

# Campus Diagonal-Besòs

**b\_TEC**

Barcelona  
innovació tecnològica



En primer plano, los principales edificios UPC en el Campus Diagonal-Besòs

**English version**

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## Introduction

Being part of a project centered on knowledge and technology transfer that involves urban transformation is always a challenge. Working to create a core of excellence in knowledge such as the future Diagonal-Besòs Campus is the task entrusted to the b\_TEC Foundation by its members (the Diagonal-Besòs Campus Consortium, formed by local administrations, headed by Barcelona and Sant Adrià City Councils, the Technical University of Catalonia [UPC] and the University of Barcelona [UB]) and its promoters the Government of Catalonia and the Barcelona Chamber of Commerce.

From the outset, we have been committed to the development of innovation and technology in an area between the city of Barcelona and the city of Sant Adrià de Besòs. We work with the conviction that the fields of energy, water and mobility are critical for the development and sustainability of the society in which we live. Therefore, we are at the service of the most influential universities, businesses and research centers in the above-mentioned fields in order to facilitate knowledge and technology generation and transfer.

The cross-cutting outlook offered by the b\_TEC Foundation helps add value to researchers and businesses that want to take part in this time of changing models that is leading us towards a world which is more committed to the economy and to the environment.

Miquel Barceló  
b\_TEC Foundation Chairman

# 1 Organization

## (map p.8)

*Green dot\_Campus Management and Services (Spiralling Tower)*  
*Blue dot\_UPC teaching and research*  
*Red dot\_Energy Park and Water Park*  
*Grey dot\_IREC (Catalonian Institute for Energy Research)*  
*Yellow dot\_University-Business*

## (captions top p.9)

**The teaching, research, business triangle**

-  
 This new park model, which is connected to other innovative territories at an international level, aims to turn knowledge into economic activity.

## (captions bottom p.9)

**The research park as a joint that structures the system as a whole**

-  
 The research park is the backbone of the project as a whole and is an essential element for the economic development of the sector.

## (illustration bottom p.9)

**RESEARCH PARK  
TEACHING  
BUSINESSES**

## 1.1 Institutions

### Board:

Diagonal-Besòs Campus Consortium

- Barcelona City Council
- Sant Adrià de Besòs City Council
- Barcelona Metropolitan Transport Authority [EMT]
- Barcelonès County Council
- Besòs Consortium

Technical University of Catalonia (UPC)

University of Barcelona (UB)

### Members:

- Miquel Barceló, President

### Barcelona City Council

- Ramón García-Bragado, Fourth Deputy Mayor

### Sant Adrià de Besòs City Council

- Jesús Maria Canga, Mayor

### Barcelonès County Council

- Joan Carles Mas, president

### Technical University of Catalonia (UPC)

- Antoni Giró, Dean
- Josep Casanovas, Vice Dean of University Policy
- Joaquim Boixareu, Chairman of the Board of Trustees

### University of Barcelona (UB)

- Dídac Ramírez, Dean
- Sílvia Altrian, Vice-Rector for Innovation and Knowledge Transfer
- Joan Corominas, Vice Chair of the Board of Trustees

## (captions p.10)

**Diagonal Besòs Campus**

-  
 With the opening of the thoroughfare Avinguda Diagonal to the sea and after Forum 2004, many people showed interest in creating a new university campus in the area. And this is what gave rise to the idea of the Campus de Llevant which evolved into the Diagonal-Besòs Campus.

## (captions p.11)

**Diagonal Besòs Campus**

-  
 The first stone of the Diagonal-Besòs Campus was laid on December 17, 2009. The Minister of Innovation, Universities and Enterprise, Josep Huguet with the Mayor of Barcelona, Jordi Hereu; the Mayor of Sant Adrià de Besòs, Jesús Maria Canga and the rector of the UPC, Antoni Giró during the celebration.

-  
 Avinguda Diagonal joins two poles of knowledge in Barcelona. The new campus located in the Besòs area connects with new areas of knowledge located in Barcelonès Nord.

