



**Green  
Building  
Council  
Italia**

06 luglio 2023

# **Dalla Tassonomia al PNRR: la digitalizzazione del processo edilizio per la transizione ecologica**

[www.gbcitalia.org](http://www.gbcitalia.org)

# Leader negli edifici ad alte prestazioni

## Uffici Deerns:

- Olanda
- Italia
- Germania
- Spagna
- Regno Unito
- Francia
- Medio Oriente (Kuwait, UAE)
- Brasile
- Colombia

## Partnerships:

- S.E. Asia (Singapore)
- India
- Stati Uniti d'America
- Indonesia



52M €

Turnover in 2021

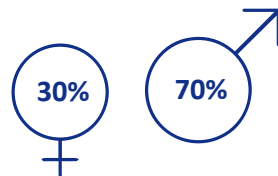
15

Offices in 8 countries



>500

Professionals  
>100 in Italy



## Markets

- Airports
- Clean Technology
- Data Centres
- Health Care
- Commercial and Public Real Estate

>130

Sustainable Certified Projects



730K

Tonnes CO<sub>2</sub> emissions avoided  
through advance and innovative  
design



# Obiettivi interni di decarbonizzazione

## Net Zero Carbon Buildings



**ADVANCING NET ZERO**

**DEERNS**  
Global engineering firm  
Tenant

Deerns is an international consulting and engineering firm, specialised in engineering design, sustainability and smart building strategies, with a mission to passionately create a positive impact on the built environment: tailored to its users and future-ready.

- 1 Commit**  
Commit to all Deerns occupied offices to operate at net zero carbon by 2025.
- 2 Disclose**  
Annual calculation of carbon footprint, considering Scope 1, 2 and 3 emissions. Calculation of 'Deerns Multiplier Indicator', resulting of the ratio between avoided emissions (through the energy efficiency of the projects designed) and own direct CO<sub>2</sub> impact.
- 3 Act**  
Set a decarbonisation plan with measurement of progress every year and recommendation of improvement measures: energy consumption reduction, transition to green/renewable energy contracting by encouraging landlords, and offsetting where decarbonisation is not possible.
- 4 Verify**  
Deerns ISO 14001 certified offices have their carbon footprint verified via 3rd party audits. Reporting and publication of annual results.
- 5 Advocate**  
Commit to educating and influencing industry to make net zero carbon mainstream. Support market transformation through awareness raising, capacity creation and knowledge sharing, and increasingly delivering future-ready, carbon neutral designs which enable a vital transition into a healthy, resource efficient and resilient society. Development of policy and plans to reduce waste and transport-related carbon footprint (mobility plans and electrical vehicle fleet). Calculating avoided emissions from nZEB projects developed each year.

**15 buildings**  
**1,820 tCO<sub>2</sub>e portfolio carbon emissions**  
**9,738m<sup>2</sup> total floor area**  
**7 countries of operation**

**Deerns** **EP 100** °C  
a member of 4 Green Building Councils



# L'evoluzione delle nostre sfide



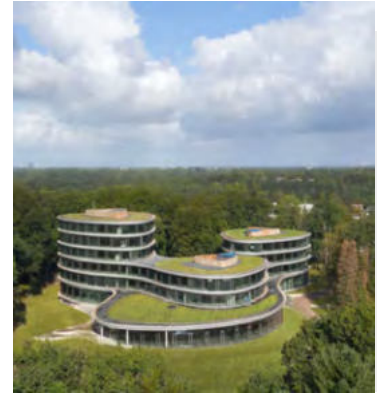
SOSTENIBILITA' E BIODIVERSITA'



