# **Bouygues Construction**

Press kit





## **Contents**

CONTENTS	1
I- GROUP PRESENTATION	3
1/ Introduction: profile	3
2/ Simplified organisation chart	4
3/ Members of the Board of Directors (as at 18 February 2016)	4
4/ General Management Committee	5
5/ International operations	7
II. FINANCIAL RESULTS	8
Sales	8
Each entity's contribution to sales	8
Geographic breakdown of sales	9
Current operating profit 2015	g
Net profit, Group share 2015	9
III. STRATEGY	10
1/ Growth strategy and opportunities	10
2/ Strengths and assets	11
IV. PRINCIPAL ONGOING PROJECTS	12
France	12
Internationally	21
V. A SELECTION OF PRESTIGIOUS PROJECTS	30
France	30
International	39
VI. BOUYGUES CONSTRUCTION ENTITIES	49
1/ Bouygues Bâtiment Ile-de-France	49
2/ Bouygues Entreprises France-Europe	49
3/ Bouygues Bâtiment International	50
4/ Bouygues Travaux Publics	51

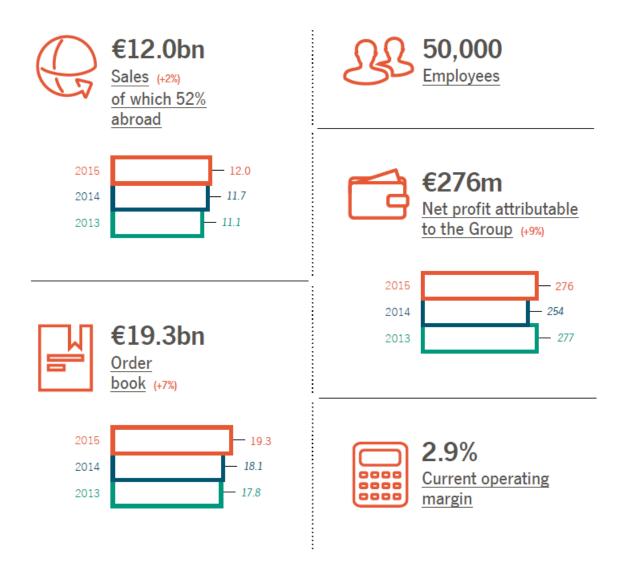
5/ VSL	51
6/ Concessions Division	52
7/ Bouygues Energies & Services	53
VII. PRESS CONTACTS	54

## **I- Group Presentation**

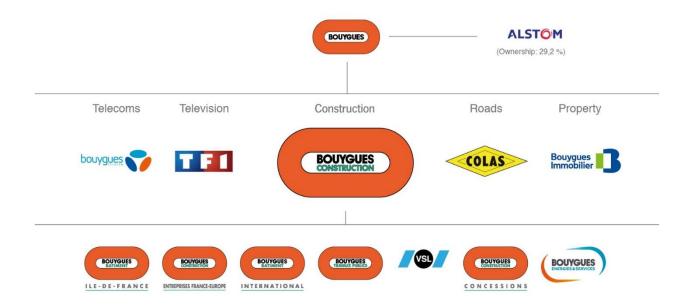
## 1/ Introduction: profile

Bouygues Construction is a global player in construction and services. Its skills and expertise make the company a leader in sustainable construction. With operations in nearly 80 countries, Bouygues Construction and its employees develop long-term relationships with customers in order to help them shape a better life.

The Group employs 50,000 people around the world, and it generated sales worth €12 billion in 2015.



## 2/ Simplified organisation chart



## 3/ Members of the Board of Directors (as at 18 February 2016)

PHILIPPE BONNAVE, Board member, Chairman and Chief Executive Officer of Bouygues Construction

PASCAL GRANGÉ, Board member, Deputy Chief Executive Officer of Bouygues Construction

**OLIVIER BOUYGUES, Board member** 

**JEAN-FRANÇOIS GUILLEMIN, Board member** 

GILLES ZANCANARO, Board member

Bouygues represented by  $\mbox{\bf Philippe Marien},\ \mbox{\it Board member}$ 

## 4/ General Management Committee

## **Executive Committee**



Philippe
Bonnave
Chairman and CEO of
Bouygues Construction



Racine

Deputy CEO
with responsibility for
Bouygues Bâtiment
International and Bouygues
Energies & Services



**Trin**Deputy CEO with responsibility for Bouygues Travaux Publics, and VSL



Pascal
Grangé
Deputy CEO with
responsibility for strategy
and finance, information
systems, concessions
and strategic reflection on
property development



Kiviatkowski
Executive Vice President
with responsibility for
legal affairs, insurance,
auditing, internal control
and compliance



Soussan

Executive Vice President with responsibility for human resources and policy on corporate and social responsibility

## **General Management Committee (in addition to the Executive Committee)**



Pascal Minault CEO, Bouygues Entreprises France-Europe



Bernard **Mounier** CEO, Bouygues Bâtiment Ile-de-France



Daniel **Rigout** CEO, Bouygues Bâtiment International



Amequin
CEO, Bouygues Travaux
Publics



Gazaignes
CEO of the Civil Works
division for Asia, Oceania
and the Middle-East



Jean-Christophe
Perraud
CEO, Bouygues Energies
& Services



Fabienne
Viala
Chairman of
Bouygues Construction
in the United Kingdom



Cyril Ferrand Deputy CEO, Bouygues Energies & Services



Charles
Paradis
CEO,
Concessions division



Montfort
Company Secretary,
Bouygues Construction



**Godinot**Director of Innovation and Sustainable Development



**Le Guillou**Purchasing Director,
Bouygues Construction

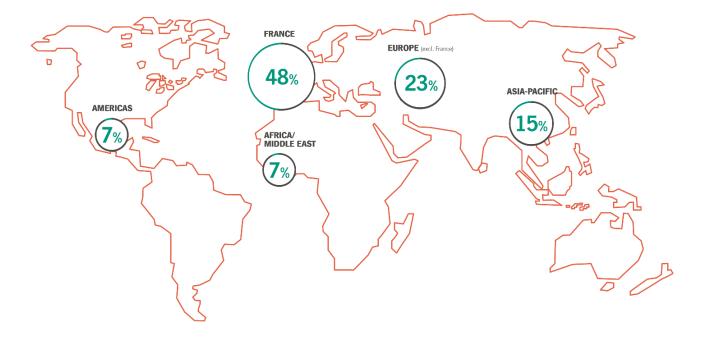


Damien Rebourg Communications Director, Bouygues Construction

## 5/ International operations

The Group, which has key references on five continents, operates in 80 countries through sustainable locations due to its subsidiaries that are well-established in their countries or temporarily for major projects with high technical expertise, with the involvement of its central engineering divisions. It is particularly active in Western and Eastern Europe, Asia, Africa and the Caribbean.

In 2015, Bouygues Construction generated 52% of its sales outside France. The increased pace of its development owes much to the strength of its teams' local roots in the countries in which it operates.





## **II. Financial Results**

## Sales

(million euros)	TURNOVER	OF WHICH INTERNATIONAL
2015	11,975	6,286
2014	11,726	5,767
2013	11,111	5,106
2012	10,640	5,028
2011	9,802	4,452
2010	9,235	4,130
2009	9,546	4,190
2008	9,497	4,113
2007	8,340	3,399
2006	6,923	2,655
2005	6,131	2,478
2004	5,512	2,276

## **Each entity's contribution to sales**

(million euros)	TURNOVER 2015	% OF TOTAL
Bouygues Bâtiment Ile-de-France	2,336	19%
Bouygues Entreprises France-Europe	2,130	18%
Bouygues Bâtiment International	2,799	23%
Bouygues Travaux Publics	2,138	18%
VSL	451	4%
Bouygues Energies & Services	2,118	18%

Total (holding included)	11,975	100 %
--------------------------	--------	-------

At the end of 2015, the order book stood at a high level  $\le$ 19.3 billion—7% higher than at the end of 2014. Turnover for 2015 was up 2% to  $\le$ 12 billion. It has fallen slightly in France by 5% and has increased dramatically internationally by 9% compared with 2014.

## **Geographic breakdown of sales**

In 2015, Bouygues Construction recorded more than 52% of its sales outside France, representing more than €6 billion.

France	48%
Europe (excluding France)	23%
Africa – Middle East	7%
Asia – Pacific	15%
Americas	7%

## **Current operating profit 2015**

€349 million

## **Net profit, Group share 2015**

€276 million





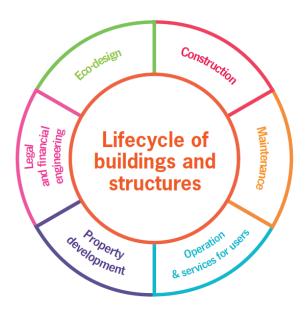
## III. Strategy

## 1/ Growth strategy and opportunities

Being attentive to customers enables Bouygues Construction to develop relationships of trust with them and to support them in their projects, within the context of its sustainable development policy.

Bouygues Construction's strategy is based on a number of priorities:

• Being an end-to-end player in order to span the entire construction industry value chain from financing through design-build to operation and maintenance;



- Incorporating sustainable construction into the entire project lifecycle, taking account of all the technical, environmental and social issues;
- Offering distinctive, high value-added products and services, giving priority to innovation in all its forms. BIM (building information modelling), for example, offers customers a 3D view of their future project, providing effective decision support;
- Consolidating its positions in France, which remains the company's largest market, while developing international operations by strengthening synergies between business segments on target markets that offer attractive growth prospects;
- Strengthening its property development activities, drawing on its specific network, Linkcity, to offer optimum solutions for enhancing the value of property assets;
- Forging strategic partnerships with businesses which possess complementary expertise in order to devise comprehensive solutions in response to increasingly complex challenges;
- Rolling out specific products and services for industrial customers in order to better meet their needs for energy efficiency and quaranteed performance;
- Promoting cross-disciplinarity at all levels of the business, firstly by strengthening synergies between Bouygues Construction entities by pooling resources and skills. Cross-disciplinarity also involves partnerships with suppliers and subcontractors, and may involve taking equity interests in innovative start-ups.



To back up this strategy, Bouygues Construction can draw on:

- a commitment to ethical behaviour by managers and sales teams with the aim of guaranteeing customers a high level of ethical responsibility. Nearly 30,000 employees will again be made aware of ethical issues in business relationships in 2016 through an online training module called FairDeal:
- a commitment to employee health and safety with a single global standard: the "zero accident" objective. This aim is expressed in several initiatives, such as workforce training, continuous improvement of construction methods, communication campaigns, anti-addiction campaigns, road accident prevention, more stringent on-site controls, etc.

