22@Barcelona, the innovation district
Index

0  Framework
1  22@Barcelona: Where
2  22@Barcelona: History
3  22@Barcelona: The Innovation District
4  22@Barcelona: Urbanism
5  22@Barcelona: Economics
6  22@Barcelona: Social
7  Q&A
0 Framework
Knowledge Infrastructure

Knowledge-based Economy

Innovation

Economy

Geography

Political Economy

TRIPLE HELIX. Local & Global Innovation System

Global | National | Regional | Local

Science | Technology | Industry | Market

Innovation

Born Global Companies

1 22@Barcelona: Where
Among the main European capitals
Barcelona’s Metropolitan Area
The Barcelona’s eastern transformation

Sagrera AVE

Forum 2004

22@Barcelona
2 22@Barcelona: History
22@Barcelona, included in the Ensanche’s plan (1859)
1986 - 1992: the opening of the waterfront
1996 - 1999: the opening of Diagonal Avenue

February 1996

February 1999
1860 - 1960: the “Catalan Manchester”
1960 - 1990: obsolescence and degradation
3  22@Barcelona: the innovation district
1998: the debate about the future of the industrial areas

An urban renovation strategy. A new model of making city
The answer to a necessity: the Knowledge Economy
3459 Plan

Clusters & Business Development

Infrastructures

International

Urban

District

Promotion

Demand

22@Innovation

Innovation

Eco

Cat

Mega

Tech

Bio

Dis
The 22@ Plan, a new model of compact city

- Activities
- Green spaces
- Advanced infrastructures
- Industrial heritage
- Facilities
- Subsidized housing
- New mobility model
- Revitalization public spaces
4 22@ Barcelona: Urbanism
# The scale of 22@Barcelona

## The scale of the project:

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Territory</td>
<td>198,26 Ha (115 city blocks)</td>
</tr>
<tr>
<td>New gross floor space</td>
<td>4,000,000 m²</td>
</tr>
<tr>
<td>• Productive Activities</td>
<td>3,200,000 m²</td>
</tr>
<tr>
<td>• Housing, facilities and services</td>
<td>800,000 m²</td>
</tr>
<tr>
<td>Increase in green spaces</td>
<td>114,000 m²</td>
</tr>
<tr>
<td>Increase in facilities</td>
<td>145,000 m²</td>
</tr>
<tr>
<td>Investment in infrastructures</td>
<td>180 million €</td>
</tr>
</tbody>
</table>

## Update execution 1 S 2009:

- **Urban Plan and new economic ceiling**
  - Rearrangement of 69% of the territory
  - Almost 1,500 firms and institutions recently established

- **Infrastructures Plan and investment**
  - 42% of reurbanization works finished or in process
  - Investment until 1 S 2009: 108 million euros
### The urban planning process (2001-2008)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td><strong>Compact city</strong></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td><strong>with publicly owned land, fully urbanised and offering excellent infrastructure</strong>, providing many more jobs in the field of knowledge intensive activities</td>
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<tr>
<td></td>
<td><strong>Industrial land, little used or in complete disuse, 100% privately owned, and part yet to be urbanised</strong></td>
<td><strong>Urban Planning</strong></td>
<td><strong>Urban Management</strong></td>
<td><strong>Infrastructures</strong></td>
<td><strong>Construction</strong></td>
<td><strong>Corporate Projects, clusters</strong></td>
<td></td>
</tr>
</tbody>
</table>
Urban planning. Density

Increase density:

- Subsidized Housing
- Activities

Build ability: m² of ceiling/m² of land

Balance public and private benefits:

<table>
<thead>
<tr>
<th>PRIVATE BENEFITS</th>
<th>PUBLIC BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• More productive uses: 22a ➔ 22@</td>
<td>• Free cession of land:</td>
</tr>
<tr>
<td>• Higher density: 2 ➔ 2.2 / 2.7</td>
<td>• 10% for 7@ facilities</td>
</tr>
<tr>
<td>• Leadind edge infrastructures</td>
<td>• 10% for subsidized housing</td>
</tr>
<tr>
<td></td>
<td>• 10% for green areas</td>
</tr>
<tr>
<td></td>
<td>• Eventual opening of streets</td>
</tr>
<tr>
<td></td>
<td>• Financing a part of the Special Infrastructure Plan</td>
</tr>
</tbody>
</table>
Special infrastructures plan

- New mobility plan
- Public space renewal
- New energy networks
- Selective pneumatic waste collection
- New heating and cooling system
- Underground galleries
5  22@ Barcelona: Economics
Urban clusters

Cluster strategies

Transversal programs

Clusters policy
Entrepreneurship
Services for companies
Internationalization
Community of professionals
Relation between clusters
Marketing

MEDIA
ENERGY
MEDTECH
ICT
DESIGN

ENERGY
MEDTECH
ICT
DESIGN
Leadership of projects: current situation and forecast

22@Barcelona: Clusters & activities

- Companies
- Institutions
- Universities
- Technological centers
- Incubators
- Entrepreneurs
- Specific spaces
- Dissemination spaces
- Residences
- Other services
## Media: Barcelona Media Park