SOLUZIONI SMART



NZEB + SALUTE E BENESSERE



ECONOMIA CIRCOLARE

2005



2010



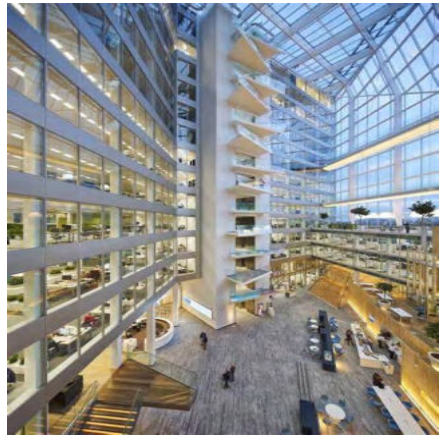
2015



2020

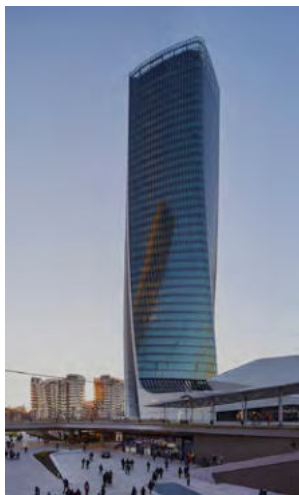


OGGI

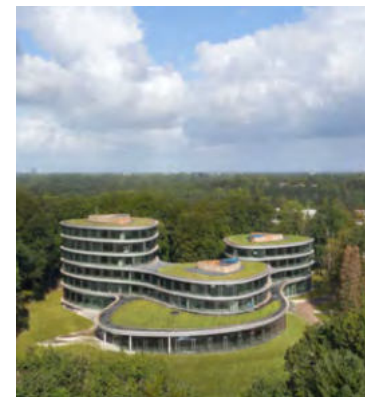




SOLUZIONI SMART



NZEB + SALUTE E BENESSERE



ECONOMIA CIRCOLARE



**bGrid**  
building data for all

2012

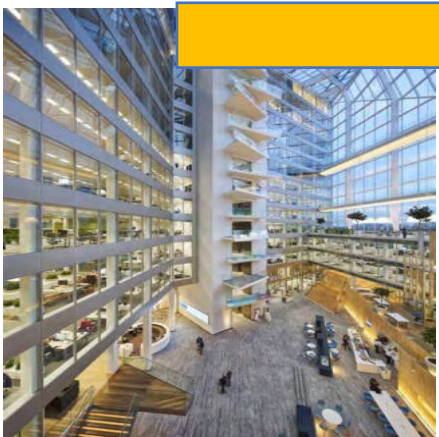
2015



2020