## Others participants institutions

- Government of Catalonia
  - Department of Economy and Finances
  - Department of Innovation, Universities and Enterprise
- Barcelona Chamber of Commerce
- Government of Spain
  - Ministry of Science and Innovation
  - Ministry of Industry, Tourism and Trade
- Barcelona Provincial Council
- Zona Franca Consortium

## 1.2 Objectives and Park Model

### Objective

The b\_TEC Foundation leads the design, organization and management of the Diagonal-Besòs Campus, and it promotes the Campus' contents by involving the government, universities and the business world.

The b\_TEC Foundation brings together projects and initiatives within the framework of the future technology campus, and it is in charge of encouraging businesses, universities and research centers to participate in joint projects designed to foster innovation and technology transfer in the areas of energy, water and mobility in the Besòs.

### Park Model

This new park model, which is connected to other innovative territories at an international level, aims to turn knowledge into economic activity. The research park is transformed into the backbone of the project as a whole and is an essential element for the economic development of the sector. The research park enhances the quality of university teaching and focuses attention on the developed knowledge by offering it to businesses in the energy, water and mobility sectors.

The creation of the Diagonal-Besòs Campus responds to the desire to develop a new hub of innovation and technology transfer, a task that is possible thanks to the effort put forth by the public owners of the space used to create this internationally renowned Campus.

## 1.3 Diagonal-Besòs Campus Project: Developments

# 2 Technology Parks

## 2.1 Research Parks

The Energy Park is the instrument that promotes the innovation and economic activity of the sector, the cohesion of the park as a whole and the activities that foster the research conducted by park participants.

### b\_TEC Energy Program

b\_TEC energy program is designed to achieve the primary goal of becoming a collaborating agent that is important for fulfilling European and Spanish objectives within the context of the SET-plan.

The fundamental objectives of this program are to:

- Develop a research and technology transfer base that contributes to the economic development of the sector
- Work with Catalan universities, particularly with the engineering schools at UPC and with UB, to improve the quality of teaching, especially in master's programs
- Contribute to the economic and social development of the Besòs area
- Attract public and private energy projects, groups and research centers that help to create an internationally renowned space in research excellence

The program relies on distinguishing characteristics that will, in large part, make it possible to achieve these objectives. These characteristics are:

- Coexistence of schools, research centers and businesses in the same space
- Influence in a specific territorial space
- Proximity to innovative businesses
- Being part of a leading industrial community

### • IREC

The Catalonia Institute for Energy Research (IREC) was established in 2008. In a little over a year in action, IREC has laid the groundwork to become a leading research center in energy in Catalonia specializing in research in the field of energy efficiency. The Institute has four complementary technology lines, which are: electricity grids; CO2 capture, storage and applica-

tions; bioenergy; and offshore wind energy. And the cross-cutting areas of advanced materials for energy applications, electricity and power electronics and socio-technical research.

### • "Fusion for Energy"

The European Agency for Energy, founded in 2007 and based in the Energy Park, is primarily responsible for providing scientific support and technology research for constructing ITER components and establishing contracts with European industry to manufacture the components.

The reactor ITER (meaning "the way" in Latin), which will be located in Cadarache, is an international project aimed to demonstrate the scientific and technological feasibility of building a large-scale, tokamak-type nuclear fusion reactor that will make it possible to obtain a clean and inexpensive source of renewable energy.

### • b\_FUS

The creation of b\_FUS Barcelona Fusion Center will enable Spanish participation in European Fusion programs by promoting access by R&D institutions and industry to the high-tech environment that the Fusion Program entails, by taking positions in ITER operation and by setting up groups and facilities of excellence.

### • UPC - UB Research Groups/Spaces for Innovation

The presence of research groups especially from UPC, but also from UB, is crucial for strengthening collaboration between education, research and business on the campus.

### b\_TEC|MIT Project

The b\_TEC Foundation is a member of the Massachusetts Institute of Technology Energy Initiative (MITEI). As a result of this joint collaboration, b\_TEC takes part in energy research projects conducted at MIT that also have the participation of other companies in the energy sector. In particular, the b\_TEC Foundation participates in two research projects:

- Floating Offshore Wind Turbines: Analysis, Design and Development: the main goal of this research project is to develop an analysis and design process for reliably developing floaters, mooring systems and wind turbines in an economically reliable manner.