<table>
<thead>
<tr>
<th>Category</th>
<th>Institutions</th>
<th>Specifics spaces</th>
<th>Universities</th>
<th>Technological centers</th>
<th>Incubators</th>
<th>Residences</th>
<th>Dissemination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies</td>
<td>MediaPro, Lavinia, Cromosoma…</td>
<td>Audiovisual Production Centre (PBM)</td>
<td>UPF, UB, UOC</td>
<td>Barcelona Media-Innovation Centre</td>
<td>Media-TIC Building</td>
<td>Melon District / Ciutadella</td>
<td>Media Factory</td>
</tr>
<tr>
<td>Institutions</td>
<td>RNE, CAC, Barcelona TV…</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specifics spaces</td>
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<tr>
<td>Universities</td>
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</tr>
<tr>
<td>Technological centers</td>
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</tr>
<tr>
<td>Incubators</td>
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</tr>
<tr>
<td>Residences</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Dissemination</td>
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</tr>
</tbody>
</table>
## ICT: Network of R+D centres related to ICT

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies</td>
<td>T-Systems, Indra, Telefónica</td>
</tr>
<tr>
<td>Institutions</td>
<td>CMT, FBD, Localret</td>
</tr>
<tr>
<td>Specifics spaces</td>
<td>Interface building, Media-TIC building</td>
</tr>
<tr>
<td>Universities</td>
<td>UB, UPC, La Salle</td>
</tr>
<tr>
<td>Technological centers</td>
<td>Technological ICT Center</td>
</tr>
<tr>
<td>Incubators</td>
<td>Media-TIC building</td>
</tr>
<tr>
<td>Residences</td>
<td>Melon District</td>
</tr>
<tr>
<td>Dissemination</td>
<td>ICT House</td>
</tr>
</tbody>
</table>
Media & ICT Cluster: 2006 - 2010

- AGBAR TOWER
- GREEN AREAS
- INTERFACE BUILDING: IMI, Indra & ACC
- T-SYSTEMS HQ. & BARCELONA DIGITAL
- BARCELONA TV
- SUBSIDIZED HOUSING
- MEDIA-TIC BUILDING
- RBA HQ.
- BARCELONA ACTIVA
- IMAGINA BUILDING: Mediapro, CIBM, Yahoo!, TCI, ...
- AUDIOVISUAL PRODUCTION CENTRE
- COMMUNICATION FACULTY (UPF)
- VILA CASAS MUSEUM OF CONTEMPORARY ART
<table>
<thead>
<tr>
<th>Category</th>
<th>Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies</td>
<td>Endesa, Ecotècnia, Agbar</td>
</tr>
<tr>
<td>Institutions</td>
<td>ITER, Climate Catalan Institute (IC3)</td>
</tr>
<tr>
<td>Specifics spaces</td>
<td>Campus Offices</td>
</tr>
<tr>
<td>Universities</td>
<td>UB, UPC</td>
</tr>
<tr>
<td>Technological centers</td>
<td>IREC</td>
</tr>
<tr>
<td>Incubators</td>
<td>b_TEC Incubator</td>
</tr>
<tr>
<td>Residences</td>
<td>b_TEC Residence</td>
</tr>
<tr>
<td>Dissemination</td>
<td>Campus services</td>
</tr>
</tbody>
</table>
### Medical Technologies - MedTech

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies</td>
<td>Matachana, Gaes, Sanofi Aventis, Isdin, Telemedicine</td>
</tr>
<tr>
<td>Institutions</td>
<td>CatSalut, Blood and Tissues Bank</td>
</tr>
<tr>
<td>Specifics spaces</td>
<td>Health Building, BIO Enterprise Park</td>
</tr>
<tr>
<td>Universities</td>
<td>UB, UPC, Official Nursing College</td>
</tr>
<tr>
<td>Technological centers</td>
<td>22@MedTech Laboratory</td>
</tr>
<tr>
<td>Incubators</td>
<td>Health Building</td>
</tr>
<tr>
<td>Residences</td>
<td>Nido</td>
</tr>
<tr>
<td>Dissemination</td>
<td>Health Building</td>
</tr>
<tr>
<td>Category</td>
<td>Examples</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Companies</td>
<td>G-Star Raw, ADD, Node, Estudi Arola, ruiz+company, Morera Design</td>
</tr>
<tr>
<td>Institutions</td>
<td>BCD</td>
</tr>
<tr>
<td>Specifics spaces</td>
<td>Palo Alto, PBM, Hub Design</td>
</tr>
<tr>
<td>Universities</td>
<td>University of Vic, UPC, IAAC</td>
</tr>
<tr>
<td>Technological centers</td>
<td>Centre d’Innovació, Barcelona Media</td>
</tr>
<tr>
<td>Incubators</td>
<td>Media-TIC, “Projecte Bressol” (textile)</td>
</tr>
<tr>
<td>Residences</td>
<td>Melon District / Ciutadella</td>
</tr>
<tr>
<td>Dissemination</td>
<td>Hub Design</td>
</tr>
</tbody>
</table>
22@ Spaces. Engines of transformation
Cluster’s leader agents
10 universities: 25,000 students
4 residences: more than 800 beds
12 R+D+i & technological centers
New companies and new jobs at 22@Barcelona