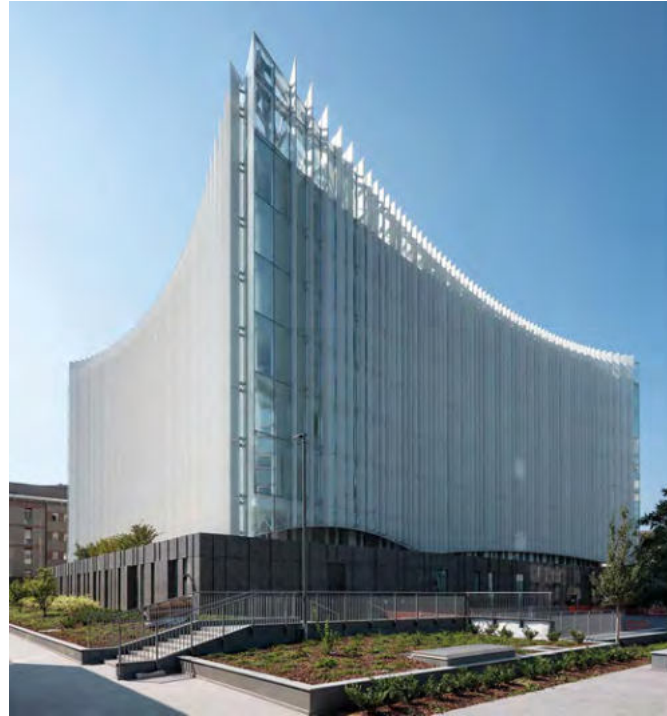
OGGI



# Il BIM applicato nei nostri principali mercati



**Real Estate**

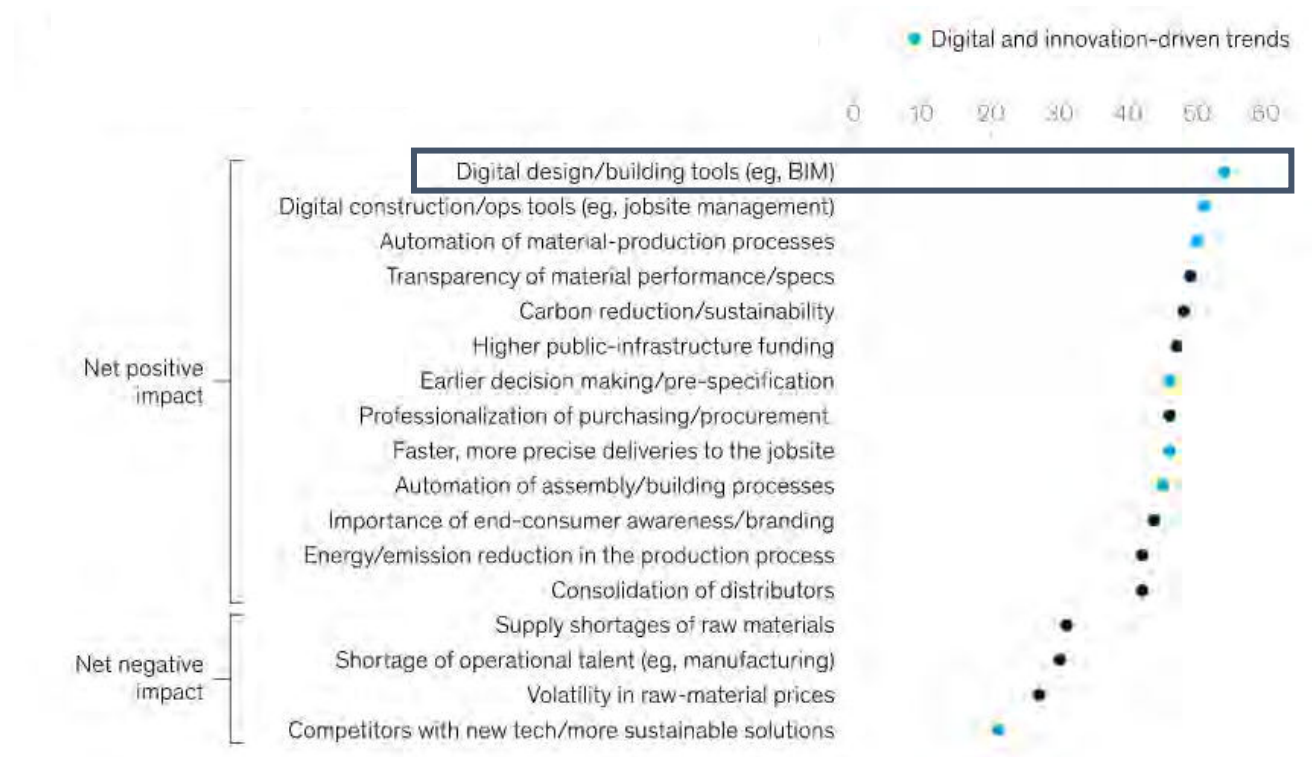


**Ospedaliero**



**Aeroportuale**

# Quali sono le tendenze più importanti dell'edilizia?



*I trend prevedono che i temi digitali avranno un impatto significativo sul settore dei prodotti per l'edilizia nei prossimi 5-10 anni.*

