IntenCity: an exemplary building for Schneider Electric in France
At the heart of innovation

IntenCity is Schneider Electric’s new flagship building located in the Scientific Polygon (Presqu’île) of Grenoble. It is a building of 26,000 m² and is exemplary in many aspects.

It is part of a vast project of reorganizing Schneider Electric’s facilities in the city of Grenoble which began in 2016. It’s objective: to regroup around 5,000 workers spread out over 13 different sites into 4 major buildings.

The aim was to reduce the group’s carbon footprint, by choosing environmental-friendly buildings, reducing inter-site travel, by strengthening cross-department team collaboration as well as with public and private sector organizations in the area such as R&D, Universities and laboratories. An operating model based on a partnership which is now essential to amplify innovation and development.

Schneider Electric did not choose Grenoble’s Presqu’île to affirm its French roots by coincidence. This area is home to an exceptional ecosystem which is ideal for new and innovative ideas to flourish. The latter brings together key players in the field of research (CEA, CNRS laboratories, Minatec), teaching (INP, EM Grenoble, Université Grenoble Alpes), and industry (ST MicroElectronics, Biomérieux) and more than fifty startups with some having already been involved in joint projects. By allocating a portion of the ground floor of the IntenCity building to open spaces, Schneider Electric wants to develop a collaborative spirit and encourage creative ideas and disruptive projects.

Schneider Electric has reasserted its position as a committed player at local and national level with its IntenCity building. This exemplary building with a low carbon footprint showcases our ability to innovate and offer our clients solutions in line with current environmental challenges. It is a full scale example of what a smart and efficient building today actually is. Building usage and people occupancy satisfy the new, more flexible and more collaborative ways of working. These are the characteristics which make IntenCity a unique and remarkable building.

Christel Heydemann
CEO Schneider Electric France
Architecture that promotes collaboration, comfort and efficiency

As is already the case with Technopole, Schneider Electric’s other site on the Presqu’île that opened in 2017, the individual offices at IntenCity have given way to open and shared workspaces where workstations are not allocated to one particular person (the flex office principle) in order to encourage team collaboration and innovation.

Workers are able to work in the open spaces that are also fitted with bubbles of 4 or 6 people, but also in other spaces in the building – meeting rooms, convivial spaces, a restaurant – or even outside, in the park.

In order to involve all future residents, work groups were created to define the layout of the work and conviviality areas, the materials used, the ergonomic furniture, the decor: everything was carefully studied so as to offer an ideal environment for the teams.

A high performing IT infrastructure will allow the latest digital communication techniques to be used to connect to people all over the world. All meeting rooms are equipped with full audiovisual equipment.

With an exceptional location in a prime position in the Grenoble Presqu’île, the IntenCity building has emerged as a remarkable building. Its volumetric design is precise and grid-based, covered in anodized aluminum with a bronze appearance.

Four buildings are placed at right angles along the Avenue des Martyrs. From the street side, it promotes the urban dimension of this fast-developing neighborhood. From the riverside on the banks of the Isère, it offers a living facade: stairs form a vertical “main street”, the true heart of the building. Around it, collaboration and relaxation activities are organized which open out onto the garden, river and mountains. All these spaces offer a variety of dynamic and flexible configurations.

Denis Bouvier
Architect, Chief Executive of Groupe-6 architects
EcoStruxure Building solutions for an efficient, flexible building for the personalized service of its residents.

All EcoStruxure Building solutions developed by Schneider Electric and implemented at IntenCity contribute to the creation of a “smart” building: an intelligent building in which technology and machines no longer take the forefront but rather use, in terms of space and time.

• An efficient building which manages and optimizes its own operating costs:
  - its energy costs thanks to the command-control which enables “energy saving” mode to be activated on a floor or area not being used and thus avoid any unnecessary consumption
  - its maintenance costs or facility management, thanks to monitoring tools that collect information (temperature, luminosity, CO₂ levels, occupancy, etc.) and displays the data on personalized screens according to the user profile to improve the building’s operating conditions.

• A multi-purpose building, connected to its ecosystem making some areas available for partners (conference rooms, meeting rooms, parking) as part of a sharing principle.