## 2/ Strengths and assets

Bouygues Construction has many strengths to draw on in all its lines of business:

- Differentiation through innovation at all levels of the company:
  - technical innovation, especially with BIM (Building Information Modeling), to industrialise processes and operating methods while encouraging information-sharing in order to make site work more efficient;
  - commercial innovation in order to offer distinctive products and services;
  - managerial innovation, with continuous improvement of the organisation of work and collaborative working in order to become more responsive and more effective.
- A strong international presence: Bouygues Construction operates worldwide on a long-term basis through well-established local subsidiaries or on one-off, technically complex major projects. The two approaches are complementary and give the company the necessary flexibility to mobilise its resources quickly on high-potential markets. Bouygues Construction generates over half its sales on international markets;
- **long experience of managing complex projects:** motivated people with high-level technical skills enable Bouyques Construction to fully meet the needs of its public and private customers;
- The capacity to adapt to changing markets: the level of its order book gives the company good medium-term visibility, enabling it to adjust costs while focusing investment on the most buoyant markets;
- A policy of controlling operating and financial risks: strict application of procedures at all levels of the company guarantees that the right projects are selected and carried out smoothly;
- Robust financial performance: over the last ten years, Bouygues Construction has demonstrated its capacity to generate sales growth while preserving profitability, backed up by a healthy and robust financial situation.



## IV. Principal ongoing projects

## **France**

## **The New Longchamp**



Start of works: October 2015
 Delivery: October 2017
 Value of works: €92 m

France Galop, the association responsible for running flat horse racing in France, has awarded Bouygues Bâtiment Ile-de-France Ouvrages Publics a contract worth €92 million to renovate the Longchamp racecourse, situated in the heart of the Bois de Boulogne in Paris. The restructuring is intended to establish the New Longchamp as an international benchmark and to provide French flat racing with a modern, high-performance racecourse that meets the expectations of professionals, owners and new generations of race-goers.

The operation consists of demolishing all the existing stands and replacing them with a single stand 160 metres long, which will be topped by a panoramic glass building incorporating a 21-metre overhang.

### **Renovation of the Louvre Post Office**



Start of works: January 2016Delivery: June 2017

The Louvre Post Office, an iconic in the 1st Arrondissement, in the heart of Paris, a building forming part of the La Poste group's property portfolio, is currently under a vast renovation programme that will get under way early in 2016. It is a strategic project based on a model of local proximity and innovation. 32 months of works will be required to transform the building, which will operate as of 2018 as a mixed-use development (postal activities, shops, apartments, public facilities, hotel, etc.) and will be open to the city, once again allowing all Parisians access to a building with a remarkable heritage.

## **Eole-Evangile Triangle**



Start of works: summer 2018

Delivery: June 2021

Linkcity Ile-de-France (formerly Sodéarif), the property development subsidiary of Bouygues Bâtiment Ile-de-France, and its partner, the architecture and urban planning practice TVK, have been named as winners of the Eole-Evangile Triangle redevelopment project in north-eastern Paris, the largest of the sites in the Reinventing.Paris competition.

Following a year's work to deliver a bid in response to the call for projects organised by the City of Paris, the international Reinventing. Paris jury has selected an ambitious proposal that combines a high quality lifestyle and environmental standards and will turn the Eole-Evangile Triangle into the French capital's first zero-carbon neighbourhood.

## **Port of Calais extension project**



Start of works: July 2015Delivery: January 2021

The Dover Strait Ports Company (Société des Ports du Détroit) has awarded the design-build contract for the Port of Calais extension project to a consortium formed around Bouygues Travaux Publics (the lead company), Colas Nord-Picardie, Spie Batignolles and Jan De Nul.

The modernisation works include:

- the creation of a new 3-kilometre seawall along with a new 100-hectare harbour basin to the north of the current facilities;
- the construction of three new ferry berths and a roll-on/roll-off berth inside the harbour basin;
- 4 million cubic metres of marine dredging to constitute the new quays;
- the development of new cross-Channel traffic reception capacities including 44 hectares of parking facilities and roads as well as roughly twenty operational and reception buildings.

#### Alto Tower at La Défense



Start of works: September 2016
 Delivery: 1<sup>st</sup> quarter of 2020

Linkcity Ile-de-France, the property development arm of Bouygues Bâtiment Ile-de-France, has signed a property development contract with Abu Dhabi Investment Authority (ADIA), a sovereign wealth fund, for the construction of the Alto Tower at La Défense. The works will be carried out by Bouygues Bâtiment Ile-de-France Construction Privée.

Designed by IF Architectes, the Alto Tower, which will be 150 metres tall, will provide 38 floors of high-class office space with total floor space of 51,000 m². Not only will Alto have an innovative outline, it will also be highly energy-efficient, with a double-skin insulating facade. As a result, it will be awarded HQE® Exceptional and BREEAM® Excellent certifications.

#### **Student residences in Paris - Saclay**



• Delivery: summer 2017

Bouygues Bâtiment Ile-de-France (authorised representative) and Bouygues Energies & Services, which are both subsidiaries of Bouygues Construction, are working in a consortium on the new Gif-sur-Yvette building with the company Kluster. This contract is part of future Paris-Saclay campus, CentraleSupélec.

The contract, which will run for a period of 26 years, covers the construction and maintenance of a property development of approximately 25,000 m<sup>2</sup>, primarily intended to house the School's teaching and research activities. It will house facilities shared at the level of the Moulon university district.

#### **Prado shopping centre in Marseille**



Start of works: Winter 2014
Delivery: Winter 2017
Value of works: €90 m

Bouygues Bâtiment Sud-Est (previously GFC Construction) is responsible for construction work on the Prado Shopping Centre. The project covers 23,000 m² and is part of complex accompanying the Stade Vélodrome football stadium in Marseille.

Designed by architectural firm Benoy & Didier Rogeon, it will consist of two buildings (the main building and Michelet building) on either side of an avenue open to the outside and covered with a canopy protecting it from bad weather. This will act as a kind of fifth facade offering access to the corner entrances and offering views of all the shopping levels of the shopping centre.

The project is in line with the principles of sustainable construction and will seek the following labels: BREEAM® Excellent and C2C ("cradle to cradle", certification based on the principles of the circular economy: zero pollution and 100% recycling).

## **New hospital centre in Guiana**



Start of works: 2014
Delivery: November 2017
Value of works: €85 m

Bouygues Bâtiment Centre Sud-Ouest (previously DV Construction) and Bouygues Energies & Services, which are both subsidiaries of Bouygues Construction, are building the Saint-Laurent-du-Maroni hospital in Western Guiana.

The new hospital complex, offering 25,000 m² of surface area, will consist of five buildings, incorporating five operating theatres, a maternity ward, and a total of 250 beds. The consortium responsible for construction, of which Bouygues Bâtiment Centre Sud-Ouest is the authorised representative, also includes its subsidiary Bouygues Bâtiment Outre-Mer (previously GTC Construction) and Ribal TP (Colas).

Bouygues Energies & Services will be responsible for two technical work packages for the project: the low- and high-voltage electricity package on the one hand, and a package consisting of HVAC, plumbing and medical fluids on the other.

## **Hospital buildings in Strasbourg**



Start of works: summer 2014
Delivery: end of 2017.
Value of works: €164.9 m
Architect: Groupe 6

Bouygues Bâtiment Nord-Est (previously Pertuy Construction and Norpac), a Bouygues Construction subsidiary, is constructing two buildings on the site of Strasbourg Teaching Hospital: the regional cancer institute and the medico-technical and locomotor facility.

This operation involves the simultaneous construction of two buildings that are connected with each other and a pre-existing building by a system of underground passages and pedestrian bridges.

The consortium, of which Bouygues Bâtiment Nord-Est is the authorised representative, will be responsible the main part of the project, including structural work, walls and covering, drywall and finishing work, along with earthworks and utility network installations.

## **Extension of line 14 of the Parisian Metro network.**



Start of works: summer 2014
Value of works: €164.9 m

Bouygues Travaux Publics, as part of a consortium, has signed a contract with RATP concerning the second tunnel lot for the extension of line 14 to the north of Paris, from Clichy to Saint-Ouen in Pleyel (a town in Saint-Denis).

This infrastructure project which is 55 % cofinanced by the Société du Grand Paris, will contribute to alleviating traffic on line 13, thereby improving the travelling conditions and access to Paris for those in the northern suburbs.

The group pays particular attention to sustainable development, and shall make every effort to limit environmental pollution in a very dense urban environment. For example, all the excavated material will be removed by boat to avoid blocking traffic in the towns concerned.



#### **Deployment of fibre optics in Oise**



Start of works: 2013Delivery: 2017Value of works: €97 m

Bouygues Energies & Services and its subsidiary Axione, are in a consortium with Sobeca, to carry out the first phase in the deployment of fibre optics in Oise.

This first phase is part of the "Very high speed, everywhere and for everyone" plan that aims to equip the whole Oise region with a 100% fibre optic network to the subscribing householder (FTTH\*). In all, 136,000 FTTH sockets will be deployed, outside the zones where the local authority shall not intervene as they fall under the remit of private operators (zones with a call for an expression of interest).

The project has just started in the 21 municipalities for the first year of deployment—representing 14,000 connections before the end of 2014. Priority is being given to municipalities with an underperforming ADSL broadband.

## **Viaduct of the New Coastal Road, Reunion Island**



Start of works: December 2013

Delivery: 2018

• Value of works: around €715 m

Bouygues Travaux Publics is working in a consortium with Vinci Construction (principal contractor) and Demathieu Bard on the construction of a viaduct for the New Coastal Road. This 5,400 metre sea viaduct, the longest in France, which will go alongside the coast, will connect Saint-Denis (the capital of Reunion Island) to La Grande Chaloupe. This is a major component of the new coastal road, two lanes of which shall be dedicated to environmentally friendly transport (buses, pedestrians/cyclists). It will replace the current road on the coast between Saint-Denis and La Possession, which is exposed to risks from rock falls and submersion under the waves during storms.

## **Terminal 1 at Lyon Saint-Exupery Airport**



Start of works: Autumn 2014

Delivery: 2016

Value of works: €142 m

Bouygues Bâtiment Sud-Est, a subsidiary of Bouygues Construction in the south west of France, is carrying out the design and construction of Terminal 1 for Lyon-Saint Exupéry airport with Aéroports de Lyon. Bouyques Bâtiment Sud-Est. is authorised representative for a consortium that also includes architects RHSP and Chabanne and partners, Technip TPS, Cap Ingélec, and Inddigo. This new 700,000 m<sup>2</sup> three storey infrastructure will considerably increase the capacity of Lyon-Saint Exupéry Airport and will double the surface area of the existing terminals. The construction will be an extension to the current terminals 1 and 3. It will be able to host nearly 10 million passengers. The building, that will be HQE© certified, is designed according to a sustainable construction approach.