- Affiliate Membership Agreement for MIT's Center for Bits and Atoms: MIT Center for Bits and Atoms is an interdisciplinary initiative for researching

Various universities, businesses and public administrations use the Energy Park as a physical space for research, investigation and innovation in energy

(captions p.14)

CEEC

-

Attendees at the general meeting of the Energy Efficiency Cluster of Catalonia on October 13, 2009.

relationships between physics and computer science. The CBA campus develops new ways for processing and understanding information, energy and materials.

#### • Energy Efficiency Cluster of Catalonia (CEEC)

The Energy Efficiency Cluster of Catalonia began its activity in 2009. CEEC's registration in October 2009 as an Association of Innovative Businesses (AEI) in the Ministry of Industry, Tourism and Trade's Special Register of Innovative Business Clusters facilitates the development of initiatives and projects funded by the Ministry and furthers the support provided by the Ministry for CEEC's annual structural and coordination costs.

Moreover, 2009 also saw the launching of CEEC working groups with the aim of developing projects related to RD&I in energy efficiency. The working groups are:

- Working group on cattle farms
- Working group on remote management of energy in public buildings
- ESCO working group on outdoor lighting
- Working group on mobility
- Working group on thermally activated cooling
- Working group on integral solutions for urban infrastructures
- Working group on training professionals in energy efficiency

During the year, a website was also created which includes all of the information relating to CEEC members, information about events organized by the association (conferences, fairs, etc.) and information and links related to the field of energy efficiency.

In addition, the CEEC has recently begun cooperating with the PTE-EE to participate in different types of events and initiatives.

#### • Spanish Energy Efficiency Technology Platform

The Spanish Energy Efficiency Technology Platform (PTE-EE) was set up in October 2008. With this initiative, the Ministry of Science and Innovation has brought together businesses and research centers working toward a common goal: to promote R&D&I in energy efficiency technologies.

During its first year of activity and through the publication of the document on the strategic vision of energy efficiency in Spain, the PTE-EE has analyzed the current state of technology in the area of energy efficiency and has presented needs and recommendations along with the path to follow in order to achieve the ultimate goal of more reasonable and responsible energy use.

#### (captions p.15)

##### CEEC

-

General Assembly of the Energy Efficiency Cluster of Catalonia. The regional minister of Economy and Finances, Antoni Castells, together with the director of ICAEN, Encarna Baras, and the president of CEEC, Jordi Serra.

#### (captions p.16)

##### PTE-EE

-

Conference for presenting the document on the strategic vision of energy efficiency in Spain in June 2009. Agustí Maure, general director of Energy of the Government of Catalonia; and José Arrojo, director of Innovation at Endesa and president of the PTE-EE with Elena González, president of Energy Lab and vicepresident of the PTE-EE and Josep Escolano, project director at b\_TEC.

## 2.2 Water Park: CETaqua

b\_TEC creates the Water Park as a center for research, innovation and knowledge exchange in the important area of water management technology and economics.

With the cooperation of various Catalan universities, led by UPC, in conjunction with leading businesses in the sector, most prominently CETaqua research center of the Agbar Group, and with the support of the Government of Catalonia, the Water Park aims to create value in products and services related to the complete water cycle in an attempt to contribute to sustainable economic development.

The Park seeks to become an internationally renowned center of excellence through training, development and technological innovation.

Once initial construction of the Diagonal-Besòs Campus begins, design of the Park's most functional aspects will begin.

## 2.3 Mobility Park

b\_TEC's effort is aimed at creating a space for developing knowledge geared toward sustainable mobility.

With leading international innovative organizations in sight, such as knowledge hubs in the United Kingdom centered around Living Labs Global, we are designing a technological and university environment that encompasses all efforts in order to improve mobility in large urban areas, thus improving energy use, with intermodal models and with the ongoing challenge to improve air quality and reduce noise by innovating demand management through the introduction of ICT in mobility.