Source: McKinsey Building Product Survey, 2022



# La "nuova normalità" nell'edilizia con il BIM

Torre UnipolSai, Milano



## Cliente

- UnipolSai

## Architetto

- MCArchitects

## Dimensione

- 33.000 sqm

## Altezza

- 120 mt

## Piani

- 23

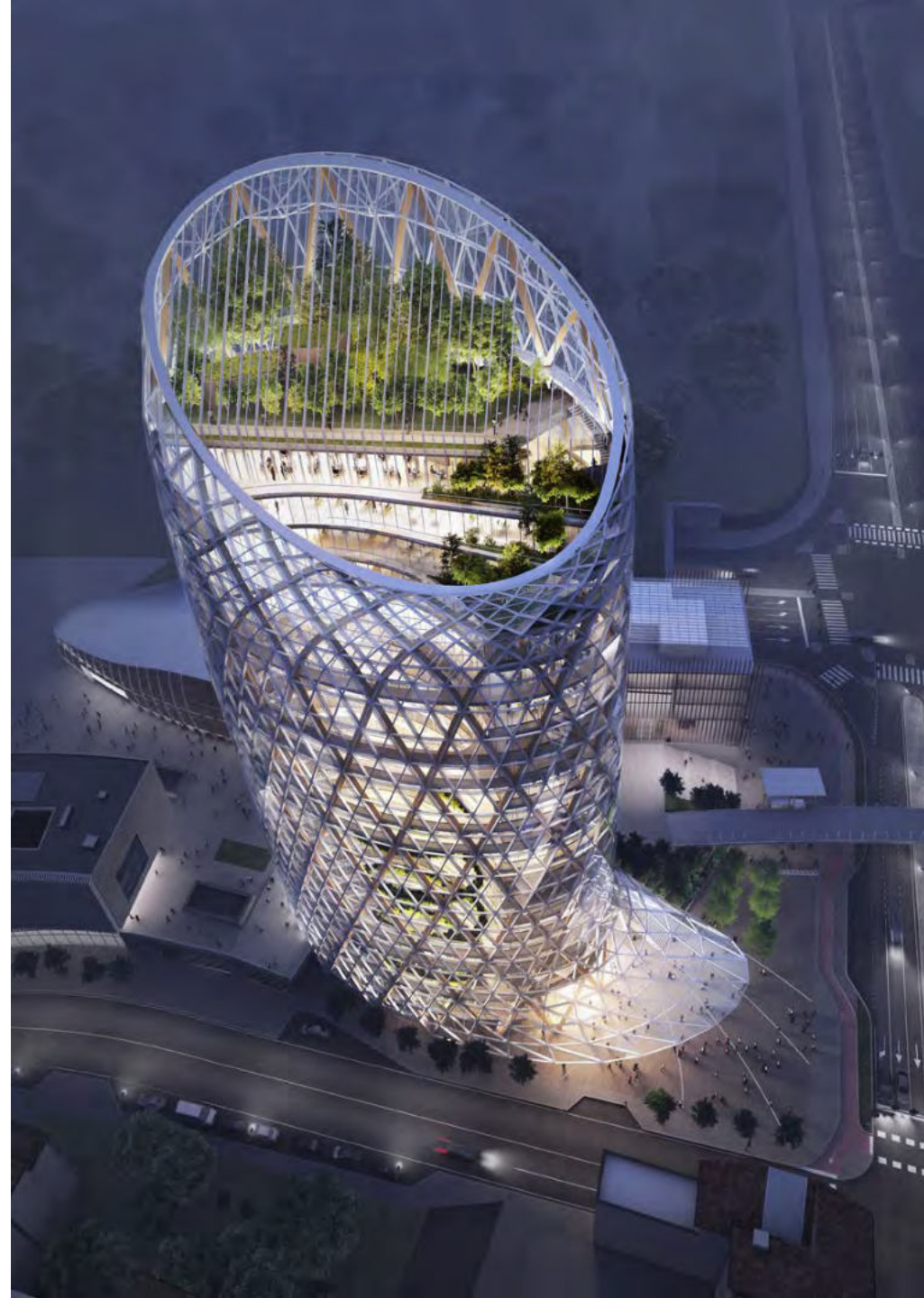
## Fasi di Design

- Preliminary design