#### Rocade L2 ring road in Marseille



Start of works: June 2014
Delivery: October 2017
Amount invested: €620 m

This public-private partnership for a duration of 30 years covers the financing, design, construction, upkeep, maintenance and renewal of the work and equipment for the new ring road for Marseille (L2 or A507). This is the largest infrastructure project assigned in France in 2013.

The L2 will make it possible to bypass and unblock the centre of Marseille through the creation of a 10 km long free urban fast lane connecting the A7 (North to Aix-en Provence) and A50 (East to Aubagne and Toulon) motorways and will make it possible to recategorise the urban districts served.

## **City of Music on Seguin Island (Boulogne-Billancourt)**



Start of works: March 2014

Delivery: 2016

Value of works: €170 m

• Architect: Shigeru Ban and Jean de Gastines

A consortium headed by Bouygues Bâtiment Ile-de-France has signed the contract for the City of Music on Seguin Island in Boulogne-Billancourt, near Paris, with the Hauts-de-Seine Department, in the context of a public-private partnership. The project awarded to the consortium consists in building (finance, design, construction) a new iconic cultural facility and developing its artistic influence through an international programme dedicated to all forms of music (artistic and commercial operation as well as maintenance for a period of 27 years).

This new 36,500 m<sup>2</sup> musical facility will be unique, combining concert halls, spaces for music teaching and training, recording studios, a seminar centre, restaurants and shops.

The environmental commitment of the project will be validated by several labels: HQE® Excellence, Urban Biodiversity1 and HQU level \*\*\*2.

## **Renovation of the Hotel Crillon (Paris)**



Start of works: summer 2013
 Value of renovation: €100 m

• Architect: Richard Martinet of Affine Design

Bouygues Bâtiment Île-de-France is renovating the Hôtel de Crillon, situated on Place de la Concorde in Paris. It will be the first time that this prestigious hotel has undergone a major renovation since it opened in 1909.

The project involves a complete refurbishment of the 14,000 m² building, including entirely recreating the décor and extending the bedrooms. The comfort of guests will be improved with the creation of new restaurants and a basement housing a spa and pool.

<sup>&</sup>lt;sup>2</sup>The Haute Qualité d'Usage label awarded by the CRIDEV (Centre de Recherche pour l'Intégration des Différences dans les Espaces de Vie).



<sup>&</sup>lt;sup>1</sup> Label instigated and awarded by the CIBI (Conseil international Biodiversité et Immobilier).

## **Renovation of the Ritz Hotel (Paris)**



Bouygues Bâtiment Île-de-France is carrying out the renovation of the famous Ritz hotel, place Vendôme in Paris.

The luxury hotel is to be totally refitted. This will encompass complete refurbishment of the decoration and renovation of the historic areas, while preserving the spirit of the iconic institution. The comfort of guests will be greatly improved by the creation of a summer restaurant with a sliding glass roof, a larger number of suites, an extension to the ballroom and incorporation of the latest technological innovations.

Start of works: July 2012
 Delivery: end 2015

Value of renovation: €140 m

• Architect: Didier Beautemps of the Atelier Cos

## **Future Law Courts complex (Paris)**



Start of works: summer 2013

Delivery: 2017Value of the project: design and construct

design and construction: €575 m operation-maintenance: €12.8 m

 Architects: Renzo Piano (Renzo Piano Building Workshop Agency) The Arelia consortium and the Etablissement Public du Palais de Justice de Paris (the governing body of the Paris Law Courts) have signed a contract for the financing, design and construction of the new Paris Law Courts complex, and the provision of maintenance and upkeep services for a period of 27 years. Bouygues Bâtiment Ile-de-France will be responsible for design and construction, for a total of €575 million. Bouygues Energies & Services, will provide facilities management services for the complex for an annual sum of €12.8 million.

The future Paris Law Courts building will unite five facilities currently spread all around Paris in a single location.

Designed by the architect Renzo Piano for the Renzo Piano Building Workshop, the project consists in the construction of a 160 m-tall edifice composed of separate functional elements which allow for more than 1 hectare of open-air terraces planted with trees and a podium housing more than 90 courtrooms.

The future law courts complex will set a new benchmark for energy consumption in a very tall building.

#### **Flamanville EPR Nuclear Plant**



Start of works: October 2006

Total value of the project: more than €300 m

The French power utility, EDF, awarded the main package for the construction of the buildings that will house the future new-generation nuclear reactor at Flamanville to Bouygues Construction. The contract includes the entire civil engineering works for the nuclear power plant. It is being carried out by a consortium including Bouygues Travaux Publics (authorised representative), Bouyques Bâtiment Grand Ouest (previously Quille Construction) (a Bouygues Construction subsidiary based in Rouen) and Baudin-Châteauneuf (a steel frame constructor). The Flamanville 3 nuclear plant will house a European Pressurised Reactor (EPR) with a capacity of approximately 1,600 megawatts. The site comprises more than ten industrial buildings, including the machine room and the containment structure in the reactor building. The latter shall be made from prestressed concrete with a steel liner to ensure leaktightness.

#### **Lighting of the City of Paris**



- Length of public service delegation contract: 10 years
- Value of contract: €360 to €450 m per year (according to variable part on purchase order)
- 180,000 light points for street lighting, 300 illuminated sites and 140,000 traffic light lamps
- 30% reduction in energy consumption

Bouygues Energies & Services, leader of the Evesa consortium, manages the street lighting and traffic lights energy performance contract signed with the City of Paris.

The contract includes project management support plus the operation and maintenance of approximately 180,000 light points for street lighting and 140,000 traffic light lamps, as well as upgrading and servicing all the street lighting, traffic signalling and safety installations.

Bouygues Energies & Services has undertaken to meet the targets of the Paris Climate Plan through sustainable management of public lighting: renovating equipment, replacing energy-intensive lights with more efficient units and installing innovative lighting and new technologies, such as LED lights. Ultimately, these measures will enable the City of Paris to economise 30% of electrical energy by comparison with the consumption of these installations at the start of the contract.

## **Internationally**

## **Clementi Avenue Residential Complex in Singapour**



Start of works: March 2016
Delivery: May 2019
Value of works: €100 m

The property developer United Venture Development – a joint venture between UOL Venture Investments and Singland Homes – has signed a contract worth roughly €100 million with Dragages Singapore, the local subsidiary of Bouygues Construction, for the construction of two condominium complexes in the heart of the city. The new project, which is designed by ADDP Architects, consists of two 140-metre, 40-storey tower blocks, which will provide 505 apartments with a total floor area of approximately 46,000 m².

With the agreement of United Venture Development, Dragages Singapore has decided to use a modular construction system based on a reinforced concrete structure. This will enable the condominiums to meet the Singapore authorities' stipulation that 65% of the superstructure of the towers must employ PPVC (Prefabricated Prefinished Volumetric Construction).

#### Phase 3 of Line 3 of the Cairo metro



Delivery: end of 2018Value of works: €1,1 bn

The joint venture led by VINCI Construction Grands Projets, alongside Bouygues Construction's subsidiary Bouygues Travaux Publics and their Egyptian partners Orascom Construction and Arabco Contractors, has won the Phase 3 contract for Line 3 of the Cairo metro.

The new contract covers civil engineering for Phase 3 of Line 3, including 17.7 km of new line and 15 stations (eight underground, five elevated and two at ground level). The works will require construction of a new tunnel under the Nile. Once completed, Line 3 will increase the overall length of the Cairo metro system to 100 km and serve five million passengers daily.



#### **Condominiums in Mumbai**



Start of works: May 2016
Delivery: end of 2019
Value of works: €100 m

The property developer Oberoi Realty has awarded a contract for the construction of two condominiums in Mumbai, India, to a joint venture consisting of Bouygues Bâtiment International and VSL, both of which are subsidiaries of Bouygues Construction. The project marks the Group's first development in the property sector in India.

Located on two adjacent sites along Lal Bahadur Shastri Road, the two complexes will include four towers, providing 1,840 apartments and 4,977 car parking spaces, representing a total floor area of 605,000 m2. The 59-storey Enigma will stand 201 metres high while the 56-storey Eternia will stand 192 metres high.

## Waste-to-energy gasification plant in Belfast



Start of works: January 2016
Delivery: end of 2017
Value of works: €202 m

The Full Circle Generation investment fund, which consists of the developer RiverRidge Energy and a consortium of investors made up of Green Investment Bank, Equitix and P3P Partners, has awarded a contract to Bouygues Energies & Services for the turnkey delivery of a waste-to-energy gasification plant in Belfast, Northern Ireland.

Bouygues Energies & Services will be responsible for the engineering, procurement and construction of the 15 MWe facility, and will then carry out operation and maintenance for 17 years. The waste-to-energy power plant will be the largest in the island of Ireland.

## **LimmiViva Hospital in Switzerland**



Delivery: spring 2018Value of works: €175 m

The Spitalverband Limmattal hospital group has chosen Bouygues Construction's Swiss subsidiary, Losinger Marazzi, to design and build LimmiViva hospital, in the town of Schlieren, near Zurich. This project, which is worth roughly €175 million to Bouygues Construction, covers the design and construction of a 50,000 m² building on eight storeys, with a capacity of 200 beds. The hospital will incorporate a car park and technical facilities on two basement levels, a restaurant, administrative offices, laboratories, x-ray facilities, five operating theatres, an A&E department and a maternity unit.

Developed with the use of BIM (Building Information Modeling), this project is a first in Switzerland with digital modeling carried out collaboratively by architects, civil engineers and HVAC and plumbing specialists.

## **Cancer treatment and surgery centre in London**



Delivery: September 2019Value of works: €257 m

University College London Hospitals (UCLH) NHS Foundation Trust has awarded Bouygues UK, a subsidiary of Bouygues Construction, a contract to design and build a new state-of-the-art hospital dedicated to advanced cancer treatment and surgery services in central London.

Designed by architects Scott Tallon Walker in association with Edward Williams Architects, this treatment centre will be one of the first facilities of its kind in the country. It will form part of a new national high energy proton beam therapy programme run by the British National Health Service (NHS).

## The « Triangle », Cambridge University new headquarters



Start of works: October 2015
Delivery: September 2017
Value of works: €165 m

Cambridge Assessment, which is responsible for the operation and management of Cambridge University's examination boards, has awarded Bouygues UK, the British subsidiary of Bouygues Construction, a contract to design and build its new international headquarters, to be called The Triangle.

The organisation's new headquarters will be based on a brownfield site previously occupied by Cambridge University Press. The 2.5 hectare plot previously housed two warehouses and an office building, which have been demolished to make way for the construction of two new five-storey office blocks and a 39-metre tower. The buildings will be connected by a main courtyard.

#### "Manhattan Loft Gardens" in London



Delivery: Spring 2018Value of works: €340 m

Bouygues UK, the British subsidiary of Bouygues Construction, is constructing "Manhattan Loft Gardens", a 143-metre landmark tower in Stratford, East London.