There are many initiatives in our region with similar goals that must be researched and supplemented. In this regard, b\_TEC is designing this space with all of these factors in mind.

b\_TEC creates the Water Park as a center for research, innovation and knowledge exchange in the important area of water management technology and economics

# 3 b\_TEC Knowledge and Technology Transfer

## (captions p.18) Participants in a seminar

- Specialized seminars are addressed at experts and specialists in the sector. The internal organization of the activity enables networking among attendees and speakers.

## One of the goals of the Barcelona Tech Summer Sessions is to be a meeting point among businesses

## (captions p.20)

Presentation made by Francesc Soler Parellada, professor of Business Organization and director of the UPC Park and Innova Program at UPC, to the Forum of Entrepreneurs and Investors at TSS09.

## 3.1 Barcelona Tech Summer Sessions

The TSS are the yearly strategic, technical and academic sessions that analyze the energy, water and mobility sectors.

Coordinated by the b\_TEC Foundation, the fourth edition of this activity of excellence, which is organized in conjunction with the Massachusetts Institute of Technology (MIT), the Technical University of Barcelona (UPC) and the University of Barcelona (UB), was held in 2009.

The Barcelona Tech Summer Sessions are the tool that demonstrates the future functioning of the Diagonal-Besòs Campus as a core of excellence specializing in energy, water and mobility which brings together in the same place those organizations who we think are essential for knowledge and technology transfer. These organizations include public administrations, private companies and universities along with research centers.

### Therefore, their goal is:

- To be the meeting point between businesses, government and universities in order to facilitate the exchanging of viewpoints on the fields of energy, water and mobility. Speakers and participants are aware of the importance of working together in these three areas of society.
- Internationality: discuss in Barcelona the issues of energy, water and mobility from global points of view. The sessions have international and national speakers and an international public.
- High quality: those in charge of session contents are specialists in their respective sectors.

The Barcelona Tech Summer Sessions 09 were characterized by the cross-cutting nature of the programs. Energy efficiency was the fundamental topic which acted as the starting point to develop the contents of the b\_TEC|MIT conference, energy seminars, water seminar and courses on mobility, renewable energies and water technologies. Energy efficien-

## (captions p.21)

Seminar on Energy Efficiency in Buildings.

## (captions p.22)

### b\_TEC|MIT Conference

- Regional minister of Innovation, Universities and Enterprise, Josep Huguet, together with Antoni Giró, rector of UPC; Miquel Barceló, president of b\_TEC; Karl Koster, director of Corporate Relations at MITILP; Sílvia Atrian Ventura, vice rector of Innovation and Knowledge Transfer at UB; Josep Maria Rovira, general director of Endesa Catalonia; and Josep Escolano, project director at b\_TEC.

## (captions p.23)

Seminar of Water Technologies.

- Course on water technologies, technical tour.

**The Barcelona Tech Summer Sessions offer conferences, forums, seminars and courses on energy, water and mobility**

## (captions p.25)

The b\_TEC Foundation participated as a community member alongside business

cy was also the center of events aimed at scientific dissemination.

### New formats:

- **Forum for Entrepreneurs and Investors:** With the collaboration of Barcelona Activa and UPC's INNOVA project, the forum of entrepreneurs in clean tech sets the stage for an environment of exchange for obtaining venture capital.
- **Seminar: from reactivity to creativity:** Professor Andrés Martín offered a seminar devoted to different visions taking place in human teams and he discussed the techniques for drawing out utmost effectiveness and motivation while keeping stress levels at a minimum.

### The consolidation of a model:

- **The b\_TEC|MIT Conference:** "Strategic Challenges in Energy, Water and Mobility: Energy Efficiency" provided CEOs and head researchers the opportunity to learn more about MIT, universities and the most important companies in the energy, water and mobility sectors. The fourth edition was a guarantee for speakers and attendees alike.
- **Energy and water seminars:** experts in different sectors updated their technological knowledge through very specific projects and study presentations in the areas of energy and water technologies. The seminars have become a place for learning about and presenting the latest technological contributions.
- **Courses:** they have become essential for academics interested in energy, water and mobility. During the week, attendees are able to acquire extensive knowledge in each of the sectors and can also take part in technical tours of extraordinary facilities.