- Design for permission
- Detail Design



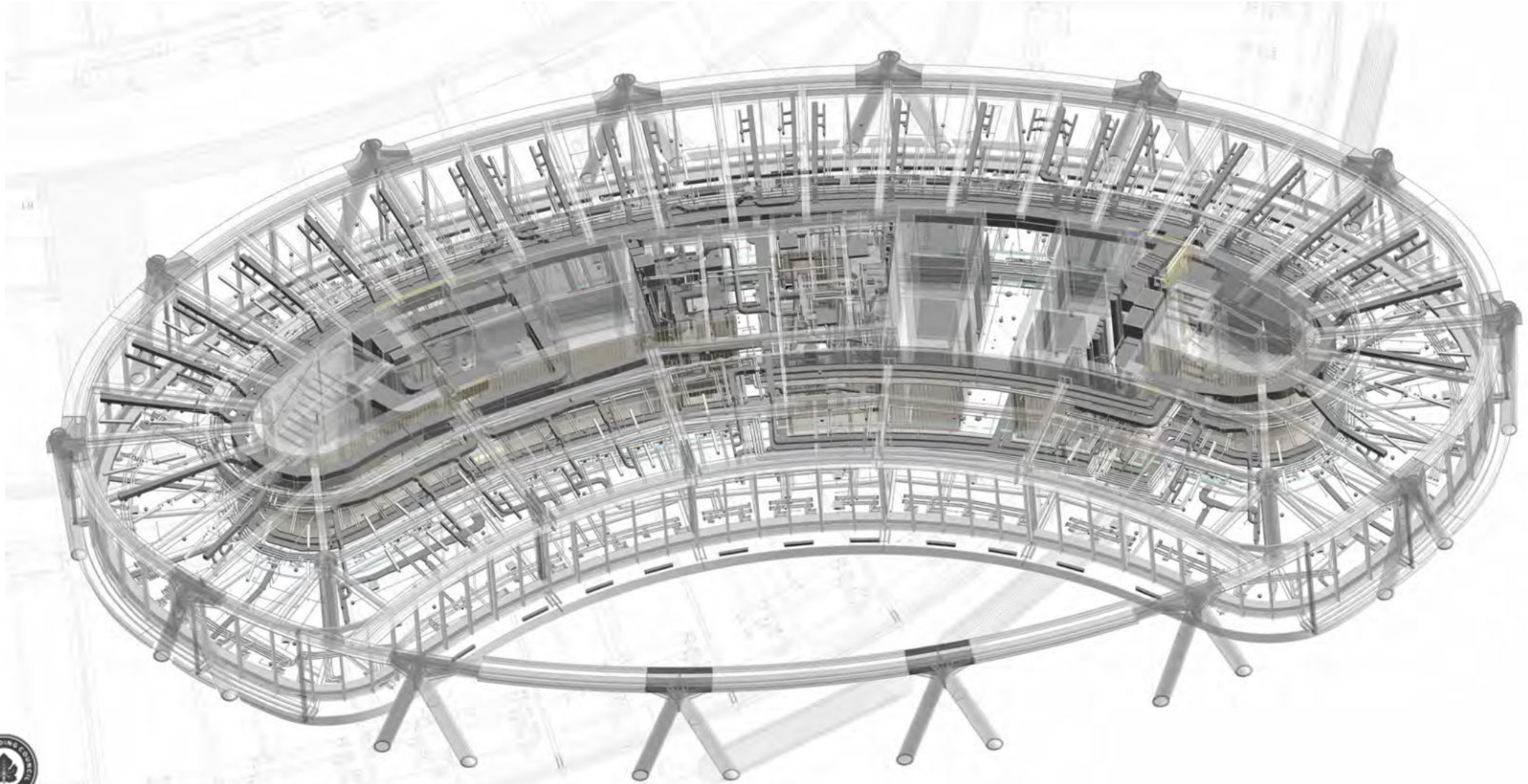
# Modello BIM Completo

Torre UnipolSai, Milano



# Piano tipo BIM

Torre UnipolSai, Milano



# Sopralluogo con controllo BIM

Torre UnipolSai, Milano



# L'evoluzione delle nostre sfide



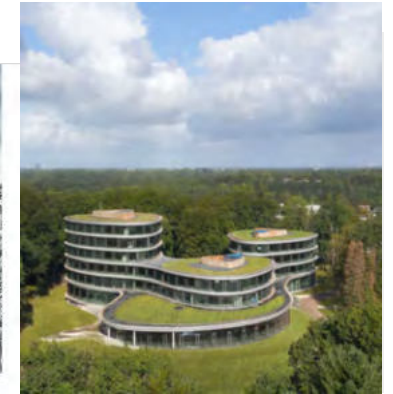
SOSTENIBILITA' E BIODIVERSITA'