Manhattan Loft Gardens will be located next to Stratford International Station and High Speed 1, the Channel Tunnel rail link. The tower will play a key role in the regeneration of the area. Designed by architects Skidmore, Owings & Merrill (SOM), this 42 storey tower will include 248 apartments above a 150 bedroom hotel, a spa, a triple-height lobby and two restaurants.



## Line 3 of the Cairo underground



Bouygues Travaux Publics, Vinci Construction (authorised representative) and their Egyptian partners Orascom Construction and Arab Contractors, are working on the construction of the new phase of civil engineering for Line 3 of the Cairo metro between Haroun and El Nozha stations.

This new construction phase (Phase 4A), continues on from Phase 2 which was brought into service in May 2014—more than 6 months ahead of schedule—it includes 5.15 km of tunnel and 5 underground stations on Line 3, the east-west link across the Egyptian capital.

## Waste-to-energy gasification plant in the UK



Bouygues Energies & Services is constructing a waste-toenergy gasification plant in Hoddesdon (Hertfordshire) in the UK for a turnkey delivery. Bouygues Energies & Services will be responsible for the engineering and construction of this 10 MWe facility and procurement of equipment, followed by operation and maintenance for a period of ten years.

This will be the largest waste-to-energy gasification plant in the UK.

Start of works: July 2015
Delivery: July 2017
Value of works: €110 m

## NorthConnex motorway connection in Sydney



Value of works: €900 m

The design and construction of the NorthConnex project will be carried out by a consortium including in equal parts Bouygues Construction Australia and Lend Lease. The project will create 2,500 jobs and the work will take four years.

It notably includes the design and build of a nine-kilometre twin-tube tunnel that will link the south of the M1 Pacific Highway at Wahroonga to the M2 Hills Motorway, joining it at the Pennant Hills Road interchange.

Once in place, NorthConnex will facilitate national and regional freight for the Sydney region, taking nearly 5,000 lorries per day off the Pennant Hills road. It will also take up to fifteen minutes off journey times for car drivers by curtailing over twenty traffic lights whilst improving public transport.

#### **Power station in Gibraltar**



Start of works: July 2015
 Delivery: December 2018
 Value of works: €100 m

Bouygues Energies & Services and the Gibraltar Electricity Authority (GEA) signed a contract worth €100 m for the design, construction, and provision of equipment for a state-of-the-art thermal power station in Gibraltar which will generate 80 MW of electricity with 3.4 MW of heat recovery. The contract also includes operation and maintenance of the plant for one year.

The solution proposed by Bouygues Energies & Services for the new latest generation power station meets the specific needs of the Gibraltar Electricity Authority (GEA). The new installations will be constructed in a confined area close to urbanised zones, and works will be carried out without disrupting the operation of the existing power stations.

## **Extension of Shatin Metro to Central Link**



Start of works: 2014
Delivery: 2020
Value of works: €490 m

Through its subsidiaries Dragages Hong Kong and Bouygues Travaux Publics, Bouygues Construction has won a 5.2 billion Hong Kong dollar contract, which is around €490 million, from MTR Corporation, for the construction of 2X2 tunnels for the 6 km extension to the Shatin metro line to Central Link.

These tunnels are part of the large-scale infrastructure projects currently under way in the city: they will link tourist sites to the business district.

The two East tunnels, both around 540 metres long, will link the ventilation building and the new "Exhibition" Station on the Shatin to Central Link line. The two West tunnels, both around 450 metres long, will be excavated between the emergency exit from Fenwick Pier and the existing "Admiralty" station. Bouygues Construction will also construct the ventilation building associated with these projects.

#### Extension of the Ridge Hospital in Accra, Ghana



Start of works: 2014
Delivery: 2017

Value of works: around €160 m

Architects: Perkins+Will

Americaribe, an American subsidiary of Bouygues Construction, is building an extension on "Ridge Hospital" in Accra, Ghana.

The contract will make it possible to create a turnkey five storey regional health centre, which will include notably 420 beds, several operating theatres and a maternity ward.

This bigger, more modern and more functional hospital is intended to be one of the most up to date medical facilities in Western Africa and will offer health care to the whole population of Ghana. In recent years the ever increasing number of patients was causing problems for the current Ridge Hospital, particularly the maternity ward which could no longer take on all the patients.

The project is part of a sustainable construction approach with the aim of achieving LEED® Healthcare certification—a first for the region—with, in particular, a focus on using solar power.

## **Zagreb Airport, Croatia**



Start of works: December 2013

Delivery: end of 2016.Value of works: €243 m

Architects: Kincl, Neidhardt and Radic

Bouygues Bâtiment International is working with Viadukt and other well reputed Croatian firms on the construction of the new terminal for Zagreb airport. This project is being carried out as part of a concessions

This project is being carried out as part of a concessions contract signed with the ZAIC-A Ltd consortium—full owner of the concession company MZLZ (Međunarodna Zračna Luka Zagreb d.d.) and which includes:

- the financing, design and construction of the 65,000 m<sup>2</sup> airport terminal that will replace the current overcrowded one.
- operation of the whole airport over nearly 30 years, in particular the runways, the existing terminal for the duration of the works, the new terminal after delivery, the cargo terminal, the car parks and future real estate developments.

Once completed the new terminal will be able to welcome 5 million passengers, compared with a current capacity of 2 million.



## **City of Dreams Entertainment complex, Macao**



Start of works: November 2013
Value of works: around €360 m

Architect: Zaha Hadid

Through its subsidiary Dragages Macao, Bouygues Construction is carrying out the construction of a 6-star luxury hotel at the heart of the "City of Dreams" entertainment complex in Macao. The work is being undertaken on behalf Melco Crown Entertainment Limited, owner and developer of casinos, leisure and entertainment complexes

"City of Dreams" is a unique entertainment spot that hosts shows and events, including the world's biggest aquatic show, a huge modern space dedicated to games, fashion boutiques, a range of hotels, restaurants and Macao's most prestigious night-club. The 6-star hotel project will become the new flagship of this singular complex.

The hotel project includes the design and construction, on a surface of nearly  $151,000~\text{m}^2$  over 39 floors, of 783 rooms including 10 villas, a casino, restaurants, conference rooms and a rooftop swimming pool. Dragages Macao is responsible for the core and shell, including the reinforced concrete structure, the steel structure exoskeleton, the facade and the coating.

## **Iqaluit airport, Canada**



Start of works: Spring 2014
Delivery: December 2017
Value of works: around €170 m

Bouygues Building Canada, a subsidiary of Bouygues Construction, and Sintra, a subsidiary of Colas Canada, are carrying out work to modernise Iqaluit International Airport in the north of Canada as part of the Arctic Infrastructure Partners consortium. The public-private partnership includes financing, design, construction and operation-maintenance of the new airport terminal for 34 years.

Bouygues Building Canada and Sintra are responsible for the design and construction of the new 10,000 m² airport terminal, a related 4,500 m² services building and the rehabilitation and extension of about 400,000 m² of runway and aircraft parking areas.

The project is designed to be highly energy efficient. The work, which will include co-generation electricity production, is aiming to achieve LEED® Silver certification. The contract also provides for an ambitious employment and training programme for Inuit workers, whilst respecting and understanding their culture.

## **Tuen Mun Tunnel in Hong Kong**



Start of works: August 2013
Delivery: December 2018
Value of works: €1,150 m

Through two of its subsidiaries, Dragages Hong Kong and Bouygues Travaux Publics, Bouygues Construction has won a €1.15 billion contract for the construction of a 4.2-kilometre undersea road tunnel in Hong Kong. It is the largest design-build contract ever awarded in Hong Kong.

The project consists in constructing an undersea twin-tube tunnel, each tube with two traffic lanes and 14 metres in diameter. The tunnel will link the New Territories, north of Hong Kong, to Lantau Island, where the international airport is located. It will be bored 50 metres below sea level, which will constitute a record depth for Bouygues Construction.

The project will entail working in an environment in which pressure is high (over 5 bar).

The site will be run to comply with strict environmental standards as they relate to marine ecology, water quality, noise nuisance and waste management. The two ventilation buildings powered by wind energy that will be constructed to the north and south of the tunnel have been designed to qualify for BEAM Plus Gold rating.

## First section of the Hong Kong - Macao Bridge



Start of works: mid-2012

• Delivery: 2016

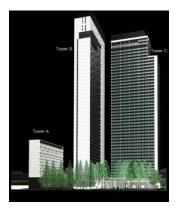
• Total value of contract: €1.25 billion (including provisional sums)

Dragages Hong Kong and VSL, in a consortium with the contractor China Harbour, are constructing the first section of the bridge between Hong Kong and the cities of Zhuhai and Macao. The value of this contract makes it the largest design-build contract ever awarded in Hong Kong.

The consortium will construct a section of the bridge measuring 9.4 kilometres, from the International Airport Island to the boundary of Hong Kong territorial waters. It will support a three-lane dual carriageway over Hong Kong's deep western waters. The Hong Kong - Zhuhai - Macao bridge is one of ten major infrastructure projects launched by the Hong Kong government since 2007.



#### **Residential towers in Bangkok, Thailand**



Start of works: 3rd quarter 2012

Delivery: 2016

Total value of the project: nearly €100 m

Bouygues Thai is constructing three residential towers and an office block in the very fashionable business district of Ploenchit, in Bangkok. The three residential towers, which will have 14, 47 and 52 floors (180 metres), will contain around 1,450 apartments, ranging from one room to three rooms. The office building will have three storeys.

At peak periods, approximately 1,800 employees will be working on the site, which is situated in a very dense urban environment.

This project is the fourth collaboration between Bouygues Thai and Noble Development plc, proof of the customer's confidence in the Group.

## **QP District in Qatar**



Working alongside Qatari partners Midmac Contracting Company and Aljaber Engineering, Bouygues Bâtiment International is currently constructing a 700,000 m² real estate development in Qatar.

Located in the new West Bay business district in Doha, this huge development will include nine office towers ranging from 18 to 52 storeys, a 5-star hotel with over 400 rooms, a shopping centre, a conference centre and a mosque, as well as all the necessary car parks and other exterior facilities. The works are being carried out in a particularly difficult environment because of the cramped nature of the site.

Start of works: September 2009Value: €950 m (60% Group share)

## V. A selection of prestigious projects

## **France**

## **Incity Tower (Lyon)**



Start of works: April 2013
Delivery: October 2015
Value of works: €124 m

 Architect: Valode & Pistre and AIA architects Bouygues Bâtiment Sud-Est (previously GFC Construction) and Bouygues Bâtiment Ile-de-France are building an office block in Lyon, called Incity, for Sogelym Dixence. It will be the tallest building in the city.