**New companies** installed in the district since 2000
(Accumulated data at 12.31.2008 in number of companies)

(December 2008)

<table>
<thead>
<tr>
<th>Type of Company</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies already located or in process to be installed</td>
<td>1,441</td>
</tr>
</tbody>
</table>

44.6% newly created

**New jobs** in 22@Barcelona since 2000
(Accumulated data at 12.31.2008 in number of employers)

(December 2008)

<table>
<thead>
<tr>
<th>Type of Employment</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees of companies already located or in process to be installed</td>
<td>42,000</td>
</tr>
</tbody>
</table>

Clusters

- 69%
- No clusters
- 31%

+ 50%
### 22@ PLUS Business Services

<table>
<thead>
<tr>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spaces and Infrastructures</td>
</tr>
<tr>
<td>Innovation and Technology</td>
</tr>
<tr>
<td>Clusters and Market access</td>
</tr>
<tr>
<td>Public Financing</td>
</tr>
<tr>
<td>22@Capital</td>
</tr>
<tr>
<td>Talent</td>
</tr>
<tr>
<td>Networking</td>
</tr>
<tr>
<td>Promotion</td>
</tr>
</tbody>
</table>
Spaces and advanced infrastructures available

1. Space search

2. 22@Barcelona landing platform
   a. Weekly and Monthly Spaces

3. Information and advice on infrastructures
   a. Telecommunications
   b. Selective pneumatic waste collection
   c. Centralized climate system
   d. New power grid
22@ PLUS: Networking

Services, sharing and consolidating the district

1. 22@Network, Association of Businesses and Institutions of 22@Barcelona
   a. Welcome plan, for new companies and institutions that move to the district.
   b. Work commissions, which work as networking opportunities and project generators.
   c. Network workshops

2. 22@Update Breakfast

3. Symposium on Urban Clusters

4. IN22@
Attracting and developing talent

1. 22@Staying in company:
   a. 22@MÁSTER / 22@DEGREE
   b. 22@BECAT
   c. 22@FP
   d. MIT-SPAIN
   e. 22@MBA

2. Dissonances
22@ PLUS: Innovation and technology

Supporting innovation and access to technology

1. Technology Valorization Program: KimBCN Foundation

2. Urban Lab:
   22@Barcelona offers a large number of opportunities for technology companies that decide to move to the district, like spaces to run pilot programs to test new technology.
   22@Barcelona = Urban Lab

3. 22@Innovation:
   Through this program 22@Barcelona fosters innovation with specific projects to generate sophisticated demand through both private and public initiatives. This allows small and medium-sized companies to access new clients and markets.
22@ PLUS: Innovation and technology

Supporting innovation and access to technology

- **4. 22@Synergys**

  Business networking and work sessions at congresses or other scientific or technological events that take place in Barcelona.
  - Easy access to new **emerging technologies** to create **synergies** and more competitive business environment.
  - Helping to generate new business opportunities.
  - **Talent**'s attraction and retention in the city of Barcelona.
Public Financing

**Personalized information, advice and management**

The 22@Barcelona Project Aid Management Unit (UGAP) offers companies located in the district, or in the process of moving there, personalized consulting services to help them identify available public financing opportunities for their strategic projects.

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**22@Capital**

**Private and venture capital investment networks**

**Global Growth Program** is aimed at technology companies with a high potential for growth. Its objective is to help companies expand globally and accelerate their growth. The program is led by professor Ken Morse, director of the MIT Entrepreneurship Center.
6  22@ Barcelona: Social
Space of personal relation

22@ Space of Personal Relation

22@Talent

For the professionals

- International Community: IN22@
- Access to education
- Relationship spaces
- Networking: 22@Update Breakfast, ...
- 22@Voluntariat

For the neighbours

- 22@Districte Digital
- Actions of direct communication
- Support to initiatives of the district
- 22@Staying in company

Increase of the belonging feeling
Creation of the community 22@
Pride to work/live in 22@
7 Q & A
Citizens Projects

22@Districte Digital
- Virtual Memory of the Sant Martí District’s elders
- New multimedia classrooms
- Computer recycling network
- Families on line
- Discovering Sant Martí District

22@Staying in company
- 22@FP
- 22@Becat
- MITSpain
- 22@MBA
- 22@Master/22@Degree

Sponsorship and participation in the neighborhood activities
Direct communication actions
Citizens needs analysis