SOLUZIONI SMART



NZEB + SALUTE E BENESSERE



ECONOMIA CIRCOLARE



2005



2010



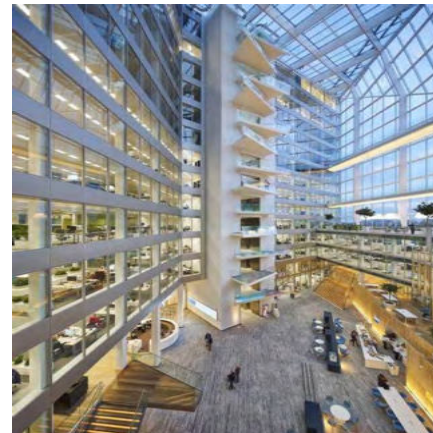
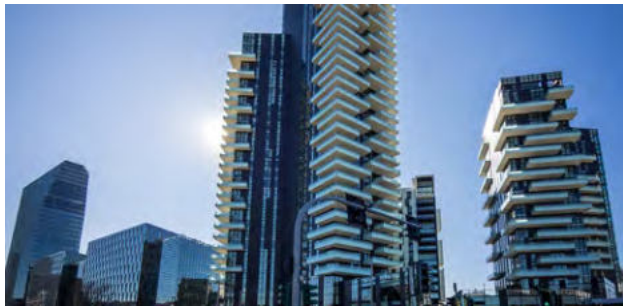
2015



2020



OGGI





SOLUZIONI SMART

# Corso Como Place, Milano

Un'esperienza nella riqualificazione degli edifici sostenibili

**+ 65%**

Fabbisogno energetico  
coperto da fonti  
rinnovabili

**100%**

Integrazione con  
soluzioni smart building

**3.200 m<sup>2</sup>**

Fotovoltaico integrato

**68/110**

LEED GOLD

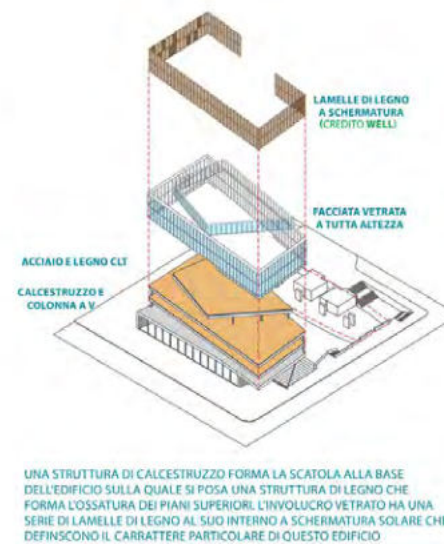
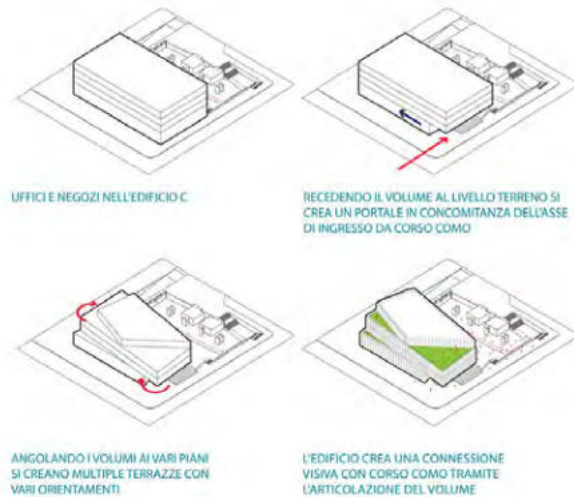
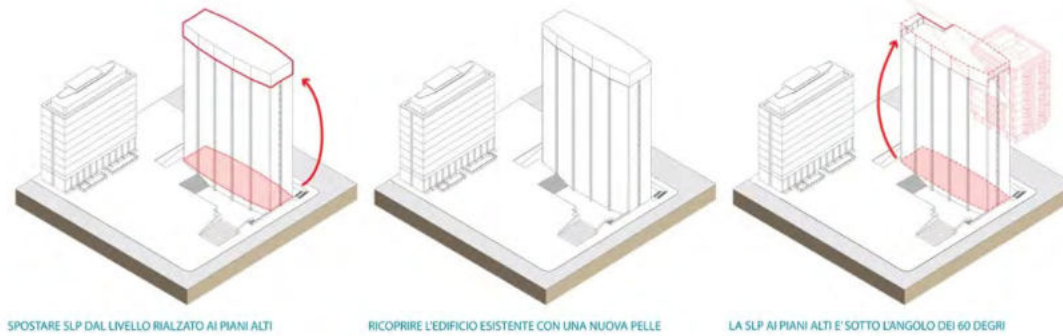
WELL GOLD

