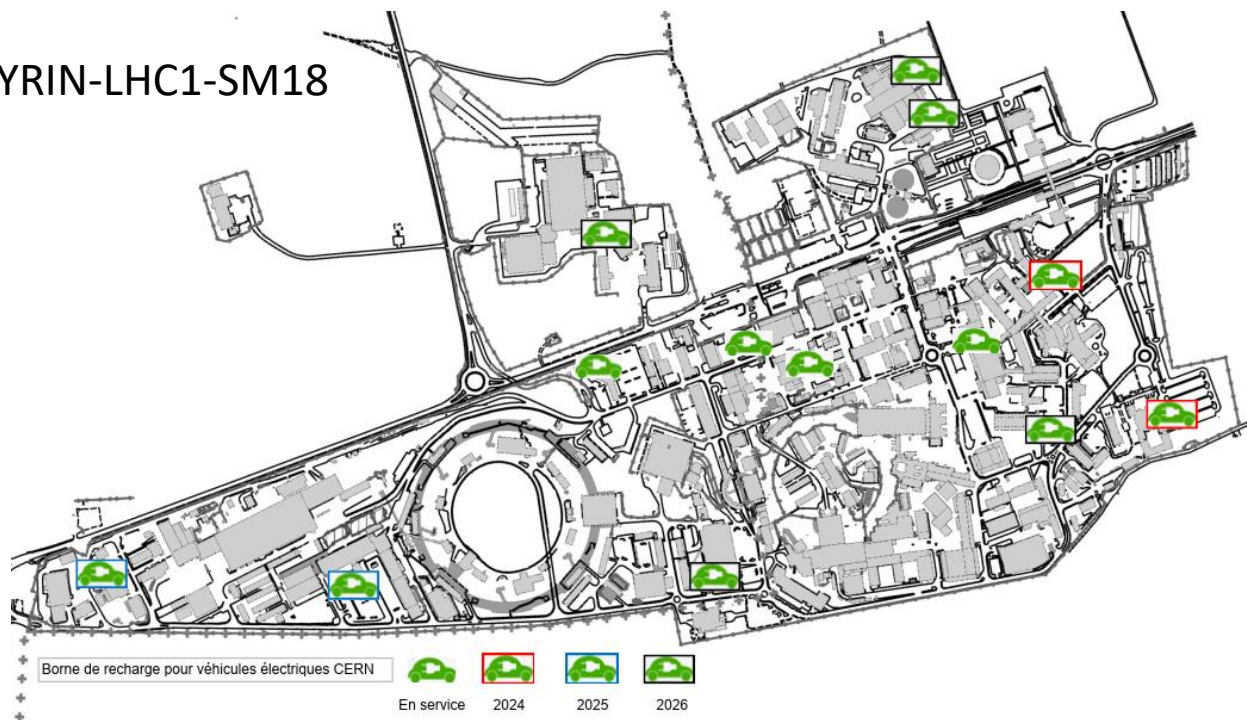
### DID YOU KNOW?

CERN played a decisive role in the study and construction of the "Route de l'Europe" greenway, linking the Meyrin and Prévessin sites.



# EV chargers for CERN vehicles

MEYRIN-LHC1-SM18

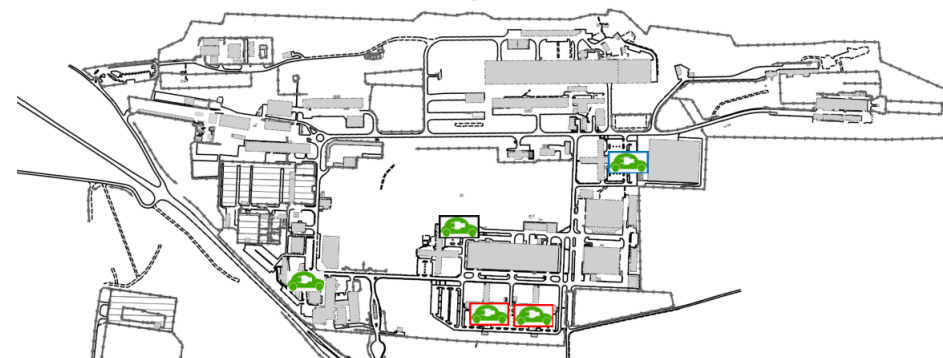


- 2023 • 13 charging points for 15 E.Vs (ratio 0,86)
- 2024 • 35 charging points for 15 E.Vs (ratio 2,33)
- 2025 • 49 charging points for 100 E.Vs (ratio 0,49)
- 2026 • 65 charging points for 185 E.Vs (ratio 0,35)
- 2027 • 65 charging points for 270 E.Vs (ratio 0,24)
- >2027 = 1 charging point for 5 E.Vs**

Borne de recharge pour véhicules électriques CERN



PREVESSIN



LHC-5



LHC-2



LHC-8



# Mail Office activities

Sorting of coming mails from french and swiss posts : approx 300 mails per day

Delivery of mail – 6 rounds in Meyrin and Preveessin + 1 for the LHC points (when needed)

