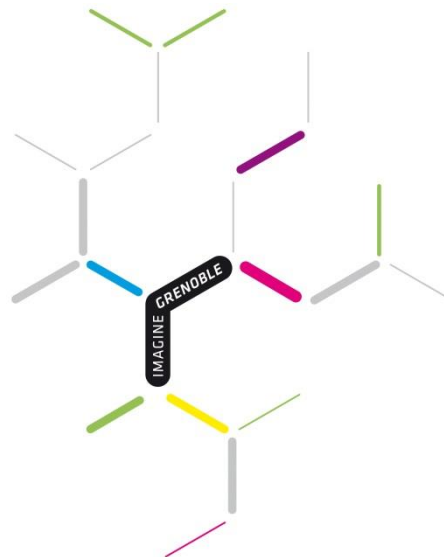


GIANT

INNOVATION CAMPUS

Grenoble Innovation for Advanced New Technologies

01/03/2017



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Outline



- ◆ **Investing in the future**
- ◆ **A history of success**
- ◆ **GIANT Alliance**
- ◆ **An ambitious science and technology programme**
- ◆ **Research – Industry partnerships**
- ◆ **Urban project**

Investing in the future



**Higher education + R&D + advanced industry
=
wealth and job creation**



**Attracting world-class researchers, engineers,
innovators, professors and students**



**Building a campus of excellence, comparable to
ambitious initiatives around the world**



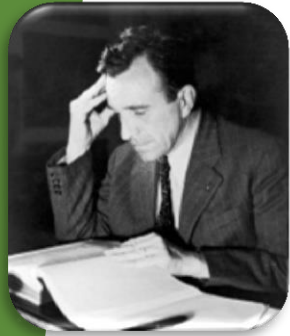
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A history of success



Louis Néel
Nobel prize in Physics
Founder of the CEA Grenoble

1904-2000



Louis Weil
Former Dean of the Grenoble University

1914-1968



Louis Merlin
Industrial
Founder of Merlin-Gérin
(Schneider Electric, 1920)

- ◆ A long tradition of strong cooperation between research / education / industry
- ◆ Two scientists and an industrialist - three people who anticipated and prepared the future

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A history of success

1956 CEA (CENG)



Commissariat à
l'énergie atomique

1962 CNRS



Centre National de
Recherche Scientifique

1967 ILL



European
High Flux Reactor

1988 ESRF



European Synchrotron
Radiation Facility

2005 MINATEC



Micro et
Nanotechnologies

2009 GIANT



An alliance for
innovation

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A history of success

A continuing renewal of electric and electronics industries

Nanotechnology

Microelectronics

Electronics

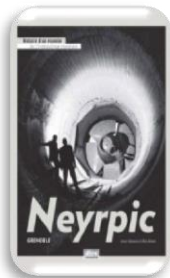
Electrotechnics

Mechanics

Hydroelectric power



1869



1900



1920



1960



1970



ALSTOM

Schneider Electric

THALES



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A history of success

From MINATEC to GIANT

2000



2006

2010

2015



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A 250 hectare scientific centre within the city, forged on the success of **MINATEC**

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A history of success

Actions	Chiffres
Fostering ERC (European Research Council)	52 laureats > 60 M€ since 2007
GIANT International Internship Programme	116 students in internship three months since 2011
Junior Scientist & Industry Annual Meeting	700 PhD + 280 professionals of the industry since 2009
High Level on site visits	9 000 visitors (2015)
Science Day Faire	5 000 visitors (2015) & 6300 pupils since 2007
Ekiden (marathon)	700 teams - 4200 runners (7 th édition)
GIANT Student Network	180 PhD participants since 2014
GIANT@SCHOOL	25/75 high school, 3420 high school student since 2010
GIANT Review	500 distributes + 2 600 consultations

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A history of success

In pictures :



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GIANT: an alliance of 8 partners

- ◆ **GIANT Council: Presidents and Directors of the 8 founding members**
In charge of strategic orientations and budget approval