**b\_TEC|MIT conference "Strategic Challenges in Energy, Water and Mobility: Energy Efficiency" - REGISTRANTS: 237 No. of SPEAKERS: 21**

**Forum for entrepreneurs and investors - REGISTRANTS: 75 No. of SPEAKERS: 5**

### Seminar:

From Reactivity to Creativity - REGISTRANTS: 23 No. of SPEAKERS: 2

**Seminars on Energy - REGISTRANTS: 333 No. of SPEAKERS: 24**

### SEMINARS ON:

Offshore Wind Energy | District Heating and Cooling | Energy Efficiency in Buildings | CO2 Capture and Storage | Fusion Energy

schools, professional schools, technology parks, sector leaders and major Catalan universities.

Community members during the award ceremony presided by the First Deputy Mayor of Barcelona, Jordi William Carnes. b\_TEC, IREC, BIOcat and bdigital were the sector leaders representing the clean technology sector.

**Seminar on Water Technologies** - REGISTRANTS: 42 No. of SPEAKERS: 9

**Courses:**

REGISTRANTS: 152 No. of SPEAKERS: 29

**TECHNICAL TOURS:**

Bus Traffic Regulation Center, Endesa Control Center in Catalonia, El Prat desalinator and Sant Joan Despí purifying plant

Mobility Courses | Renewable Energies | Water Technologies

### 3.2 HiT Barcelona

This World Innovation Summit, the b\_TEC Foundation collaborated on the CleanTech track at Hit Barcelona, where it fostered relationships between entrepreneurs and investors in the telecommunications, clean technologies and health industries.

The event was organized by Fira de Barcelona, and 22@Barcelona was among the co-organizers.

June 15/16	<b>b_TEC MIT International Conference "Strategic Challenges in Energy, Water and Mobility: Energy Efficiency"</b>				
June 22/26 <b>Mobility Week</b>	<b>Monday 22</b>	<b>Tuesday 23</b>	<b>Wednesday 24</b>	<b>Thursday 25</b>	<b>Friday 26</b>
	Seminar from reactivity to creativity			Technical tour	
	Mobility course			Mobility course	
June 29/July 3 <b>Energy Week</b>	<b>Monday 29</b>	<b>Tuesday 30</b>	<b>Wednesday 1</b>	<b>Thursday 2</b>	<b>Friday 3</b>
	Seminar on Offshore Wind Energy	Seminar on District Heating/ Cooling	Seminar on Energy Efficiency in Public Buildings	Seminar on CO2	Seminar on Fusion Energy
	Course on Renewable Energies				
			Round-table discussion		Technical tour
July 6/10 <b>Water Week</b>	<b>Monday 6</b>	<b>Tuesday 7</b>	<b>Wednesday 8</b>	<b>Thursday 9</b>	<b>Friday 10</b>
	Seminar on water technologies				
	Course on water technologies				Technical tour
			Round-table discussion		

# 4 b\_PIE Business Innovation Project

**The specific services offered by the b\_TEC Foundation that are conducive to attracting businesses to the territory and that make it possible to create and transfer knowledge between the Campus' research parks**

**(captions p.27)**

The Innovation, Universities and Enterprise Minister, Josep Huguet; the president of the b\_TEC Foundation, Miquel Barceló and the president of the Chamber of Commerce of Barcelona, Miquel Valls during the presentation of the project to the companies.

This specific program adds to the functional and structural cohesion of the Diagonal-Besòs Campus through the specific services offered by the b\_TEC Foundation that are conducive to attracting businesses to the territory and that make it possible to create and transfer knowledge between the Campus' research parks.