• A building at the service of its residents that encourages their performance by offering them the best possible environment:
  - ideal conditions for comfortable working areas
  - ease of booking and usage of meeting rooms, parking spaces, thanks to systems which take into account precise needs (number of users, necessary equipment, comfort parameters)
  - dealing effectively with any issues (cleanliness of facilities, replacement of defective devices, etc.).

An energy performance model

IntenCity marks the beginning of a new generation of buildings that are both energy efficient and capable of compensating their consumption with local production:
- equipped with EcoStruxure™ Building solutions, the site aims for a consumption of 37 kWh/m²/year whereas the average consumption of existing buildings in Europe is estimated to be 330 kWh/m²/year.
- This consumption will be compensated by more than 4,000 m² of photovoltaic panels fitted to the roof and two vertical wind turbines which will produce 970 MWh a year, thus making the building energy autonomous.

A Smartgrid ready building, IntenCity is already a part of the energy landscape of tomorrow. It is equipped with technical solutions which will allow it to interface with the other buildings in the neighborhood as part of a local network, with the possibility of opting out in the event of a high demand in electricity or a high tariff, to store the renewable energy produced, to defer consumption in favor of neighboring buildings.

Achieving LEED Platinum certification

IntenCity began efforts to obtain the LEED Platinum certification from the very beginning. It is the highest level of the Leadership in Energy and Environmental Design certificate. The building is aiming for a score of 103 credits (out of a maximum of 110) which would make it the most energy-efficient in the world (ahead of the current leader - a building in Barcelona with a total of 101 points). It should be noted that 80 credits are needed to achieve the certification. IntenCity is already guaranteed to achieve the maximum number of points in terms of energy.
Maximum use of digital assets

A showcase of Schneider Electric’s know-how energy performance, IntenCity is also an example for customers and all players in the technological ecosystem for whom digital technology plays a key role.

Three digital laboratories can be found on site:

• The EcoStruxure end-to-end system laboratory which features a demonstration area to present some of our innovations on new digital systems regarding Analytics, Big Data, Machine Learning, EcoStruxure “Edge” solutions, currently being included in our offers or in a trial stage. These innovations are based on customer-driven issues and the added value they represent.

• The Stallman laboratory dedicated to cyber security, where the resistance of Schneider Electric products and systems to cyber attacks will be tested.

• The IoT Sensors laboratory dedicated to testing and showcasing of intelligent captors needed for IoT systems.

A digital workplace, a collaborative modular and comfortable space, was also designed on site to experiment and put new working methods into practice (brainstorming, prototyping, co-creation, agile meetings).

Next to this space, the Innovation Hub will allow meetings, activities and temporary exhibitions, to be organized around the digital theme.

Principle of ongoing improvement

IntenCity has its own Building Information Modeling (BIM), which is an exact reflection of the construction, as well as an energy model capable of reproducing the energy behavior of the real building.

Beyond dynamic data collection using the site instrumentation and data visualization, this “energy model of the building” will allow this information to be paired with static data. It will then be possible to invent new functions as well as operating support services in terms of space management, energy, maintenance, operation management on the technical systems and information for the occupants. This is a major innovation: Schneider Electric is the first group in the world to use a 3D visualization model for real-time monitoring of the building.
Reducing its CO2 footprint

With this new organization in the Grenoble region, Schneider Electric confirms its commitment to reducing greenhouse gas emission in line with Grenoble’s Air Energy Climate Plan.

• By bringing teams together to a reduced number of sites limiting inter-site travel.
• By providing electric vehicles for workers to use when travel is necessary.
• By inciting workers to use sustainable transport methods.
• By giving priority to high energy-performing buildings by removing 15% of the floor space occupied in the Grenoble hub, demolishing and disposing of 60,000 m² of old and energy consuming buildings, and the construction of 43,000 m² of high energy performing buildings (Intercity and Technopole).

Key figures

4th quarter 2020: relocation of Schneider Electric teams from France Operations, Schneider Digital, Global Supply Chain, Global Marketing, Global HR...

• Area: 26,000 m²
• Capacity: 1,500 people
• Energy consumption: 37 kWh/m²/year
• 4,000 m² of photovoltaic panels