The Incity Tower, which will replace the old UAP tower, deconstructed by Bouygues Construction, will form part of the transformation of the Part-Dieu business district in Lyon, the second largest in France. With 44,145 m² of floor space on 40 storeys, the skyscraper will be a new landmark on the Lyon skyline. It will accommodate around 2,700 employees.

The tower has been designed in line with the principles of sustainable construction. Incity will feature a thin double-skin facade (internal double glazing and external single glazing), which will insulate the building while encouraging good airflow. The wide glazed facade will allow natural daylight to enter and so restrict the need for artificial light. The tower will be equipped with energy-efficient systems. In all, the building will consume less than 90 kWhPE/m²/year, as compared to between 300 and 800 kWhPE/m²/year for the previous generation of office towers. This will be the first tower in Lyon to be awarded the BBC® low-consumption label, and it will also be seeking double certification (HQE® and BREEAM® Excellent).

#### **Ministry of Defence at Balard (Paris)**



Start of works: January 2012

Delivery: 2015Value of the project:

 design-build €745 m (€500 m for Bouygues Bâtiment Ile-de-France) facilities management €534 m

 Architects: Nicolas Michelin & Associés and Atelier 2/3/4 Bouygues Bâtiment Ile-de-France and Bouygues Energies & Services, forming part of Opale-Défense, won a contract to finance, design and construct the French Ministry of Defence at Balard, in south west Paris, along with operation and maintenance of the complex for 30 years. The project was designed by two firms of architects (Nicolas Michelin & Associés, who coordinated the overall architectural project, and Atelier 2/3/4) and the engineering consultant Iosis. It comprises the construction of the main ministry building on the western part of the site (140,000 m²) along with a vast redevelopment operation for the eastern part (170,000 m², including 120,000 m² of renovation).

Works began in January 2012, and will involve 2,500 people at peak periods. Substantial technical resources will be employed, most notably 25 tower cranes.



#### The Philharmonie de Paris



Start of works: March 2011Delivery: beginning of 2015

 Value of project: €219 m (€107 m for Bouygues Bâtiment Ile-de-France)

Architects: Ateliers Jean Nouvel

As part of a consortium, Bouygues Bâtiment Ile-de-France has completed work on the hall for the Philharmonie de Paris. This building is one of the first projects to be completed in the context of the Grand Paris urban renewal plan. It includes a 2,400-seat auditorium, eight rehearsal rooms, secondary performance spaces, a teaching centre and administrative offices.

The structure has been built on the hill of the La Villette park with a public pathway on the whole roof. The exterior is dominated by a 60 metre-tall giant screen which is used to publicise forthcoming performances. The building and gardens are being operated and maintained for 15 years by Cofely, a subsidiary of GDF Suez. The car parks will be managed by QPark.

### Stade Vélodrome football stadium in Marseille



Start of works: June 2011
Delivery: summer 2014
Value of the project: €267 m

 Architects: SCAU Architects and Didier Rogeon Architect AREMA-a consortium whose members include Bouyques Bâtiment Sud-Est (previously GFC Construction) and Exprimm, subsidiaries of Bouygues Construction—has completed the reconfiguration of the Stade Vélodrome football stadium in Marseille and the surrounding area, under the terms of a public-private partnership. The stadium has been entirely modernised and brought into compliance with international standards, particularly with regard to Euro 2016. The configuration of the stadium now achieves UEFA's 5-star rating. Total spectator capacity will be increased to 67,000 from the current level of 60,000, including 6,000 VIP seats.

The stadium remained in operation during the entire period of building works, with space available for up to 42,000 spectators. The adjoining rugby stadium (the Stade Delort) was also redesigned. The partnership contract also includes the development of an adjoining 100,000 m² property complex which will comprise offices, a shopping centre, two hotels, a health centre, serviced apartments and housing.

AREMA is also responsible for operating the Stade Vélodrome for 35 years.



#### **The Saint-Quentin-en-Yvelines Velodrome**



Start of works: July 2010Delivery: December 2013

Total value:

€74 m (for the construction works)

• Architects: Chabanne, Ralph

Schuermann

In the context of a public-private partnership, Bouygues Construction has built the Saint-Quentin-en-Yvelines velodrome. The contract covered the finance, design and construction of a sports facility dedicated to cycling, as well as operation and maintenance for 30 years. The velodrome has a capacity of up to 5,000 people, including 3,500 on fixed seating. It includes the world's first 250-metre long, 8-metre wide cycle track with a constant radius of 23 metres. The French Cycling Federation has installed its headquarters in the building. The 35,000 m² project also includes the construction of the first covered BMX track in Europe, as well as a property development programme. This mainly consists in the construction of a hotel, accommodation for students and research workers, offices and shops.

The entire project will abide by the principles of sustainable development:

- Optimisation of energy needs and consumption according to the facility's operational cycles,
- Recovery of rainwater Protection of wildlife,
- Impact of the project on the local economy (local subcontracting and creation of 500 new jobs).

## Les Grésillons wastewater treatment plant (Triel-sur-Seine)



Start of works: September 2008

• Delivery: March 2012

 Total value: €312 m (Bouygues Travaux Publics' share: €90 m)

 Architects: HB architects, Alain Farel, Atelier Acanthe Bouygues Travaux Publics was responsible for earthworks and civil engineering for the plant, construction and fitout of buildings, and the construction of roads and related works. Staff housing was also built for personnel of the Paris regional wastewater authority operating the plant.

This second phase is a follow-up to the first phase that was completed by Bouygues Travaux Publics and inaugurated at the start of 2008. This tripled the size of the plant, increasing the treatment capacity from 100,000 m³ to 300,000 m³ of wastewater per day. It is now capable of handling the sewage discharged daily by the equivalent of a population of between 1.5 million and 2 million people. It is also capable of complying with very stringent standards of sewage treatment, in line with the objectives of the European Union's Water Framework Directive. Attesting to the quality of construction its very low environmental impact, the facility qualifies for High Environmental Quality (HQE) certification.



## First Tower, Paris La Défense



been increased by roughly 10% to 87,000 m<sup>2</sup>.

The entire structure has been reinforced and the building skin has been totally rebuilt with approximately 50,000 m<sup>2</sup> of glazing and curtain walling, including 30,000 m<sup>2</sup> of naturally

The renovation of the former Axa Building is part of a major programme to modernise the La Défense business district, in order to ensure that it continues to appeal to users and investors. It is a world first in terms of scale and technical

The building comprised three wings, and originally stood 155 metres tall (40 storeys above ground); it was raised by ten storeys to reach a total height of 231 metres, making it the tallest building in France. One of the wings has been lowered, to achieve a 10-storey stepped cut-back. The floor space has

ventilated double-skin facade. Designed and constructed with

a far-reaching approach to sustainable development, the First Tower was awarded High Environmental Quality (HQE®) certification.

complexity.

Start of works: January 2008
Delivery: March 2011
Value: over €300 m

Architects: KPF and SRA Architects

## Aubervilliers shopping centre (Paris region)



Start of works: July 2008
Delivery: March 2011
Value: €212 m

Architects: Antoine Grumbach

Bouygues Bâtiment Ile-de-France and Brézillon have built a large shopping centre in Aubervilliers, in the northern suburbs of Paris, for Icade and Klépierre. With a surface area of 56,000 m², the complex, designed by architect Antoine Grumbach, also houses 20,000 m² of offices. Located near the Boulevard Périphérique (the inner ring road around Paris), it has been awarded high environmental quality (HQE®) certification. A 2,800 space car park has also been built. The complete complex stands in a pleasant setting designed by landscaper Michel Desvignes to reflect the themes of water and nature.

## **Royal Monceau Hotel, Paris**



Bouygues Bâtiment Ile-de-France has carried out a thorough refurbishment of the Royal Monceau, a celebrated luxury hotel in Paris with a floor area of 14,000 m². The number of rooms was reduced from 220 to 150. The hotel also includes a spa/fitness centre which incorporates the largest hotel swimming pool in Paris, two restaurants, a ballroom, a cinema, a garden, 11 luxury apartments and a business centre. Philippe Starck is responsible for the interior design of the building.

This contract illustrates Bouygues Construction's know-how in constructing and refurbishing luxury hotels.

Start of works: August 2008Delivery: October 2010

• Value of the project: €104 m (Group share:

€36.3 m)

• Architect: Didier Poignant

## **Tour Mozart + Bouygues Telecom technical centre, Issy-les-Moulineaux**



As part of the Issy Mozart development project, Bouygues Bâtiment Ile-de-France constructed a 24-storey, 100 metre-tall office building which was awarded High Environmental Quality (HQE®) certification. The project also includes a 3-storey building called The Wave, which provides the main access to Mozart Tower. Thanks to the infrastructures already in place beneath the tower block and the third building of the Issy Mozart development, three underground floors house the service areas along with a 757-place car park. The complex became the headquarters of Bouygues Telecom. It won a first prize at the "Eco Building Performance 2007" exhibition.

Start of works: January 2008

Delivery: April 2010

Total value of the project: €155 m

• Architect: Arquitectonica



Construction of a  $57,000 \, \text{m}^2$  technical centre for Bouygues Telecom, incorporating a  $23,000 \, \text{m}^2$  "green office". A wood-fired cogeneration boiler has been installed, which produces heat in the winter and generates electricity in the summer.

Start of works: July 2007
Delivery: September 2009
Value of works: €134 m
Architect: Valode & Pistre

## Oxygène Tower, Lyon



Bouygues Bâtiment Sud-Est (previously GFC Construction) and Bouygues Bâtiment Ile-de-France have completed work on the Oxygène Tower. The 28-storey skyscraper stands 115 metres tall, making it the second-tallest building in Lyon, after the Crédit Lyonnais Tower (known as "The Pencil"), which is 162 m tall. The Oxygène Tower provides 29,500 m² of office space. To improve energy performance, it has ventilated double-skin facades and most of the offices benefit from natural daylighting.

Start of works: July 2007Delivery: March 2010

Value of works: more than €100 mArchitect: Arte Charpentier

Women's, Children's and Haematology unit, Caen Teaching Hospital



• Start of works: March 2006

Delivery: April 2009

Total value of the project: €70 m
 Architect: Architecture Studio

Rouen-based Bouygues Construction subsidiary Bouygues Bâtiment Grand Ouest (previously Quille Construction) has completed the design construction of the Women's, Children's Haematology unit of Caen Teaching Hospital. Located on the "pearl coast" site in Caen, the 345-bed facility brings under one roof all services for mothers and children, currently spread out on different sites. Clinical haematology patients are also cared for in the new 4storey block. This project, financed under the 2007 Hospital Plan, was concluded in the framework of a longterm hospital lease. Exprimm, the Group subsidiary specialising in facilities management, is responsible for the building's multi-technical maintenance, renewing facilities and operating services.