Stéphane Siebert



Jérôme Vitré



Stephen Cusack



Francesco Sette



Loïc Roche



Brigitte Plateau



Helmut Schober



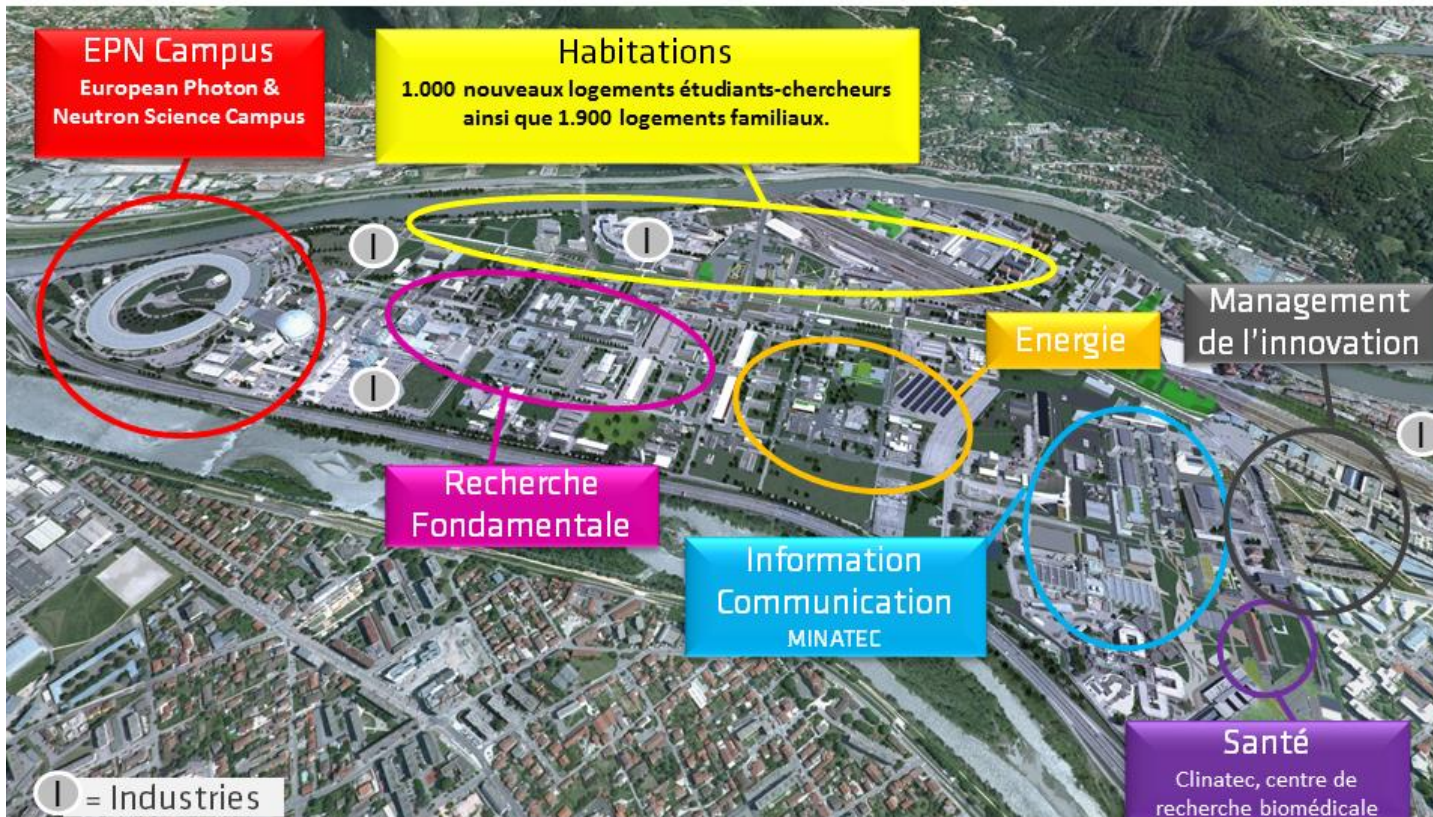
Patrick Lévy



- ◆ **1 coordination group: 2 representatives per founding member**
In charge of preparing the projects for the Council

