



MIND West Gate: Water Square

Podium

Milan Innovation District (MIND), Italy

Ground-breaking 'innovation district' comes alive at former Expo 2015 site in Milan

A major new region for science, technology, knowledge and innovation is springing to life in Milan, Italy – a 'City of the Future' that values a 'humanistic-approach' to building and design, and is setting new standards on the sustainability, wellness, safety and productivity fronts.

Welcome to MIND, the Milan Innovation District, and future home of a state-of-the-art hospital (Galeazzi Hospital), a world-class university (University of Milan), and cutting-edge international research centre (Human Technopole) – three anchor projects that celebrate life sciences and entrepreneurship.

Indeed, the anchors make perfect sense: 50 per cent of life science companies in Italy are located in the Milan and Lombardy area; and entrepreneurship is a strong local focal point (there's rich local talent in research, academia and industry, and a strong university culture – more than 300,000 students are in Milan alone).

But that's not all. Slated for completion in 2031, the global innovation district is set to provide residential and commercial spaces, and feature amenities and services (including retail, hospitality, cultural, sport, entertainment), as well as a creative hub for start-ups and innovative companies. MIND will host 60,000 people living and working together every day.

Housed on Milan's famed Expo 2015 site, MIND is a mixed-use precinct and 'urban regeneration' project worth €3 billion. It comprises over 1 million square metres in surface area and is currently in development by international real estate group, Lendlease.

Lendlease Digital, in particular, is playing a pivotal role in the project. Its emphasis on digitalisation and the power of data and data-driven insights through Lendlease Podium is helping to change the design process, foster innovation, and spark economic activity.

The clear vision for MIND is to capitalise on the success of Expo 2015 and place Milan on the map of the world's gateway cities, leveraging local excellence in life sciences and entrepreneurship. In addition, MIND's aim is to enhance people's quality of life and promote the country's sustainable economic development and international growth, through a platform of infrastructure that will enable scientific, economic and social innovation.



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Innovation Ecosystem a New Chapter

Three years into the project, and there are already some notable firsts. Firstly, MIND represents a private-public partnership, based on a 99-year concession agreement – which is a first and major milestone in Italian history. The project is a collaborative partnership on a scale not seen previously in Italy and creates the country's first innovation district.

A little over two years ago Lendlease made the bold move of inviting partners and competitors alike to the innovation table. The idea was to fuel momentum and push the envelope on the design front. With that vision in mind, Lendlease hatched the Federated Innovation™ ecosystem – the fourth project anchor – which has 34 partners onboard across key verticals. They include: life science and healthcare; energy; proptech and smart spaces; fintech; mobility and logistics; retail tech; urban digital tech; construction tech; greentech; security and defence; and agri-food tech and wellbeing.

Collectively, the innovation ecosystem of partners is building 'an innovation agenda' and working collaboratively in a bid to transform the colossal MIND site – it takes 20 minutes to walk from one side to the other – into an unrivalled science, technology and innovation district of international relevance.

The goal? To build an outstanding pipeline that aims to pull the best entrepreneurial solutions products and services that are the next big solution for urban living.

To date, the Federated Innovation™ ecosystem – with its pillars of social innovation, tech innovation and green innovation – has already become a benchmark for future developments at a national level. It's also creating a new chapter in the world of property design and construction.

'Futuristic' Redefined

Unlike traditional business parks or technology parks, MIND is a city based on people – an innovation district at human scale. It's about people, and placemaking.

What's more, MIND is a 'traditional' city where technology is present everywhere, but invisible. A city where technology is a tool to simplify your life, but not necessarily visible on a screen. A city where people are front and centre – and not dwarfed by gadgets. So, don't expect to see any flying drones or all-glass monochrome, drab buildings anytime soon.

Instead, the district accentuates natural beauty and the environment – it features the longest linear park in Europe – and provides places of 'connection and collaboration.' By using traditional construction materials like timber, for example, but in a more innovative manner, the city provides renaissance-styled 'piazzas' for people to meet, exchange ideas and innovate.

Think of it as the bluest and greenest innovation district, where nature is everywhere and where people feel welcomed. A place where sustainable design is part of the future. Where people become part of the movement and are conscious about water consumption and energy consumption.