WIREScore

Architect: PLP  
MEP & Smart Building: Deerns  
Sustainability : Deerns



# Un caso di ristrutturazione sostenibile dell'esistente



© PLP



# Obiettivi di progetto

- Strategia energetica: 5% Bonus Volumetrico
- "Free from services equipment"
- Trasporti verticali
- Comfort degli occupanti durante il Fit-out
- Nuovo concetto di smart office
- Implementazione criteri ESG





# Nuovo concetto di smart office

I forgot my security card!

I can't find my Stuff!

I can't find my colleague!

This place needs to be cleaned

Are my people Happy?

Does this really need to be cleaned?

Are my people Healthy?

I can't work In this heat

Are flexible work places really that efficient?

How do we manage this!

How much Real estate do I really need?

> 30 minutes of searching for free workspace

I can't find a Conference room

I can't park my car!

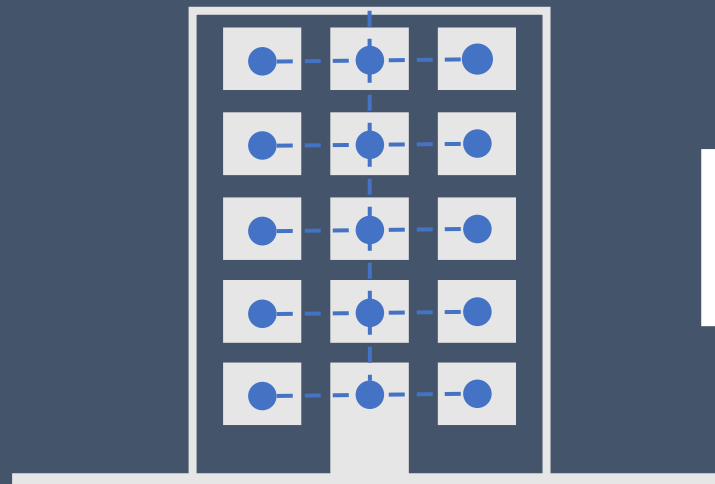
Sustainable Building Maybe

Sustainable Usage No



# Nuovo concetto di smart office

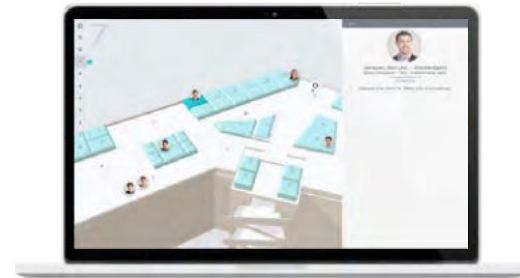
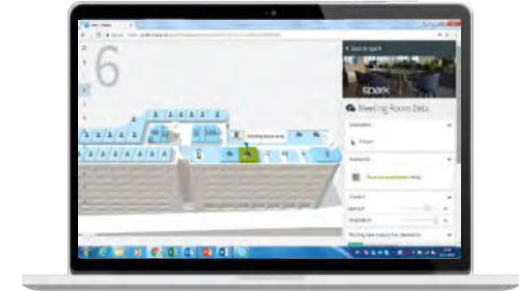
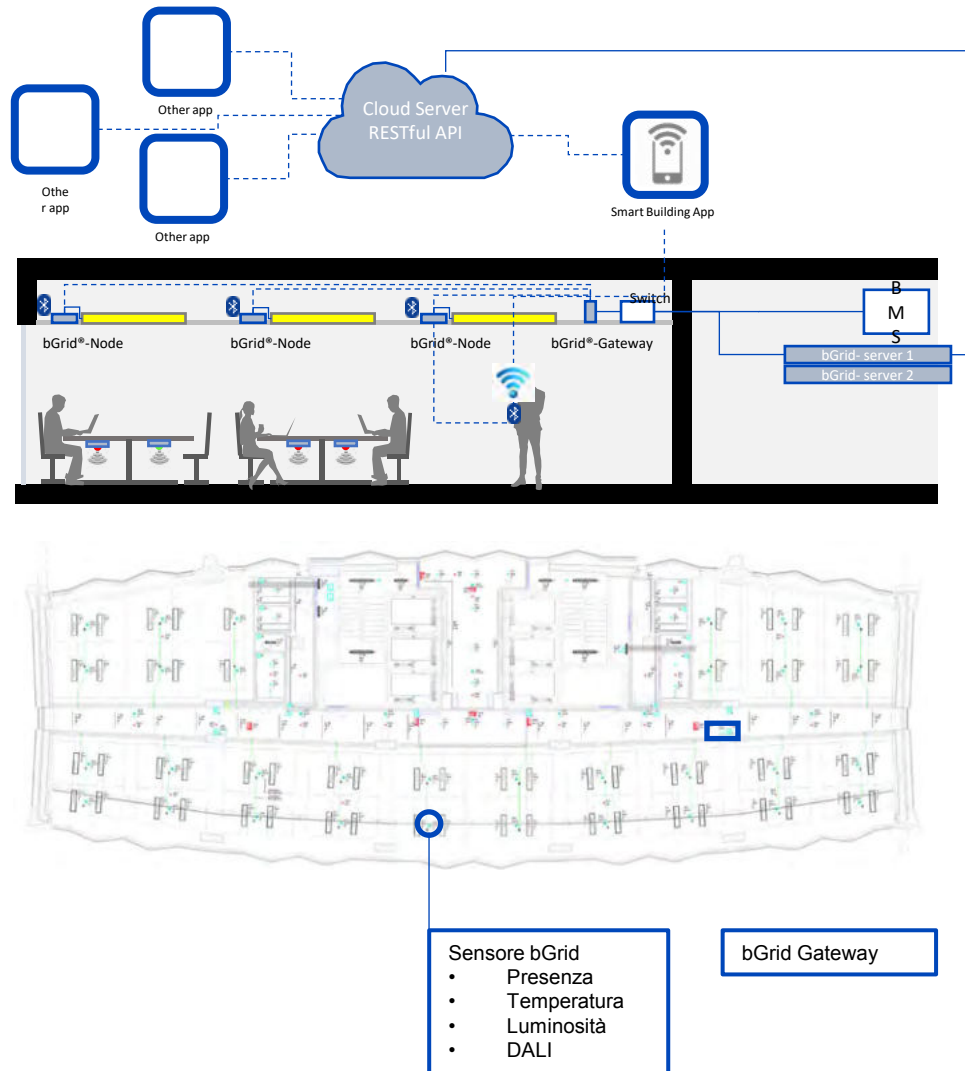
*“The Building as your Smartphone”*



bGrid® Smart Building network