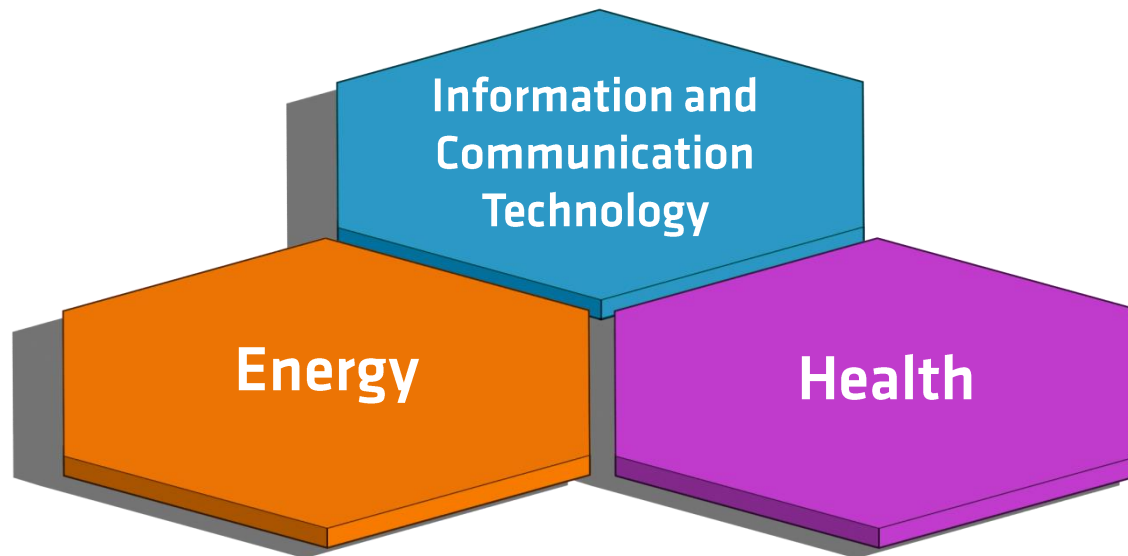
A 250 hectare campus

Or 344 football pitches
1000 supermarkets
5000 cinemas



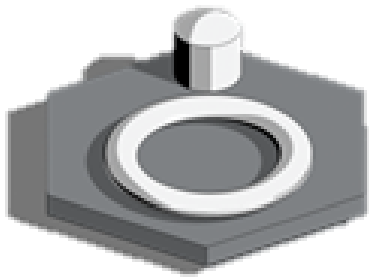
An ambitious science and technology programme

Responding to major societal challenges :

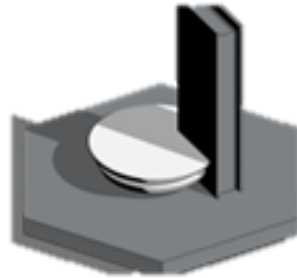


An ambitious science and technology programme

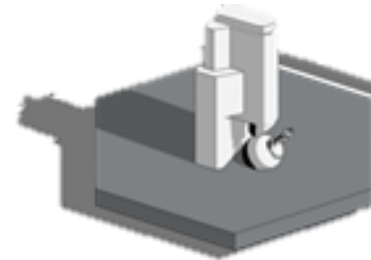
With 3 transversal competence centres:



**EPN Science Campus
European large
infrastructures**

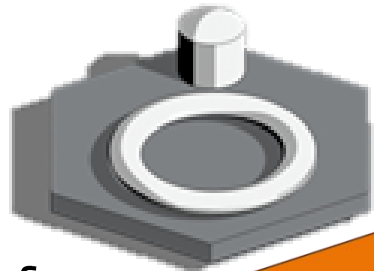


**Technology
management**



Basic research

An ambitious science and technology programme



EPN Science Campus
European large
infrastructures

Information and
communication
technology

Technology
management

Energy

Health



Basic research



GRENOBLE
ECOLE DE
MANAGEMENT
TECHNOLOGY & INNOVATION

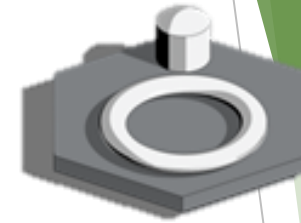


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An ambitious science and technology programme

Major international research facilities:



European Synchrotron Radiation Facility is a world-leading synchrotron radiation source hosting 41 cutting-edge experimental stations



ESRF

Institut Laue-Langevin (ILL) operates the most intense (reactor) neutron source in the world, feeding a suite of 40 high-performance instruments



EMBL

EMBL Grenoble is an outpost of the EMBL organisation (HQ in Heidelberg), specialising in research in structural biology



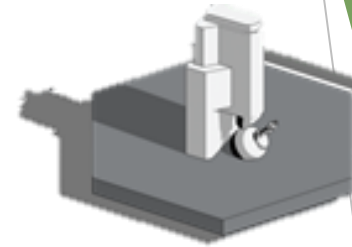
ILL

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An ambitious science and technology programme

Basic research:



