Grenoble’s Innovation Ecosystem
Grenoble’s Innovation Ecosystem
Grenoble-Alpes Métropole

Key fields for action:
- Economic Development
- Higher Education & Research
- Water and sanitation
- Waste management
- Transport
- Energy
- Urban development
- Environment
  (among others!)

Le Baro’Métro
Un panel de 12 agglomérations
Grenoble’s Population

- Grenoble-Alpes Metropole: 445,000 inhabitants
  (Source: Insée, 2014)
- A predominantly young, educated and active population in Isère county:
  33% of the population is under 25 (vs. 31% French average)
  29% of the population has completed at least two years of higher education (vs. 25% French average)
  (Source: AEPI, 2014)
  8.8% unemployment rate vs. 10.4% national average
  (Source: Insée, 2013)
- BUT ageing population: over-60s expected to be 31% of the population by 2060 (with 18% over 75)
- Higher population density in Isère county (162 hab/km²) than national (117 hab/km²) and regional (143 hab/km²) averages
  (Source: Insée 2012)
- Rich international network of partners: Eurocities, EU covenant of mayors, twin towns, project partners...
Grenoble
Capital of the Alps
Capital of Innovation
Grenoble’s Triple Helix

Higher Education

Industry

Research

with government support
Higher Education

- University Joseph Fourier = 5th in France (Shanghai Ranking – ARWU)
- INP = 2nd best engineering school in France (QS World University Ranking)
- GEM = top 5 business schools in France

- 61 300 students
- Student city: 1/5 inhabitants is a student
- 10.6% of these students are international
- Science oriented: 42% in scientific fields
- High level students: 14 doctoral schools
- 45% of PhD students are international
- Grenoble, #1 attractive city for students in France 2013
- Young: 33% of the population is under 25
- Qualified: 28.4% of people have a graduate degree (24.3% in France)
Research

- 3 Nobel and 1 Wolf Prize in Physics
- 1 Turing Prize (the only French one)
- 1 Draper Prize
- 2 Nobel Prizes for Chemistry
- 1 Blue Planet Prize

- 25,000 researchers:
  - 15,000 public researchers
  - 10,000 private researchers
- Fundamental Research
- Applied Research
- Interdisciplinary research
- World-renowned labs

No 1 for R&D jobs in France

<table>
<thead>
<tr>
<th>City</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grenoble</td>
<td>7.1%</td>
</tr>
<tr>
<td>Toulouse</td>
<td>6.8%</td>
</tr>
<tr>
<td>Paris</td>
<td>4.7%</td>
</tr>
<tr>
<td>Lyon</td>
<td>4.0%</td>
</tr>
<tr>
<td>Rennes</td>
<td>3.6%</td>
</tr>
<tr>
<td>Nantes</td>
<td>3.5%</td>
</tr>
<tr>
<td>Nice</td>
<td>3.4%</td>
</tr>
<tr>
<td>Marseille</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

Percentage of research and design jobs as a proportion of total jobs

Source:
Industry

A diverse range of industries...

- Metalwork → 24,300 jobs
- Electronics → 23,800 jobs
- IT → 21,700 jobs
- Wholesale → 18,000 jobs
- Logistics → 16,200 jobs
- Chemicals, plastic, pharmaceuticals → 14,600 jobs (in Isère)

... including global leaders...

... and innovative SMEs...

... in cutting-edge fields!

- Electronics and micro-and nanoelectronics
- IT and software
- New energy technologies
- Medtech and healthcare
- Chemicals and cleantech

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Grenoble’s Smart Cities Projects

- **2013 – 2017**
  - Partnership with Malmö (Sweden), Oslo (Norway) and Eibar (Spain)
  - Renovation of the Arlequin district of Grenoble to create a ‘Nearly Zero Energy Neighbourhood’
  - Total Budget: €16.5M (€9.8M EU financing)
  - City of Grenoble’s Budget: €3.6M (€1.9M EU financing)

- **2014 – 2019**
  - Partnership with Amsterdam
  - Integrated demonstrator projects bringing together smart grids, heat networks and sustainable housing
  - Focus on the Presqu’île district of Grenoble
  - Total Budget: €43M (€25M EU financing)
  - City of Grenoble’s budget: €5M (€2.8M EU financing)
Smart Cities and Communities – Lighthouse Projects

Lighthouse projects
• Low energy districts
• Integrated infrastructures
• Sustainable urban mobility

Conditions
• Consortia: industry & cities
• 3 lead cities
3+ follower cities
• Part of ambitious urban plan
• Presentation of an attractive business plan
• Funding from other sources secured
• Contributions to data collection

‘commercial-scale solutions with a high market potential in areas such as energy efficient and smart buildings and neighbourhoods; smart digital services for better-informed citizens; identification, optimisation and integration of flows (data, energy, people, goods); smart and sustainable digital infrastructures; smart and sustainable energy systems and smart mobility services’
« The Presqu’île » District
The « Presqu’île » District

- Historic home to innovative actors → the CEA, CNRS, Schneider Electric, ST Micro, Minatec, Tenerrdis & Minalogic, universities...
- Site for the GIANT campus – Europe’s MIT
- Base for Ecocité 1 and Ecocité 2 projects
- Numerous public & private projects already underway which give us a base to build upon
- Citizen benefit → desire to reintroduce inhabitants into the district. Opportunity to create a new, green, connected district with a great quality of life!
Mobility

- Renowned, innovative transport solutions → tram system, car sharing, cable cars...
- Multimodal (bus/train/tram/carsharing) real time information (mobile app' and common sales points)
- Innov’Access, a ground-breaking programme to promote handicapped accessibility
- One of France’s top two bikeable cities → 300km of cycle lanes
- Partnership with Toyota to test the new I-Road
- Partnership with SymbioFCell to deploy hydrogen-powered vehicles for the use of the city’s services
Energy

- Reputation for responsible city planning
- Grenoble was France’s first urban area to implement an Air & Climate plan in 2005
- Named 2nd most sustainable city in France by magazine ‘Terra Eco’
- Energy-neutral districts: Bouchayer Viallet, Caserne de Bonne
- 2nd district heating network after Paris (96000 equiv. dwellings connected with more than 50% renewable energy sources (waste, biomass and clean energy)
- 80% of France’s private-sector research in eco-construction, materials and processes takes place in the Rhône Alpes region
- Home to Europe’s first industrial-scale fuel-cell production line (for hydrogen powered vehicles)
- The world’s first life-sized smart-grid experiment, GreenLys
- The world’s hydro-turbine capital – hydroelectricity was invented near Grenoble at the end of the 19th century
ICT

- Home to one third of France’s electronic component manufacturing jobs
- A hub for R&D in hardware-software convergence and the internet of things
- +200% jobs in software in ten years
- Awarded 5@ for internet connection for citizens
- Named a real digital ecosystem through ‘French Tech’: 470 members #DigiGre
- Many innovative working solutions: Fab Labs, technology platforms, co-working...
- Only French city to have a Turing Prize Winner: Joseph Sifakis in 2007
- Forum 5i 2015: Internet of Things
Thank you for your attention!

Kate Margetts
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Grenoble-Alpes Métropole