**Services:**

- Connection with the public sector
- University networking
- Support for internationalizing companies
- Connection with new business opportunities
- Participation on projects developed by the Campus' parks
- Management of physical spaces for businesses

**Group of businesses and organizations:**

Endesa, Agbar, Schneider, Alstom-Ecotècnia, Barcelona Chamber of Commerce, Àbac, Arelsa, Asistencia Técnica Industrial, Carburos Metálicos, Circutor, Copcisa Eléctrica, Creara, Districlima, Elyo Ibérica, Emte, Enertika, Gas Natural-Unión Fenosa, Geopten, Grupo MH, HC Energía, Iberdrola, Salicrú, Sauter Ibérica, Sensing&Control Systems, SGS Tecnos, Siemens, Simón, SECE, Solar&Palau, Telvent

This program is currently being launched and receives specific developmental support from the Barcelona Chamber of Commerce.

# 5 Economic Development Barcelona-Sant Adrià

**(captions p.28)**  
**Foreign Investment Promotion Bureau Xi'an, China**

-  
 At the b\_TEC Foundation.

**We present the project to businesses and government delegations at an international level to raise awareness about the area's future potential**

**(captions p.29)**  
**Israel Electric Corporation**

-  
 At the Forum waste treatment plant.

**A delegation from Algeria**

The b\_TEC Foundation acts as a nexus for economic development in Barcelona and Sant Adrià de Besòs in the areas of energy, water and mobility.

During the year, we present the project to businesses and government delegations at an international level to raise awareness about the area's future potential and to foster future collaborations.

# 6 Environment: Today

## (captions p.30) Headquarters

-  
The Fundació Formació i Treball building located near the campus where the b\_TEC Foundation will be located.

**The scholarship program is aimed at young people who want to study technical engineering at the College of Industrial Engineering of Barcelona (EUETIB)**

## (captions p.31) Awarding scholarships

-  
The mayor of Sant Adrià de Besòs, Jesús Maria Canga, and the deputy mayor of Education, Gregorio Belmonte, with representatives from the EUETIB and b\_TEC Foundation during the ceremony to award scholarships to secondary school students in Sant Adrià de Besòs in order to study engineering.

## (captions p.32) Facilities

-  
Inside the library in La Mina  
-  
Inauguration of the La Mina Library and the new Sports Center (July 2009)  
The president of the Government of Catalonia, José Montilla, alongside Jesús Maria Canga, mayor of Sant Adrià de Besòs; Carme San

The b\_TEC Foundation is committed to the territory's environment, and it leads specific initiatives in the area to support the Diagonal-Besòs Campus and thus foster interaction between schools, research, business and territory.

### 6.1 The new b\_TEC Foundation headquarters

The b\_TEC Foundation and Fundació Formació i Treball (FIT) have signed a collaboration agreement on the use of space at the Formació i Treball building by different projects and units that the b\_TEC Foundation can identify, stimulate and promote. This will become a reality when b\_TEC moves its headquarters to the new building in summer 2010, together with IREC and other research units of the future Campus.

### 6.2 Besòs Education: Scholarship Program

The collaboration agreement signed by the Sant Adrià City Council, the b\_TEC Foundation and the EUETIB in February 2008 to create a financial aid program for students in the area has made it possible to give these scholarships for the second year in a row. The program is aimed at young people who want to study technical engineering at the College of Industrial Engineering of Barcelona (EUETIB) and who have studied at least up to the last year of post-compulsory secondary education at a school in Sant Adrià.

### 6.3 Facilities: La Mina Library, Sports Center

The transformation of the neighborhood La Mina is a comprehensive action that enhances the conditions of the neighborhood in the long term and which works toward integrating the neighborhood in the Besòs area. The b\_TEC Foundation, as the organization in charge of managing Diagonal-Besòs Campus spaces, includes, as part of the campus project, the use of new facilities located in the immediately surrounding urban area.

The year 2009 saw the inauguration of the neighborhood library and sports center, which are two of the most emblematic facilities in the territory trans-

Miguel, territorial delegate of the Government of Catalonia in Barcelona; Miquel Barceló, president of the b\_TEC Foundation; and Jordi Bosch, manager.

## (captions p.33) Scientific dissemination in La Mina

-  
**Activities in La Mina**  
They include talks about energy, water and mobility and various cultural activities open to the public.

formation plan, a plan that includes an urban reform that integrates the creation of the campus.