Fields of activity :
nanosciences and nanotechnologies, materials science, micro-electronics,
quantum physics and lasers, cryotechnology, biology, biotechnology, and energy



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An ambitious science and technology programme

**Technology and innovation
management:**



**Advancing corporate performance by providing skills and knowledge
through excellence in pedagogic innovation and applied research**



Backed by Grenoble Ecole de Management

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An ambitious science and technology programme

GIANT has **public** and **private** funding

Project investment	1 300 M€ between 2010 and 2015			
Research & Education	600 M€	including	MINATEC	110 M€
			NanoBio	50 M€
			GreEn	125 M€
			GEE & RF	295 M€
Development work	300 M€			
Infrastructures	400 M€			
Funding entities	19%	State		
	24%	Local government		
	19%	European large scale infrastructures		
	5%	CEA		
	33%	Private		

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- ◆ **Research - Industry partnerships**
- ◆ Urban project

Research – Industry partnerships

Today, **40 companies** representing more than **5,000 industrial jobs** located on the site

And more than **100 start-ups** !



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Research – Industry partnerships

GIANT, instigator of synergies between research and industry:

- ◆ Provision for companies of advanced tools: **technological platforms**
- ◆ Active support for **start-up** creation
- ◆ Development research-industry **partnerships**
- ◆ Member of **competitive clusters**: MINALOGIC, LyonBioPôle, TENERDIS, Carnot institutes