## The Couesnon Dam, Mont-Saint-Michel



Start of works: March 2006Delivery: end of 2008

Total value of the project: €12 m

In order for Mont-Saint-Michel (a UNESCO world heritage site) to become an island once again, Bouygues Bâtiment Grand Ouest (previously Quille Construction) carried out construction works, as a part of a consortium, on a new dam on the Couesnon River that flows into the bay. The dam should free the island from the stranglehold of the sand and marshes that surround it. In addition, the causeway and car park will be replaced by a bridge along which a shuttle will operate.

Consortium for the civil engineering part: Bouygues Bâtiment Grand Ouest (authorised representative), Mastelloto.



## **Zenith concert hall, Strasbourg**



Bouygues Bâtiment Nord-Est (previously Pertuy Construction), a Bouygues Construction subsidiary based in Nancy, built the Zenith arena in Strasbourg. Elliptical in shape, this huge concert hall is modular to allow for seating capacities ranging from 1,800 to 10,000.

This innovatively designed architectural project, with walls that can be tilted at varying angles, is draped from the outside with a tensioned orange glass fibre membrane. With a single 100 m span, the metal frame eliminates the need for interior supporting columns.

Start of works: March 2006
 Delivery: December 2007
 Value of contract: €50 m
 Architect: Massimiliano Fuksas

## **A28** motorway between Rouen and Alençon



• Delivery: October 2005

• Total value of the project: €700 m

Design, construction and operation as a concession of the stretch of the A28 motorway linking Alençon and Rouen. The 125 km-long four-lane stretch of motorway incorporates 103 engineering structures, two viaducts, interchanges with the A13 and A88 motorways, lay-bys and parking zones, service stations, an operations centre and a maintenance zone.

In 2015, Bouygues Construction sold its stake in ALIS (Autoroute de Liaison Seine-Sarthe) to fund manager PGGM.



#### The Stade de France, Saint-Denis



Design, construction, operation and maintenance of a stadium with 80,000 covered seats and a total of 36,000 m<sup>2</sup>× of net usable surface. Built on a 14-hectare site, the Stade de France features an elliptical disk-shaped roof suspended 42 metres above the pitch. The playing surface is sunk below natural ground level, reducing the external height of the imposing stadium.

To create space for an athletics track, the lower stands, which consist of 10 metal and concrete structural elements, are mobile and can be pushed back 15 metres under the upper section, via a system comprising sliding supports and air cushions. The stands maximise the number of spectators seated along the length of the pitch, where visibility is best.

Outside the stadium, a 4-hectare plaza and a ramp give ground-level access to 25,000 seats, while the remaining seats are reached via 18 stairways located on the exterior of the building. These stairways also lead to a circular gallery offering a panoramic view of Sacré-Coeur in Montmartre and the St Denis Basilica. The Stade de France has 148 boxes and 6,000 VIP seats, 2,000 m² of office space, a 2,000 m² multi-purpose hall, three restaurants including one with a panoramic view, 50 bars, boutiques and 6,000 parking spaces. There is also 7,500 m² of space separated into seven events rooms ranging from 300 m² to 1,940 m².

Start of works: January 1995
 Delivery: November 1997
 Value of contract: €300 m

• Architects: Michel Macary, Aymeric Zublena, Michel Regembal, Claude Costantini

# The Pont de Normandie Bridge



Construction of a 2.1-kilometre cable-stay bridge across the Seine estuary between Honfleur (Lower Normandy) and Oudalle, near Le Havre (Upper Normandy). The consortium of civil works companies forming the Pont de Normandie EIG (Economic Interest Group) agreed to meet the challenge set by customer, the Le Havre Chamber of Commerce and Industry, of building a bridge with an 856 m-long central span, 80% longer than the previous world record.

Start of works: May 1990
Delivery: January 1995
Value of contract: €140 m

# The Parc des Princes stadium, Paris



The construction of the stadium required the installation of a giant elliptical shell assembled from precast concrete segments. Assembled on-site with the use of synthetic resins, they were installed with prestressing. The stadium has a capacity of 50,000 spectators, with 25 kilometres of tiered seating on stands covering two levels.

• Start of works: January 1968

Delivery: January 1972Value of contract: €15 m

Architect: Roger Taillibert

# **International**

# **Tour MahaNakhon Tower in Bangkok, Thailand**



Bouygues Thai is constructing the MahaNakhon Tower, in the business district of Bangkok. The 77-storey building will be 314 metres tall, which will make it the country's tallest skyscraper when it is handed over, as well as the tallest ever built by Bouygues Construction.

It will contain a shopping centre, luxury apartments and a hotel.

• Start of works: August 2012

Delivery: May 2016

• Value of the project: €52 m

Architect: OMA

#### **Brickell City Centre, Miami, United States**



Start of works: June 2013
Delivery: 1st half of 2016
Value of works: €200 m
Architect: Arquitectonica

Americaribe, an American subsidiary of Bouygues Construction, which teamed up with the American construction firm John Moriarty & Associates of Florida, has won a contract worth approximately \$520 million (roughly €400 million) to build the first phase of a mixed-use project in Miami for Swire Properties, South Florida's leading international real estate developers. Americaribe's share of the contract is worth around \$260 million (approx. €200 million).

Brickell City Centre is a mixed-use development with a total area of around 502,000  $\text{m}^2$ , minutes away from downtown Miami. The project's first phase includes a luxury shopping centre of more than 46,000  $\text{m}^2$ , two residential towers with 820 apartment units, a 263-room hotel with 89 serviced apartments, a wellness centre and an office building. The project is LEED® registered for Neighbourhood Development and currently one of the largest in the United States in this category.

## **Trade and Industry Tower, Hong Kong**



Dragages Hong Kong has completed the design and construction of a new office tower known as the Trade and Industry Tower.

This 22-storey building, which offers roughly 67,000 m<sup>2</sup> of floor area, will house various departments of the Ministry of Trade and Industry.

The tower will implement high environmental standards and will seek to qualify for LEED gold certification. Landscaping is a crucial part of the project. In all, more than 30% of the total site area will be planted.

Start of works: January 2012

Delivery: 2015

• Value of works: around €207 m

#### **Abidjan Bridge, Ivory Coast**



Start of works: September 2012

Delivery: 2014

Value of works: €232 m

Bouygues Travaux Publics, as the leading firm in the Socoprim project company, is responsible for the design and construction of a 6.4-kilometre highway in Abidjan, Ivory Coast, along with operation and maintenance for 30 years.

This project, in which the construction works represent a total of €232 million, is one of the very first concessions in West Africa.

The highway will incorporate the third Abidjan bridge (the Henri Konan Bedié bridge), 1.5 kilometres long, and the Valéry Giscard d'Estaing interchange. The Henri Konan Bedié bridge will consist of two three-lane carriageways over 1.5 kilometres. It will link two of the city's major districts, Riviera (in the north) and Marcory.

When completed, 100,000 vehicles per day will be able to use the new road infrastructure.

# **Sports Hub, Singapore**



Start of works: September 2009

Delivery: April 2014

• Value: €770 m (Group share)

As a member of the SHPL consortium<sup>3</sup>, Dragages Singapore won a contract for the Singapore Sports Hub. This public-private partnership covers the financing, design and construction of the sports facility, plus facilities management for 25 years. It is the world's largest PPP contract for a sports infrastructure.

The Sports Hub is a huge integrated sports and leisure complex located on a 35-hectare site. Among the facilities are the 55,000-seat New National Stadium, an aquatic centre, a multi-sports hall, the existing Singapore Indoor Stadium, an exhibition centre, a sports museum and sports federation offices, plus  $41,000 \text{ m}^2$  of shopping and dining facilities.

<sup>&</sup>lt;sup>3</sup> Dragages Singapore (lead partner), HSBC Infrastructure Fund III (an investment fund managed by the HSBC group and specialised in PPP projects), United Premas (a Singapore-based facilities management company ranked No 1 in South-east Asia, a subsidiary of Australia's UGL Limited) and Global Spectrum Pico Pte Ltd (a subsidiary of the US company Comcast Spectator, specialised in venue management)



# The Tangiers Med 2 container port, Morocco



Start of works: Summer 2010

Delivery: 2014

Total value of the project: €825 m (Group share: €335 m)

After completing the Tangiers Med 1 port complex and the roll-on/roll-off port, Bouygues Travaux Publics and Bymaro (subsidiaries of Bouygues Construction) are now constructing two new container port terminals (Tangiers Med 2), which will offer additional capacity of 5.2 million containers. The operation for the Tangiers Mediterranean Special Agency is being carried out by a consortium which also includes Saipem, Besix and Somagec. The consortium will be responsible for building a 3,700-metre long main breakwater and a 950-metre secondary breakwater, 2,800 metres of quay, and a 150-hectare logistics platform. The breakwaters will primarily be constructed with the use of precast four-lobed caissons and piled up rocks protected by Accropodes<sup>™</sup>. The caisson technique has a number of advantages, above all which of considerably reducing environmental impact as it reduces both the footprint of the project and the volumes of materials used.

## Kai Tak cruise terminal, Hong Kong, China



Start of works: May 2010
Delivery: end of 2013
Value: €490 m

Dragages Hong Kong was responsible for designing and constructing a harbour terminal for cruise ships, along with supporting facilities, in Hong Kong. The installation, which is located to the south of the former runway of Kai Tak airport, is capable of simultaneously berthing two 8,000-passenger mega cruise liners.

Designed by architects Foster + Partners and Wong Tung & Partners, the building consists of a three-storey open plan landscaped structure. The absence of columns allows highly modular use of space.

The project complies with the demands of Hong Kong BEAM certification with regard to the precepts of sustainable construction, combining energy saving measures with a focus on the building's long-term performance: reduced energy consumption, renewable energies, recycling, etc.

#### **Rolex Learning Center, Switzerland**



Start of works: August 2007
Delivery: September 2009

• Total value of the project: €56.5 m

Losinger Marazzi, the Swiss subsidiary of Bouygues Construction, built a 35,000 m² university campus at the point of entry to the EPFL (Ecole Polytechnique Fédérale de Lausanne). The most up-to-date virtual and physical technologies were employed to construct this facility for students.

The project, designed by the Sanaa architectural practice, incorporates a library, a training zone, social areas (including a self-service cafeteria and a more elegant restaurant, a function room, shops, etc.), cultural spaces and service areas (machine rooms, car parks etc.). The "wave-shaped" architectural concept constituted a major technological challenge; it consists of two superimposed arched shells with openings, the longer of them spanning 80 metres. The site has been awarded the Minergie label, certifying the energy efficiency of the building.

# **Broomfield Hospital, United Kingdom (now in operation)**



Start of works: February 2008

• Delivery: August 2010

• €200 m (construction) + €180 m (operation and maintenance)

Bouygues Construction's British subsidiaries built Broomfield Hospital (in south-east England, near London). This Private Finance Initiative (PFI) provided for the refurbishment of the existing hospital and extended it to 43,000 m². It also covered the installation of network infrastructure and of all medical equipment.