### 6.4 Talks at the La Mina Civic Center

As part of the task to integrate with the environment, we discuss the Diagonal-Besòs Campus project with a variety of publics. Through the talks on scientific dissemination organized within the framework of the Barcelona Tech Summer Sessions, we involve the neighborhood in the project. These talks allow us to explain to residents about the most significant social impacts of the energy, water and mobility campus.

# 7 Construction of the Diagonal-Besòs Campus

On July 14, the event was held to lay the first stone of the Spiralling Tower building, developed by the Zona Franca Consortium, which will be the future headquarters of the b\_TEC Foundation and the Diagonal-Besòs Campus Consortium

(captions p.35)  
Spiralling Tower - Management and campus service -

The Mayor of Barcelona and president of El Consorci de la Zona Franca (CZFB), Jordi Hereu; the Mayor of Sant Adrià de Besòs; the rector of the UPC, Antoni Giró and the architect Zaha Hadid in the event hold to lay the first stone of the Spiralling Tower.

At first, main building from UPC at the Diagonal-Besòs Campus.

The process to construct the Diagonal-Besòs Campus has already begun.

On July 14, the event was held to lay the first stone of the Spiralling Tower building, developed by the Zona Franca Consortium, which will be the future headquarters of the b\_TEC Foundation and the Diagonal-Besòs Campus Consortium. The building, with a surface area of 29,032 m<sup>2</sup>, will become the gateway to the Diagonal-Besòs Campus. It will have spaces for universities, businesses, continuing education, assembly halls and common services.

The first stone of the Diagonal-Besòs Campus was laid on December 17. Construction will begin with the retaining walls that will enable construction of the underground floors of the buildings to be located on the campus.

The Diagonal-Besòs Campus will have 12 buildings for universities, businesses and research.

## Current status:

- Spiralling Tower - architect Zaha Hadid - developer Zona Franca Consortium - construction phase
- Retaining wall - design by Ferrovial- College of Industrial Engineering of Barcelona (EUETIB - UPC) - architect Martínez Lapeña and Elías Torres - construction phase
- Buildings for the School of Industrial Engineering of Barcelona (ETSEIB - UPC) - awarded to: buildings B and J Brullet i Associats | I and C Batlle i Roig Arquitectes

# 8 Accounts balance

## Balance Sheet

<b>ASSETS</b>	31/12/2009
<b>A) NON-CURRENT ASSETS</b>	172.861,24
<b>II. Tangible fixed assets</b>	165.251,38
<b>VI. Long-term financial investments</b>	7.609,86
<b>B) CURRENT ASSETS</b>	767.149,82
<b>I. Inventories</b>	108.000,00
<b>II. Receivable from users, sponsors and operations and other accounts receivable</b>	643.388,40
1. Receivable from users and for sales and services	625.979,99
4. Other accounts receivable	591,29
6. Current tax assets and other accounts receivable from public authorities	16.817,12
<b>VI. Cash and cash equivalents</b>	15.761,42
<b>TOTAL ASSETS</b>	940.011,06
<b>LIABILITIES</b>	31/12/2009
<b>A) EQUITY</b>	3.629,47
<b>A-1) Equity</b>	43.629,47
<b>I. Working capital or net worth</b>	90.000,00
1. Working capital or net worth	90.000,00
<b>III. Surpluses from previous years</b>	(65.202,09)
<b>V. Surplus for year</b>	18.831,56
<b>B) NON-CURRENT LIABILITIES</b>	803.446,09
<b>II. Long-term payables</b>	803.446,09
2. Other long-term payables	803.446,09 *
<b>C) CURRENT LIABILITIES</b>	92.935,50
<b>II. Short-term payables</b>	5.996,54
1. Bank borrowings	4.581,46
2. Other short-term payables	1.415,08
<b>IV. Operating payables and other accounts payable</b>	86.938,96
2. Sundry accounts payable	43.312,27
4. Current tax liabilities and other accounts payable to public authorities	43.626,69
<b>TOTAL PATRIMONI NET I PASSIU</b>	940.011,06