# Nuovo concetto di smart office



# Implementazione criteri ESG

Environmental by LEED&C2C, Social by WELL and Governance by WIREDSCORE



# Implementazione criteri ESG

ENVIRONMENT – E by LEED



1000

Pannelli fotovoltaici installati

65%

Fabbisogno energetico coperto  
da fonti rinnovabili

80%

Riduzione consumi idrici per irrigazione



# Implementazione criteri ESG



SOCIAL – S by WELL

70%

Workstations con viste di qualità verso l'esterno

100%

Finestre con tende per il controllo della radiazione solare

100%

Sistema di trattamento dell'aria ad elevatissima efficienza per limitare l'ingresso di inquinanti



# Implementazione criteri ESG



GOVERNANCE – G by WIREScore

0%

Interventi civili sull'edificio per la connettività dei tenant

100%

Accessibilità alle reti dei provider e integrabilità delle tecnologie future

100%

Smart Building integrato









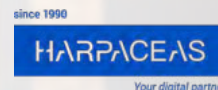
Green  
Building  
Council  
Italia

06 luglio 2023

**Dalla Tassonomia al PNRR:  
la digitalizzazione del processo  
edilizio per la transizione  
ecologica**

**Grazie.**

Evento realizzato  
con il supporto di:



[www.gbcitalia.org](http://www.gbcitalia.org)