The new hospital includes more than 330 beds, five operating theatres, three endoscopy rooms, a maternity unit with two operating theatres and a neonatal intensive care unit. Bouygues UK carried out all the construction work and Ecovert FM will provide facilities management services for 33 years (building maintenance, energy and utilities management, laundry, catering, etc.).



# **Busan Harbour, South Korea (now in operation)**



Start of works: January 2008

• Delivery: end of 2011

• Total value: €703 m (Bouygues Travaux

Publics share: €250 m)

Bouygues Travaux Publics, along with partners Hyundai Development Company, CMA CGM, KMTC, Kukje Transportation Co Ltd, and KCTC, as well as BPA (Busan Port Authority) and Macquarie Korea Infrastructure Fund, signed a construction and 30-year concession contract in January 2008 for one package of South Korea's new Busan Harbour. The new harbour project is divided into four packages, to be built and operated by four different concession companies. It replaces the previous Busan port, which was located in the centre of the city, and will be better able to respond to strong growth in maritime container traffic.

Located on South Korea's south-eastern coast, it is well placed to serve local and international markets, particularly China. As part of its package, the Group was responsible for design and civil works, along with the supply of handling facilities (container gantry cranes and other harbour cranes, shuttle carriers, etc.). The first phase consisted in treating the ground and carrying out extensive earthworks to reclaim 84 hectares of land from the sea. Concrete caissons were then installed to form the four quays at which container ships berth. All the equipment (gantries, cranes and shuttle carriers) is fully automated.

# **Gautrain rapid rail link, South Africa (now in operation)**



Start of works: September 2006

Delivery: 2012

 Value of work: €1.2 bn (of which €550 m for Bouygues Construction) Bouygues Travaux Public, a member of the Bombela concession company, has carried out the civil works for the Gautrain Rapid Rail Link project. This Public-Private Partnership contract covers the financing, design, construction, operation and maintenance of the rail network. The project is intended to alleviate traffic congestion between Johannesburg and Pretoria. The journey time between Johannesburg and the international airport is shortened to less than 15 minutes. A bus network complements the rail system, providing a distribution and feeder service for passengers within a 10-kilometre radius of the stations. The first section of the network links Sandton to the OR Tambo international airport, and the second runs between Pretoria (Hatfield) and Johannesburg.

The 80-kilometre rail system incorporates 15 kilometres of tunnels, 11 kilometres of viaducts and bridges and 10 stations (three of which are underground). It will also include a maintenance depot, a traffic control centre and 11,000 parking spaces in close proximity to the stations, to attract potential users of the new rail link.

All the construction works are guided by an Environmental Management Plan (EMP), with the replacement of trees removed, monitoring of noise levels, dust management, etc. As part of a social and economic development programme for Gauteng province, virtually all the site workers have been hired locally. A large number of indirect jobs have also been created. In addition, a major skills transfer programme has been put in place, targeting small and medium-sized enterprises and local communities.

#### **Home Office, London (now in operation)**



Start of works: March 2002
 Delivery: January 2005
 Total value of works: €325 m

Total value of operation/maintenance: €15 m per

year (approx. €380 m in total)

• Architect: Terry Farrell

Bouygues UK and Ecovert FM, Bouygues Construction's British subsidiaries, carried out the Home Office project in London.

The project consisted in demolishing three towers built in the 1960s in the heart of London, and replacing them with the new headquarters of the Home Office, capable of accommodating roughly 3,500 civil servants in 55,000 m² of office space. The project also included the design and construction of a residential complex (combining social housing, luxury flats, shops and a day-nursery) adjacent to the Home Office. Full facilities management services will be supplied by Ecovert FM for a 26-year period.

#### The Dubai elevated metro



VSL, the Bouygues Construction subsidiary specialising in post-tensioning and cable-stay bridges, carried out the construction work on the Red Line, the elevated metro line crossing Dubai. In a joint venture with Freyssinet International and Rizzani de Eccher, VSL precast 13,000 voussoirs for the viaduct and erected them over a distance of 45 km, using eight launching girders.

Start of works: March 2006 Delivery: September 2008

• Total value of the project: €110 m

# Masan Bay Bridge, South Korea



Start of works: April 2004Delivery: mid-2008

Total value of the project: €250 m

Bouygues Travaux Publics performed the construction work for the Masan Bay Bridge in South Korea, in a joint venture with Korea's Hyundai Engineering Corp. The contract covered the financing, design and construction of the bridge. Located at the entrance to Masan Bay, in the south-east of the country, the bridge allows motorists to avoid the congested motorway that skirts around the bay to Busan, the second largest industrial city in South Korea. With a total length of 1,700 metres, it is the second longest bridge in the country. The steel and concrete structure comprises a 740 metre-long cable-stayed bridge and two raised access roads, 410 and 550 metres long respectively.

# Sail@Marina Bay



Bouygues Bâtiment International built the Sail@Marina Bay residential complex in Singapore. Located on the seafront in the business district, it comprises two 71- and 63-storey towers. Standing at 245 and 215 metres, they are the tallest residential towers in the country and the tenth highest in the world.

They house 1,111 luxury apartments, three pools, two tennis courts and a car park. The original architecture, in the form of sails, features  $80,000~\text{m}^2$  of glazed facades. The towers, plumb with a metro line, were built on land reclaimed from the sea, which needed special foundations to be built at a depth of 80~metres.

• Start of works: February 2005

Delivery: mid-2008

Total value of the project: €140 m
 Architects: NBBJ, Meinhardt Thailand Ltd

# Tangiers Commercial Port (Tangiers Med I), Morocco



Start of works: June 2003Delivery: summer 2007

Total value of the project: €225 m

Bouygues Travaux Publics and Bymaro, subsidiaries of Bouygues Construction, won a contract in partnership with Saipem to design and construct the Tangiers-Mediterranean deepwater commercial harbour. The project was carried out on behalf of the Tangiers Mediterranean Special Agency (TMSA). Following the international call for tenders issued by TMSA in October 2002, Bouygues Construction was appointed to build the breakwaters, dredge the sea floor and reclaim land for the new Tangiers-Mediterranean port. The company was chosen as a result of a technical alternative proposed by its engineering teams: a breakwater made up of approximately forty precast reinforced concrete caissons in areas where the sea is more than 20 metres deep. This alternative had a number of advantages: it increased the surface area of harbour water by almost 18 hectares and reduced environmental impact by diminishing the footprint of the works and the volumes of materials used. Additionally, it resulted in a shorter construction time.



#### **Groene Hart Tunnel, the Netherlands**



Bouygues Construction, constructed the Groene Hart tunnel (the Netherlands) in partnership with the Dutch company Koop. The Group proposed an innovative solution to the Dutch Ministry of Transport and its prime contractor, HSL Zuid: a single-tube, two-lane tunnel over 7 kilometres long. This system offered many safety advantages and met the very strict environmental constraints required for building the Rotterdam-Amsterdam extension of the high-speed railway in the protected Groene Hart (green heart) area. This line, commissioned in 2005, enables trains to connect Amsterdam to Paris in only 3 hours and 15 minutes.

Start of works: start of 2000

• Delivery: end of 2005.

Total value of the project: €430 m (Bouygues

Construction share: €370 m)

# **Vancouver Hospital, Canada (now in operation)**



In October 2008, Bouygues Bâtiment International signed a 30-year concession contract for the financing, design, construction and operation/maintenance of a hospital building in Surrey, British Columbia (Canada).

This public-private partnership operation is Bouygues Construction's very first building contract in North America. The 30,000 m² building incorporates facilities for outpatient consultations and day-surgery operations. ETDE, in partnership with the Helios group, is responsible for all facilities management services for the building throughout the 30-year period of the concession.

Start of works: October 2008

• Delivery: mid-2011

 Value: over €230 m (€168 m for design/build and €65 m for operation and maintenance)

#### Highway 2000, Jamaica (now in operation)



Bouygues Construction constructed the 34-kilometre stretch of motorway linking Kingston, capital of Jamaica, and Mandeville, a bauxite mining town in the west of the island.

The concession company, Highway 2000, will be responsible for operating and maintaining the infrastructure until 2037.

• Start of works: February 2002

Delivery: end of 2004.

• Total value of the project: €330 m



# **Istria motorway, Croatia (now in operation)**



Start of works: 1997
Delivery of final phase: 2007
Total value of the project: €270 m

Bouygues Travaux Publics constructed the Istria motorway in Croatia in three distinct phases:

# Phase 1A

Design and construction of a two-lane motorway, 42 kilometres long. Works carried out by Bouygues Travaux Publics consisted of earthworks and drainage, construction of engineering structures and roadway, along with the restoration of the network of local access roads, as well as the civil works required for the toll plazas, service stations and rest areas. The company was also responsible for bringing the road equipment into service.

#### Phases 1B1 and 1B2

Construction of a 42-kilometre two-lane motorway consisting of six interchanges, a toll plaza, rest areas, a 1,376-metre launched bridge and 25 engineering structures.

#### Phase 1B3

13 km of two-lane expressway between Vodnjan and Pula. 19 engineering structures will be built on this stretch.

# The Channel Tunnel (France / United Kingdom)



Start of works: August 1986Delivery: October 1993

• Total value of the project: €11.5 bn

Joining France and Britain, the Channel Tunnel provides a completely underground 50-kilometre link, 37 kilometres of which is under the sea. Bored at a maximum depth of 40 m, the cross-Channel "fixed link" consists of two 7.60 m-diameter single-track tunnels (one in each direction) and a central service tunnel (4.80 m in diameter) for maintenance, ventilation and safety. The two underground switching halls, which allow trains to transfer from one tunnel to the other, are the largest of their type in the world.

Bouygues played a key part in boring the tunnels from the French side.

The Channel Tunnel is the longest undersea tunnel ever constructed using TBMs.

# **University of Riyadh, Saudi Arabia**



Start of works: July 1981Delivery: December 1984

• Total value of the project: €2.6 bn

Architect: HOK

This turnkey university complex is one of the world's largest. It includes 1,865 laboratories and 10,000 study rooms. In particular, it incorporates:

- eight teaching buildings, fully equipped with laboratories, classrooms, accommodation and administration facilities dedicated to the various disciplines,
- eight specialised buildings, including a forum, two auditoriums, a library, two administrative and academic buildings, an audiovisual centre, two amphitheatres and a restaurant.

The buildings are interlinked by 1.5 km of pedestrian walkways, 20 metres wide. With open sides giving onto the surrounding area, they are roofed with monumental arcades.

