

#### Together, let's imagine a new way of life





BOUYGUES

Shared innovation





# Renovation, a major challenge for desirable cities

The renovation of existing buildings is an important issue, economically, socially, culturally and environmentally. It has multiple impacts on the preservation and enhancement of built assets, on the comfort of occupants and on the energy efficiency of households. It is also a local employment issue in the construction sector.

#### Designed with you in mind,\* WIZOM Renovation:

- Contributes to a better life together by making your project a time of sharing and conviviality
- · Durably enhances the value of your assets
- Helps to strengthen the attractiveness of your community



#### So that renovation represents a new beginning.



## Tailor-made solutions to ensure a collective dynamism

With Wizom Renovation, our priority is to listen to the diverse needs of the inhabitants and to put them at the heart of our projects. We involve residents in all phases, before, during and after the project.



Co-design your project with the inhabitants

Create and maintain links with each resident



8 12 30 A

Enhanced experiences during the work

Appreciate the full satisfaction of the inhabitants together



Progress towards new ways of life

Propose new services

## Contributing to a better life together





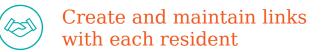


#### Why not make it fun?

We can put in place a fun and inclusive solution which will unite the enthusiasm of residents, associations and partners behind your project.

#### The consultation

The consultation period, which takes place through weekly workshops, feeds into the work of the architects and programmes of work.



#### A dedicated contact person

Before, during and after the work, a contact person specially trained in listening, partnership and coordination will be at your disposal. In close contact with each resident, they are the designated point of daily contact, ensuring a reassuring and positive presence.

#### Their role:

- To provide on-going communication about what is happening on the construction site
- To take on board the daily pressures of life for each resident and to support them from the work phase right up to the ownership of their new home
- To ensure the security of everyone's property
- To organise events for all
- To unite everyone so that each resident becomes a stakeholder in your project and contributes to the success of the enterprise







## Better experiences during the work

#### Men and women in a dedicated organisation

Innovative and tried-and-tested solutions are shared with our partners to reduce disruption and ensure the safety of the workforce and residents:

- Outsourced logistics
- Multi-skilled workforce
- Lean management
- Manufacturing (preparation, cutting in the workshop, etc.)
- Health and safety

#### A shared commitment

Together with our partners, we ensure that work is carried out calmly and that a pleasant living environment is maintained.



## Enjoy the complete satisfaction of residents together

The satisfaction of our tenants is monitored daily by our contact person who is dedicated to Listening Partnership Coordination.

In addition, a survey on quality covering our interactions, residents' feelings and the quality of services is available to you to ensure continuous improvement.



## Work towards new habits

#### Tailor-made support

Wizom Réhabilitation can support your efforts to involve residents in the formation of new daily habits which are essential to creating new behaviours around saving energy, reducing waste and water consumption.



For example, asking a team of volunteers to meet the challenge of reducing their consumption by simply adopting some green behaviour.



## Offer new services

Smiile - a collaborative neighbourhood network

A collaborative economy brings about many positive values and provides concrete solutions for residents' expectations.





It allows a relationship to be created with tenants which does not just revolve around sorting out problems.

Without Smille, I would never have had the means to live here. I needed a drill to put up my curtains. It cost  $\notin$ 40 to hire one from my local hardware store. But here, a neighbour lent me theirs via Smille.





### Rue des Panoyaux, Paris (75) A project to create cohesion

#### Wizom Réhabilitation promotes the circular economy

- · Benches with frames made from recycled cladding
- · Construction of an independent solidarity grocery store
- Interior design created with cladding panels already on site



Various solutions used on the site made it possible to reuse or recycle 80% of the materials used as part of the project and to involve 7 associations in the development of the site.



### Jas de Bouffan (13) A project combining consideration and efficiency

#### An approach initiated by teams from Famille & Provence

Famille & Provence met with residents to discuss their habits around and use of heating, hot water and various forms of energy in their homes and to find out about their knowledge of green behaviour and how they could implement it.