Outgoing mail collection, franking and sending around 1'300 per month

Around 2'400 inbox in total on CERN sites

Invoices and pension fund mails sorting every morning

Mass mailing preparation and sending around 3'000 per month

Preparation of shipment by express mail (documents only) requested through Snow

Diplomatic documents transportation twice a week (7-8 requests per week)

# Security Service



## 3 Staff members

Head of Security Service  
Deputy Head of Security Service  
Video analyst



## Frame service contracts

Guards  
Personnel/ visitors Registration  
Locks and Keys service  
Fences maintenance

# CERN security in figures (2023)

1,487 cameras including 1,031 live, 229 thermal

7 sonorized sites (HP)

95 intercoms

740 buildings

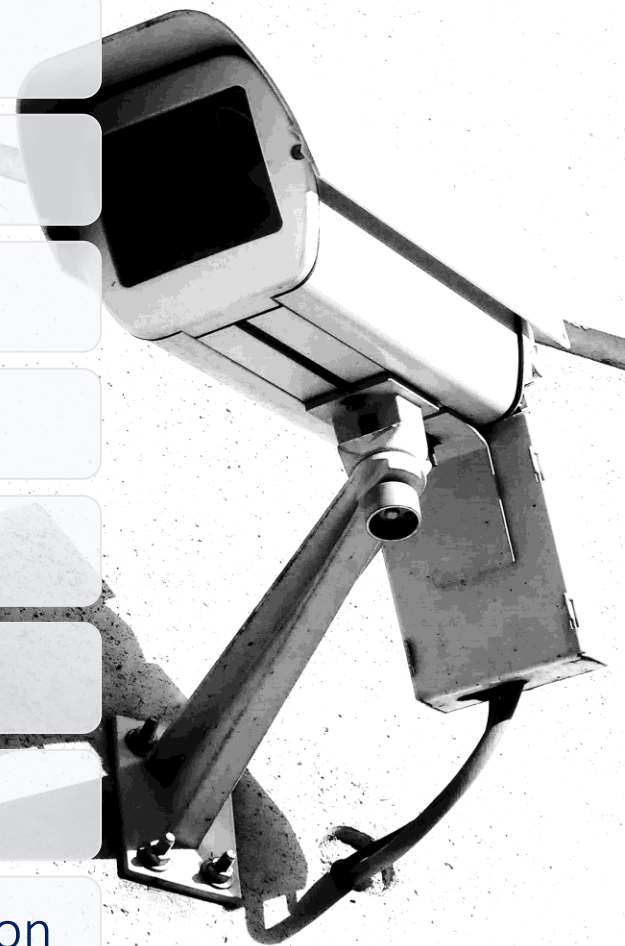
22 km of fencing

627 video investigations (resolution rate 94%)

66 theft reports (including 31 on site)

4 VVIP visits: Presidents of Switzerland, France, and Chile and SGW inauguration

169 VIP visits



# Site security: a combination of risks and constraints



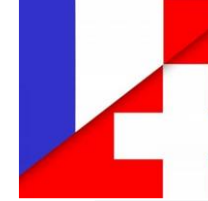
## CAMPUS

- Functioning as a small town (bank, restaurants, hotels, cafeterias, etc.)
- Controlled perimeter (intruders)
- Traffic (VL, PL, pedestrians, bicycles, scooters, etc.)
- Incivility /disrespects (accidents, theft, demonstrations, sabotage, etc.)
- Negligence or improper behaviour (inadequate parking, unattended vehicle, abandoned luggage...)



## INDUSTRIAL SITE

- Electricity,
  - Gas,
  - Beam,
  - Radioactivity,
  - Chemical risks,
  - ...etc.
- but
- Not a CEVESO or OIV. Classified site.



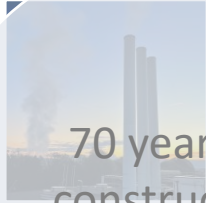
## CROSS-BORDER ORG.

- Cross-border movements of goods and people
- Specific access controls (entrances)
- Officials, countries representatives or ministers from member states regularly on site.

# Site security: principles, thoroughness and adaptability

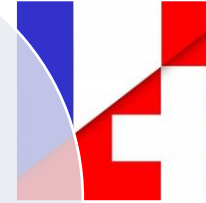


Essential actions to maintain fluidity.



70 years of construction activity

Physical protection measures adapted to CERN geographical environment.



Campus philosophy.

Increasing number of users/people on site.

Diversity of controls and mobility options (vehicles, shuttles, 2 wheels, pedestrians...)

Resilience (Increase efforts and risks for offenders).

Close collaboration with the Host States security services (CH and FR).

Non-intrusive controls.

Preparation and trainings to face security events, including crisis management.

Large number of buildings/ laboratories, with various purpose and occupancy.



CAMPUS

INDUSTRIAL SITE

CROSS-BORDER ORG.

# Secured Site





# Tools and solutions