A city built with no carbon fossil fuels, which will be absolute zero carbon by 2040 and resilient to climate change. A place where quality of life is of paramount importance, and where ideas are born from the connection and collaboration of people from different backgrounds and sectors.



The goal for Lendlease is to create a healthy, diverse and vibrant community with people at its core – a mixed use district where digital technologies enhance connections, promote the exchange of knowledge and improve people's lives.

Autonomous Buildings in Action

MIND will be a 'showcase project' for autonomous buildings emerging around the world. Autonomous buildings are about the value they create for the people who use them. They are becoming intelligent and smart, thanks to the power of digitisation, and transforming the way property and construction industries operate and design.

An autonomous building learns to adapt and flex to meet the needs of its occupants, without the burden of intrusive technologies – and that's the vision of MIND. Specifically, the buildings must protect its users and their privacy, while simultaneously delivering experiences and services that benefit those same users in their day-to-day lives. This is significant because it charts a new course for digital technology in buildings where people are the centre of the strategy, not the technology itself.

Through the use of these digital technologies, Lendlease is creating buildings that provide people with a better sense of self – are intuitive and responsive – but don't encroach on privacy. In fact, the responsible/ethical use of data practices will provide a balance between what people need to vastly improve their wellbeing and how they use the data. It is a city that understands people's behaviour and makes life easier, eliminating the need to collect data that people don't want shared.

Meanwhile, on the tech front, MIND's vision is a holistic digital strategy: It supports the idea that the precinct may be made up of a number of buildings, but it's a single digital ecosystem that encompasses the entire area. This breaks down the barriers of buildings and tenancies to create 'consistent experiences' and reliable services for users no matter where they're located across MIND.

And while AI, IoT and cloud technologies are advancing the capabilities of individual silos of products within the autonomous building space, it's the more recent software defined, containerised architectures in which they are being deployed, that's changing the game for autonomous buildings.

In fact, the ability to bring together components of different technologies to solve the unique problems and requirements of a building or city in a cost-effective and integrated fashion is creating a whole new world of possibility for delivering value to customers.

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Setting New Design Standards

Certainly, design needs to be cutting edge in order to make the MIND vision a reality. Lendlease is forging new design standards and processes – and on a mission to change mindsets in the property and construction industries.

Through digitisation, Lendlease Digital is using data-driven insights to determine how buildings respond. That means asking questions like, 'How do we gain data from the way people live, move and operate within a space? How do we make sure we take a good design and make it even better? And how do we improve as we move forward to the next design?'

What's more, MIND will leverage the best available technology in the emerging spaces of data, machine learning, IoT and Digital Twins. The key is how each of these components is able to be brought together within Lendlease Podium to solve real problems and create value.

The platform will enable Lendlease to work collaboratively with the most innovative software and hardware technology in the market in a scalable and repeatable fashion.

At the same time Lendlease Digital is building a physical studio, Podium MX Studio, that delivers integrated design capabilities – bringing the supply chain through a connected ecosystem of partners.

This collaboration allows for co-developing and co-designing of new products, with rapid prototyping – giving Lendlease the ability to fast-track development on site.

The goal? Lendlease is moving towards an automated components-based design approach that uses DfMA methodologies to design and construct better buildings safer, faster and with cost reductions.

Importantly, by learning lessons from the escalating data generated every day, Lendlease can create better designs, healthier spaces and safer places to build and to live. In short, Lendlease can learn how people behave in this space – and then enact the vision.

Ultimately, these lessons learned will ensure MIND becomes the 'innovative district at human scale' that it promises to be – and will fulfill the legacy of Expo 2015, which put people and planet wellbeing at the top of the podium.

Project Timeline

MIND Village will host corporates and start-ups from **2021** (commercial workspace, laboratories, retail, amenities and marketing suite).



MIND West Gate: a mixed-use development – forecast completion **2024** (commercial workspace, build-to-rent, light industrial, hotel and placemaking retail).



Human Technopole – forecast completion **2024** (life sciences research centre).



University of Milan – forecast completion **2025** (Science Campus)



Galeazzi Hospital – forecast completion **2022** (state-of-the-art hospital with over 500 beds)