#### Wizom Réhabilitation supports tenants

A house on the site opened its doors when the work began. Several types of communication took place over the 2-year work period (group information meetings, website dedicated to the enterprise and to tenants, site newsletter, etc.)



Events to promote unity and cohesion were organised. A booklet about green behaviour was made available to all tenants once work was completed to support them in the management of their accommodation.

## Tailor-made solutions to ensure the long-term value of property

A commitment to quality is an integral part of the success of your project.

Wizom Réhabilitation offers solutions which ensure the effective quality and the control of costs in renovated residences. We focus on the new uses envisaged for the housing environment.

Improving your property sustainably

φ

Respect the architectural goals

The control of costs - an important issue

Respond to new societal challenges

Adapt to all types of property



## Respect the project's architectural goals

Our teams work closely with our partners, architects and project managers who are working on the projects so that the architectural vision is maintained.

We contribute to the respect of architectural goals and performance through project monitoring led by the architect.

#### We will deliver, without exception.

Guaranteed perfect completion and an after-sales service are managed by dedicated teams who are nearby and readily available.





 $\varphi$ 

### The control of costs - an important issue

The Energy Office at Bouygues Construction builds ondata from all delivered projects which were subject to a commitment to energy efficiency.

This feedback allows us to ensure your goals in terms of energy.

For example, we offer clear commitments within the framework of global performance markets, with the assurance of jointly measured, definitive results.

Let's imagine together technical solutions and participatory social innovations to achieve the objective of zero shared management.

We offer financial innovations to optimise the construction of your project.





One example is the use of third party funding for the production of renewable energy.



φİ

## Respond to new societal challenges

#### Digital technology for all

WIZOM Réhabilitation aims to be part of the transition to digital technology.

The challenges of BIM and of digitalisation in particular are quantitatively more important for existing sites than for new builds. In fact, the benefits of BIM are largely appreciated during the maintenance operation

For all renovation work, we offer some use of BIM throughout the various stages of the project.



For example, we offer 3D scanning using a drone and the export of data to asset management software.



Wizom Connected by Bouygues Bâtiment, which is designed to provide you with solutions to match your every requirement, offers you increased comfort, savings and peace of mind.



For life

#### Housing which evolves with residents

From first installation to retirement, the home can adapt to all the different phases of life.

The function of housing, from traditional homes to retirement homes, must be increased to meet the needs of residents.



ලි

66

# Adapt to all types of property

#### The renovation of individual houses in the area

The thermal renovation of individual houses in the public housing stock is a well-known area of expertise for Bouygues Construction, which has renovated over 5,000 houses since 2013.

With the Grenelle de l'Environnement's ambitious aims, the thermal renovation of individual houses in the public housing stock is a real challenge for housing organisations who are required to reduce the energy consumption of the existing housing stock by 38% by 2020.

71% of homes were underperforming in terms of energy in May 2017

Marketing watch 2017 Bouygues Bâtiment Over 11% of households are affected by fuel poverty INSEE 2015



#### **Quick intervention**

The structure chosen by Bouygues Construction and the many skills of its partners means that disruption to tenants is minimised by reducing service response times in homes and reducing the overall time frame for work by about a third.

Jean-Claude Charles, Director of Development and Podeliha.

#### Commitment to energy performance

We have fitted all homes with a home dashboard for genuine, measured performance. As a result, our tenants, with support over 2 years, have been able to monitor their own energy consumption and change their behaviour accordingly. In addition, we have analysed the energy consumption of 6 homes in order to understand their usage.

Christophe Durand, Head of Development and Assets at Vendée Logements.

#### Taking residents into account

I think that we have been supported very well throughout the building work. Before it started, we were able to visit a house which gave us some idea of the work to come. Then, during the construction work, Anne, who was in charge of Bouygues Construction's Listening Partnership Coordination programme was always around to explain what was happening on site, how it was organised and how long it would take. As a result, we were well prepared! I am very happy with what was done to my home - sink, tiling, washbasin, shower to replace my bath and even a new façade outside with insulation! I love it.