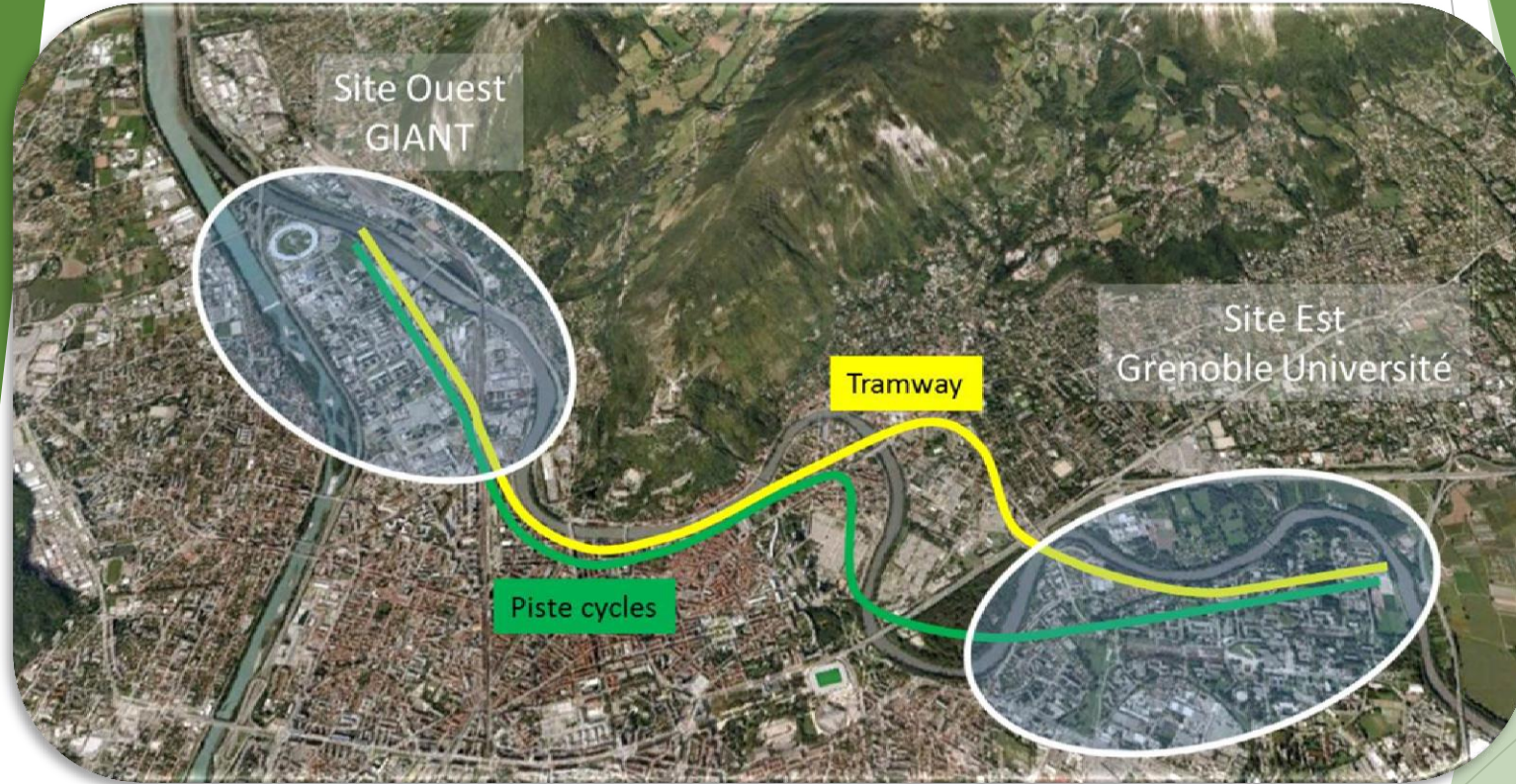
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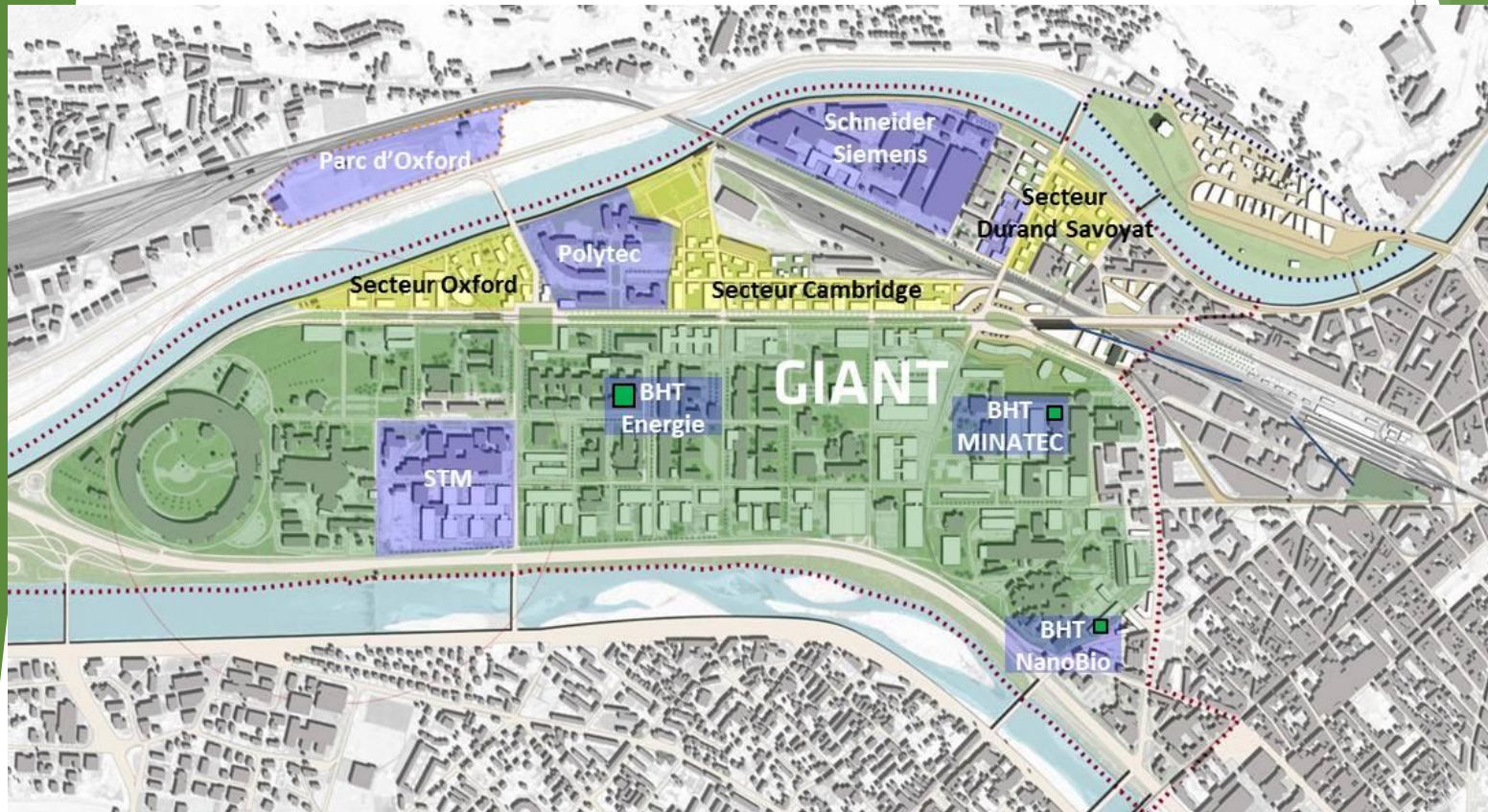
Urban project