For information on more of the Group's past projects, visit our website: http://www.bouygues-construction.com/en/achievements



# **VI. Bouygues Construction entities**

# 1/ Bouygues Bâtiment Ile-de-France



Turnover in 2015: €2,336 million New orders in 2015: €2,152million 5,350 employees

The Paris region market leader in the construction sector, Bouygues Bâtiment Ile-de-France offers recognised expertise, for new-build or renovation work, in four major areas: public facilities, private commercial structures, housing or civil engineering. It develops overall expertise for its customers through the specialisation of its operational units and its subsidiaries: Rénovation Privée, Construction Privée, Habitat Résidentiel, Ouvrages Publics, Habitat Social and Brézillon.

Its offer is completed by Linkcity Ile-de-France for property development, Elan for project management, and Cogemex for residential maintenance.

Through its organisation and its expertise it offers each of its customers appropriate high performance solutions, regardless of the complexity and scale of their projects.



- <u>Main deliveries in 2015</u>: Ministry of Defence, Philharmonie de Paris, the Laennec district in Paris, Sanofi campus in Gentilly, Eole offices in Montrouge, renovation of Paris-Bercy Sports Complex (opposite) etc.
- <u>Projects under way:</u> City of Music on Seguin Island in Boulogne-Billancourt, future Paris Law Courts, Hotel de Crillon, Boulevard Ornano real estate complex in Paris, Russian Orthodox spiritual and cultural centre, etc.
- <u>Contracts</u>: renovation of the Longchamp racecourse, Alto Tower in La Défense, renovation of the Louvre Post Office, SerendiCity student housing project in Saclay...

# 2/ Bouygues Entreprises France-Europe



Turnover in 2015: €2,130 million New orders in 2015: €2,157 million 4,900 employees

Bouygues Entreprises France-Europe consists of subsidiaries operating in the building sector in France (excluding the Paris region) and in the adjacent countries of Western Europe.

Bouygues Bâtiment Nord-Est, Bouygues Bâtiment Grand Ouest, Bouygues Bâtiment Centre Sud-Ouest, Bouygues Bâtiment Sud-Est, Bouygues Bâtiment Outre-Mer, Bouygues Belgium, Losinger Marazzi (Switzerland), Richelmi (Monaco) and Acieroïd (Spain), partners in the Linkcity property development network, take charge of projects from the design and finance stage through to delivery.

Working in close proximity to their customers, they benefit from a strong policy of synergy: pooling of material resources, common purchasing structure and training centre, and networks of competence specialising in healthcare, universities, prisons, etc.)



- <u>Main deliveries in 2014:</u> Marignane Development Centre Airbus Helicopters (opposite), Schools in Loiret, Incity Tower in Lyon, Saint-Omer leisure centre, URM (Casualty/Reanimation/Medical unit) in Toulouse, Regional Hall in Clermont-Ferrand, Orleans Hospital, etc.
- <u>Projects under way:</u> Teaching hospitals in Strasbourg, Lyon Saint-Exupéry airport, Prado shopping centre in Marseille, Erlenmatt eco-neighbourhood in Basel and Im Lenz in Lenzburg (Switzerland), Bourgogne and Bordeaux I Universities, Strasbourg Music and Conference Centre, Boulevard des Dames in Marseille, Belfort Montbéliard Hospital, schools in Pont-à-Mousson (PPP), etc.



• <u>Contracts</u>: Wacken Europe Business District in Strasbourg, LimmiViva Hospital in Switzerland, Black Swans complex in Strasbourg, etc.

# 3/ Bouygues Bâtiment International



Turnover in 2015: €2,799 million New orders in 2015: €2,497 million

16,650 employees

For more than 40 years, Bouygues Bâtiment International has been creating social amenities in many parts of the world and for many cultures. The company is present on every continent through a network of local subsidiaries that call on a wide range of expertise at Group level.

The strengths of Bouygues Bâtiment International reside in technical and commercial innovation, managing complex projects, risk management, and acknowledged leadership in sustainable construction.

Its strategy is largely based on its capacity for rapid deployment, to enable it to seize commercial opportunities in mature markets or the most dynamic regions.



- <u>Main deliveries in 2015:</u>,Trade and Industry Tower in Hong Kong (opposite), ELI Beamlines research centre (Czech Republic), Banco de la Nación headquarters in Peru, sports facilities in Toronto, Queen Charlotte Hospital (Canada),etc.
- <u>Projects under way:</u> Hertfordshire University campus (United Kingdom), Ridge Hospital in Accra (Ghana), Czech IT, robotics and cybernetics institute Prague Swansea University (UK), Zagreb airport (Croatia), Star City residential complex (Myanmar), Australian Embassy (Thailand), Brickell City Centre property development (USA), Les Terrasses de Dar

Essalam residences (Morocco), National oncology centre (Trinidad & Tobago), etc.

• Contracts:, Manhattan Loft Garden Tower in London, Cancer treatment and surgery centre in London, 2<sup>nd</sup> phase of Star City in Myanmar, Cambridge Assessment Center (United Kingdom), condominiums in India, residential complex in Singapour etc.



# 4/ Bouygues Travaux Publics



Turnover in 2015: €2,138 million New orders in 2015: €2,299 million

5,200 employees

Bouygues Travaux Publics carries out complex viaducts and engineering structures, underground work, tunnels and civil engineering both in France and abroad. It works particularly in the areas of energy and the environment, and engineering structures as well as road, rail and port infrastructures.

Through its specialisation in large scale projects and organising PPP projects, its development is focussed on highly technical projects with major added value. To undertake these large scale projects, the company depends on long lasting installations (in France, Switzerland, Hong Kong and Australia) and its subsidiary specialised in dismantling and maintaining nuclear facilities: Bouyques Construction Services Nucléaires.

- <u>Main deliveries in 2015:</u>, LNG reservoirs in Dunkirk, XRL 820/821 tunnels (Hong Kong), Raymond Barre bridge in Lyon (France opposite), North Strathfield railway road in Sydney, etc.
- <u>Projects under way:</u> Nimes-Montpellier rail bypass, Flamanville EPR power station, Chernobyl containment sarcophagus (Ukraine), line 3 of the Cairo underground railway (Egypt), Hong Kong-Zhuhai-Macao motorway bridge, L2 bypass in Marseille, viaduct for the new Coastal road on Reunion Island, Tuen Mun-Chek Lap Kok tunnel (Hong Kong), Shatin to Central Link tunnel in Hong Kong, Troissereux bypass, extension tunnel on line 14 of the Paris Metro, etc.



• <u>Contracts:</u> NorthConnex in Sydney (Australia), Phase 4A of the Cairo metro, port of Cherbourg extension (France), etc.

# 5/ VSL



Turnover in 2015: €451 million New orders in 2015: €439 million euros 4,450 employees

A world leader in its field, VSL operates all around the world in the projects that employ post-tensioning systems in structures that are slender or under great stress. VSL also operates on other high added-value markets, particularly cable-stay bridges, major civil engineering projects, overhead urban viaducts, ground improvement techniques and the development of technological activities in the field of construction.

With a network of local subsidiaries established in 35 countries, VSL operates an ambitious R&D policy. With a large portfolio of patents, to its credit, the company focuses chiefly on the development of post-tensioning systems and on cables, anchors and cable ties for cable-stay bridges.





• Contracts: condominiums in India, etc.

- <u>Main deliveries in 2015:</u> ITER reactor in Cadarache (France), pedestrian bridge in Singapour, Bangkok Mass Transit System (Thailand) (opposite), renovation of the Tarban Creek bridge in Sydney (Australie), etc.
- <u>Projects under way:</u> New Orbital Highway contract 3 in Qatar, PTT LNG reservoirs in Thailand, Klang Valley Mass Rapid Transit Viaduct in Kuala Lumpur (Malaysia), Hong Kong Zhuhai Macao motorway bridge, Hô-Chi-Minh-Ville underground railway (Vietnam), Hung Hom Station (Hong Kong), Forth Bridge in Edinburgh, Scotland, SBK Line in Djakarta, Malaysia, etc.

# **6/ Concessions Division**



# Revenue 2015: €655 million 860 employees

The Concessions division manages and operates the concession companies in which Bouygues Construction has an interest.

Operating both in France and a number of other countries, the Concessions division is involved in managing a variety of infrastructure projects that facilitate the transportation of goods and people (motorways, bridges, tunnels, railways, buses, tramways, etc.) or provide amenities for leisure activities (stadiums, etc.).

It also contributes know-how to the start-up of new projects to be operated as concessions, enabling the Group to deliver a range of technical skills in design, finance, legal affairs and construction.



Highlights from 2015:

Sale of Bouygues Construction stake the A28 motorway concession company
Increase in traffic on the Henri Konan Bédié Bridge in Abidjan (opposite)
Delivery of the Vichy deviation



# 7/ Bouygues Energies & Services



Turnover in 2015: €2,118 million New orders in 2015: €2,559 million

12,130 employees

Bouygues Energies & Services designs, installs, maintains and operates power and network infrastructures and provides tailored services that enable its customers to combine economical energy consumption with a high-quality lifestyle and working conditions for their users.

Bouygues Energies & Services operates everywhere that regions, cities, homes and workplaces are undergoing change, striving to make life for its customers and their users simpler, more comfortable, cheaper and more responsible. It delivers these benefits through its expertise in energy performance and high value-added services in its three principal business areas: energy and digital networks, electrical, HVAC and mechanical engineering, and facility management.

- Entered into operation in 2015: French Ministry of Defence, photovoltaic power stations in Landes, etc.
- <u>Main deliveries in 2015</u>: high-voltage power line in Mozambique on behalf of Vale (opposite), electrical and thermal engineering for Airbus Helicopters offices in Bourget, air-conditioning for Paris-Bercy Sports Complex
- <u>Projects under way:</u> street lighting and traffic lights energy performance contract in Paris, maintenance of Exxon and Chevron petro-chemical sites in Normandy, L2 bypass in Marseille, Boutre-Trans subterranean power line, broadband network in Oise, Saint-Martin power station, , connection of the Total oil terminal in Djéno (Congo), etc.



• <u>Contracts</u>: Waste-to-energy gasification plant in Belfast (Ireland), new Western Guiana hospital complex, electric vehicle recharging terminals in Maine-et-Loir (France), fibre-optic network in the Aisne department, etc.



# **VII. Press contacts**



MATHIEU CARRÉ

Press relations, brand and corporate communications assistant director

Tel. +33 (0)1 30 60 66 39

m.carre@bouyques-construction.com



JESSICA SWIDERSKI

Press and social media Officer

Tel. +33 (0)1 30 60 28 05

j.swiderski@bouygues-construction.com

**Bouygues Construction Communications Department** 

1, avenue Eugène Freyssinet

78061 Saint-Quentin-en-Yvelines cedex - France

All the Group's press releases are available for downloading on our website:

www.bouygues-construction.com

Please visit our blog:

http://www.bouygues-construction.com