\* Deposit of CIEMAT-b\_TEC agreements

Financial statements audited by SILCHRIS AUDITORS, SL (No. S1214) (29/04/2010)

<b>SIMPLIFIED PROFIT AND LOSS ACCOUNT</b>	31/12/2009
<b>1. Operating income</b>	2.969.422,64
a) Sales and provision of services	219.823,44
c) Income from promotions, sponsors and partnerships	2.199.599,20*
d) Subsidies, donations and other income	550.000,00
<b>2. Grants provided and other expenses</b>	(12.000,00)
a) Grants provided	(12.000,00)
<b>3. Changes in inventories of finished goods and work in progress</b>	(56.155,54)
<b>5. Procurements</b>	(124.342,25)
<b>7. Personnel costs</b>	(444.262,96)
<b>8. Other operating expenses</b>	(2.284.202,59)
a) Outside services	(2.601.601,46)
a.2) Leases and fees	(1.643.911,32)*
a.3) Repairs and maintenance	(191.834,06)*
a.4) Independent professional services	(312.040,23)
a.6) Insurance premiums	(5.123,95)
a.7) Banking services	(5.547,68)
a.8) Advertising, publicity and public relations	(61.789,06)
a.9) Utilities	(66.686,98)*
a.10) Other services	(314.668,18)
b) Taxes	317.398,87
<b>9. Depreciation of fixed assets</b>	(23.899,14)
<b>12. Deterioration and gains on revaluation of fixed assets</b>	(1.524,59)
b) Revaluation and other gains	(1.524,59)
<b>13. Other gains</b>	10.012,23
<b>I) OPERATING PROFIT (1+2+3+4+5+6+7+8+9+10+11+12+13)</b>	33.047,80
<b>14. Financial income</b>	11,58
<b>15. Financial expenses</b>	(14.261,49)
<b>17. Exchange gains</b>	33,67
<b>II) FINANCIAL PROFIT (14+15+16+17+18)</b>	(14.216,24)
<b>III) PROFIT BEFORE TAX (I + II)</b>	18.831,56
<b>19. Tax on profit</b>	0,00
<b>IV) PROFIT FOR THE YEAR (III+19)</b>	18.831,56

\*Corresponds to agreements signed between CIEMAT and Fundació b\_TEC under which CIEMAT undertakes, through the Foundation, to make its Barcelona offices available to "Fusion for Energy" (Total income and expenses for 2009 = €1,794,224)

The aforementioned Simplified Profit and Loss Account for the fiscal year ended 31 December of 2009 was drawn up and ratified by the Foundation's Board of Trustees in Barcelona, on 23 March 2010.

Financial statements audited by SILCHRIS AUDITORS, SL (No. S1215) (29/04/2010)

<b>STATEMENT OF CHANGES IN EQUITY</b>	Total equity	Surplus from previous fiscal years	Surplus for current fiscal year	Total
<b>A) BALANCE AT 2007 YEAR-END</b>	90.000,00	(83.496,51)	1.810,96	8.314,45
<b>B) ADJUSTED BALANCE AT START OF 2008</b>	90.000,00	(83.496,51)	1.810,96	8.314,45
I. Total recognised income and expenses			16.483,46	16.483,46
III. Other changes in equity		1.810,96	(1.810,96)	0,00
<b>C) BALANCE FOR 2008 YEAR-END</b>	90.000,00	(81.685,55)	16.483,46	24.797,91
<b>D) ADJUSTED BALANCE AT START OF 2009</b>	90.000,00	(81.685,55)	16.483,46	24.797,91
I. Total recognised income and expenses	18.831,56	18.831,56		
III. Other changes in equity		16.483,46	(16.483,46)	0,00
<b>E) BALANCE FOR 2009 YEAR-END</b>	90.000,00	(65.202,09)	18.831,56	43.629,47

This statement of changes in equity for the fiscal year ended 31 December 2009 was drawn up and ratified by the Foundation's Board of Trustees in Barcelona, on 23 March 2010.

Financial statements audited by SILCHRIS AUDITORS, SL (No. S1215) (29/04/2010)

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