# Paris Region, an innovation powerhouse

The Paris Region is an exceptional land in terms of research and innovation. Its diversified economy is buzzing with top-ranked high-tech clusters and research centers, which generate exciting opportunities for cross-sector collaboration. Research and development in the Paris Region is mainly carried out by private companies which account for two thirds of total expenditure and represent more than 85% of design-research jobs.

## #1 in Europe for R&D
(2017)

### The highest amount of R&D expenditure in Europe

<table>
<thead>
<tr>
<th>Paris Region R&amp;D expenditure</th>
<th>€20.2b</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.6% of EU and 40% of French R&amp;D expenditure</td>
<td>€6.3b</td>
</tr>
<tr>
<td>2.8% of Paris Region’s GDP</td>
<td>€13.9b</td>
</tr>
</tbody>
</table>

### Main fields of R&D:
- Automotive industry 18%
- Pharmaceutical industry 11%
- IT activities and information services 10.0%
- Specialized activities, scientific and technical, 7.5%
- Aerospace 6.8%

In the Region, more than two-thirds R&D expenses are made by companies.

## The largest R&D pool in Europe

<table>
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<tr>
<th>Paris Region workforce</th>
<th>165,547</th>
</tr>
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<tr>
<td>including</td>
<td>119,742</td>
</tr>
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These professors, researchers, engineers, technicians and support staff work in universities, Grandes Ecoles, public institutes and companies.

<table>
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<th>Researchers</th>
<th>35.8%</th>
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<td>Total 165,547</td>
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<td>68.7%</td>
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### Paris Region, the best place in Europe to source R&D talent

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6.6% of EU and 37.5% of French R&D employees

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### Researchers in Europe (2017)

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<th>Community of Madrid (ES)</th>
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<tr>
<td>Catalonia (ES)</td>
<td>71,984</td>
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<tr>
<td>Warsaw Capital region (PL)</td>
<td>70,978</td>
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<tr>
<td>Köln (DE)</td>
<td>46,592</td>
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<td>Plate-forme EVR@ – Laboratoire IBISC, Université d’Evry – Paris Saclay</td>
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Internationally recognized technological and scientific knowledge

- **32 Nobel Prizes**
  Ecole Normale Superieure, top Nobel producing undergraduate institution in the world in 2016

The two most prestigious awards in mathematics

- **11 Fields Medals**
- **4 Abel Prizes**

27,500 students enrolled in doctoral programs, i.e.

- **37.4%** in France

EU28 Top 5 regions by R&D expenditure (millions of euros in 2017)

Paris Region

- **6,560**
- **16,000**
- **10,700**
- **7,000**

At the forefront of innovation

- **7,687** patents filed, i.e. 58.5% of the patents filed in France
  INPI, data 2018
- Paris Region is the European leader, and accounts for 4.4% of all European patent applications in EU-28.

- **#3 region in the world in volume of papers in international journals**
  (51,000) behind Beijing and Tokyo
  Elsevier/scopus, data 2014

- Nearly **500,000** scientific publications registered in Paris Region, mainly in the fields of medical research, physics and astronomy, engineering sciences, biochemistry, genetics, and molecular biology, according to the Scopus database, between 2004 and 2014.
  L’Institut Paris Region - OST

- 3 of the 10 world’s most innovative research institutions
  - #3 CEA Alternative Energies and Atomic Energy Commission
  - #8 CNRS National Center for Scientific Research
  - #9 INSERM National Institute of Health and Medical Research

- The world’s most innovative Research Institutions, 2019

Paris, European leader and #9 largest science and technology clusters in the world according to the Global Innovation Index 2019

- **99 doctoral schools**
  Ministry of Research, 2018-19
- **8,238 foreign PhD students**
- **5,789 foreign researchers**
  40.2% of foreign researchers in France
  FNAK, data 2019

R&D and innovation expenditure:

- **OMPI, 2019**
- **Eurostat, data 2017**

- The world’s most innovative Research Institutions, 2019

- Elsevier/scopus, data 2014

- The highest number of people employed in the fields of science and technology and scientists and engineers in Europe
  Eurostat, data 2018

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A thriving technological hub at the heart of Europe

The Paris Region is home to an exceptional diversity of sectors. Companies across all industries will find a hub that gathers the major players in their area of business and research. Paris Region’s diversified economy is buzzing with top-ranked high-tech clusters and research centers. This unique landscape generates exciting opportunities for cross-sector collaboration. For example, combining IT and healthcare, or automotive and eco-technology.

**8 regional competitiveness clusters make up this dynamic ecosystem.**

- **Over 2,600 projects**
- **€9.2b of total funding**

### Financial services
- 500 members, incl. 160 major groups, 300 SME’s, 20 labs and teaching institutions
- 28 projects funded since the cluster was founded
- Total funding: 80 million €

### Aeronautics, space and defence
- 336 members, incl. 125 major groups, 130 SME’s, 49 labs and teaching institutions
- 73 projects funded since the cluster was founded
- Total funding: 313 million €

### Digital & ecological transformation
- 1,032 members, incl. 86 major groups, 850 SME’s, 75 labs and teaching institutions
- 12 investments funds
- 9 urban communities
- 810 projects funded since the cluster was founded
- Total funding: 1,700 million €

### Perfumery and cosmetics
- 600 members, incl. 80 major groups, 520 SME’s, 200 labs and teaching institutions
- 350 projects funded since the cluster was founded
- Total funding: 450 million €

### European innovation and technology cluster in digital and Deep Tech
- 900 members, incl. 150 major groups, 600 startups / SME’s / mid-cap companies, 140 labs and teaching institutions
- 20 investors
- 20 local authorities & institutional bodies
- 625 projects funded since the cluster was founded
- Total funding: Over 3.18 billion €

### Rubber and polymer industry
- 138 members, incl. 11 major groups, 98 SME’s, 4 start-ups, 25 labs and teaching institutions
- 89 projects funded since the cluster was founded
- Total funding: 265 million €

### Transport and mobility
- 447 members, incl. 44 major groups, 312 SME’s, 35 labs and teaching institutions
- 14 local authorities & institutional bodies
- 260 projects funded since the cluster was founded
- Total funding: 1,120 million €

### High-tech healthcare and new therapies
- 476 members, incl. 34 major groups, 400 SME’s and startups
- 40 labs and teaching institutions
- 371 projects accelerated by the cluster
- Total funding: 2,073 million €

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