Existing situation: two campuses connected in 30 minutes



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Urban project



Industry, tertiary



Housing, shops, leisure facilities and transport infrastructures

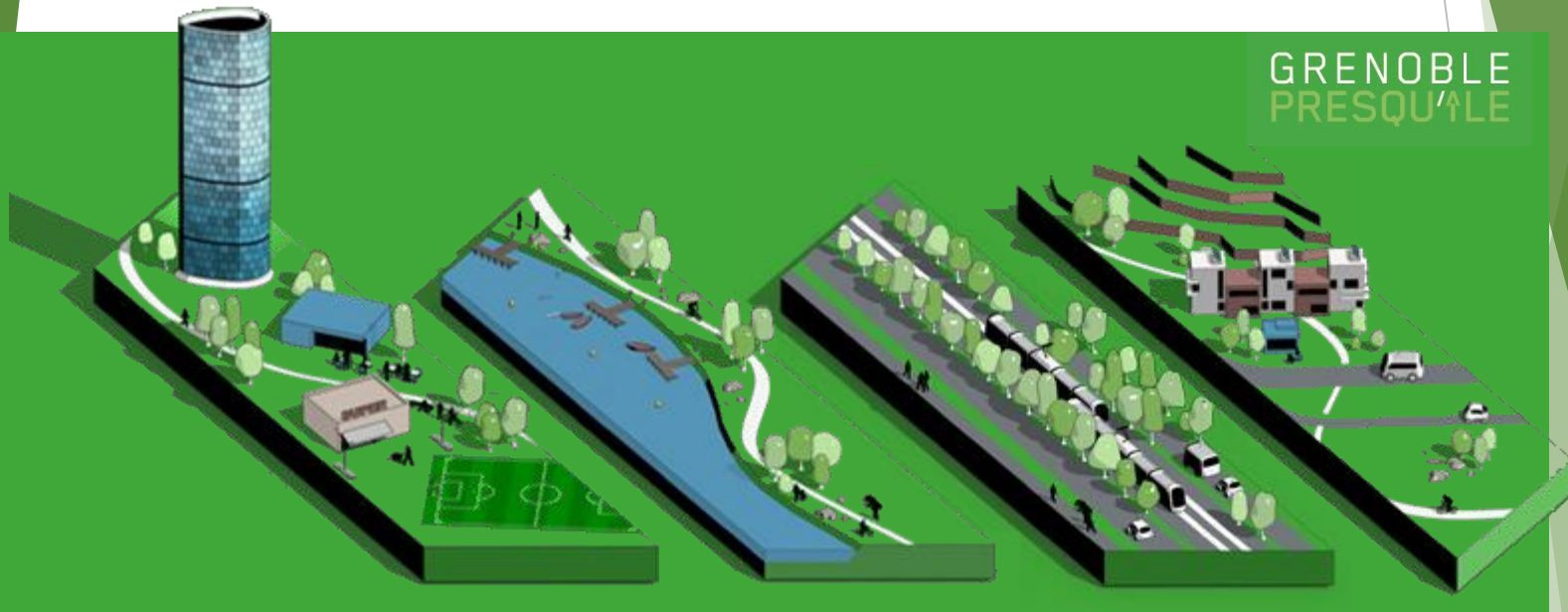


GIANT research and education buildings

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Urban project

A green neighbourhood within the city, offering excellent living conditions and architectural coherence



- Hotel, restaurants, leisure facilities
- Landscaping of river banks, parks, sports
- Green mobility, tramway, bicycle tracks
- Family and student housing, shops

Urban project

GRENOBLE
PRESQU'ÎLE

Housing, shops, leisure facilities and transport infrastructures



Illustrations AECDP

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Urban project

- Existing situation: a campus close to the city centre
- Developing a green neighbourhood within the city: the Grenoble Presqu'île project
- Developing a carbon-neutral-site
- A mobility concept

“Greentech” energy production

Solar, hydrogen, hydraulic



Energy efficiency

Low consumption buildings
Integrated energy management



Integrated mobility

Electric mobility services



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Thank you for your attention.

Questions? Comments?



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