Mme B., a resident in the district.

#### Return to work / collaborative work

People with disabilities can get involved on a professional level thanks to this collaboration. Together with employees from ESAT Arceau Anjou, we store their materials on our logistics platform. We manage their stock, prepare sets of materials for each house according to what they have ordered, put them on pallets for each house and deliver them on site every Monday morning. This collaboration allows Bouygues Construction to save storage space, speed up work and therefore limit visual nuisances for residents on the site.



## Les Tilleuls Building, Andresy (78) An ambitious commitment to performance

128 homes were renovated in the building, resulting in significant improvements in energy consumption.

#### Implemented Wizom Réhabilitation solutions

- Savings of more than 50% in heating thanks to the installation of heat pumps to replace shared gas boilers.
- Collection and analysis in real time of the results obtained to optimise the operation of the installations and set up predictive maintenance.



Energy Performance Contract Savings in consumption 52%



## Rue du Colonel Driant, Malzeville (54) Consumption of heating halved

Wizom Réhabilitation has set up a social support system using family ambassadors for all those 'good deeds' beyond the simple objective of reducing heating costs.

#### Implemented Wizom Réhabilitation solutions

Software for monitoring temperatures in homes that has made it possible to:

- Solve certain technical shortcomings.
- Highlight residents' behaviour.

By the end of 2016, the result was better than the forecast target (savings of 55%). Beyond the set objectives, support around behaviour has made it possible to save money on domestic hot water.



## Tailor-made solutions for your region's development needs

Wizom Réhabilitation puts our skills, grouped in our companies, at the disposal of the development needs of your area and the circular economy through innovative projects:

- Responsible purchasing based on a spirit of balance between stakeholders
- Requirements, specifications and criteria for the protection and enhancement of the environment
- Actions in favour of social progress and economic development



#### Respect for the environment



Being a player who is close to clients and local stakeholders



Creation of initiatives around services, development and entertainment



## Respect for the environment



## The management of asbestos using PAGE (Processus Amiante Global Entreprise)

The treatment of asbestos in buildings poses a real problem both for landlords, residents and the company.

All the measures to be taken are summarised in our Processus Amiante Global Entreprise.

#### Air quality

We can recommend low-emission products to limit pollutants thanks to our Polygreen database, which is the result of tests carried out on site, while ensuring a balance between air quality and ventilation.

#### Circular economy

Our building sites are all committed to an approach of reducing volumes of raw materials and waste recycling.

#### Key partnerships

Conscious of our impact on forests and the supply chain of wood, we work in partnership with WWF France to further our responsible purchasing of wood (primarily wood certified FSC) and to support the development of a responsible wood chain.





All of our construction sites are 100% responsible, Label Top Site.



## Being a player who is close to clients and local stakeholders

We give priority to regions and local stakeholders in terms of employment and involvement in order to strengthen with them the local economic and social fabric.



Direct impact on the local economy (figures for France)



Over 90% of framework contracts are agreed with local companies.



Over one million inclusion hours take place 20 in France every year.



of suppliers and partner businesses are from the local economic and social fabric in which we operate.



In total, the value of subcontracting to special organisations is nearly 2.5 million Euro.



## Creation of initiatives around services, development and entertainment

#### To maintain employability in an ever-changing world

Training courses provided by the group enable less qualified employees to acquire additional skills. This initiative opens up new career development opportunities and ensures the sustainability of local employment.

#### Occupational integration

Bouygues Construction actively contributes to occupation integration by allocating more than a million hours a year in France.

Our action is based in two principles:

- Trusting local stakeholders
- Favouring a skilled approach

#### Partnerships with and patronage of local associations

- Use of ESAT across the region for the packaging up of sets of equipment, cleaning of building site facilities, catering services, etc.
- Bouygues Construction's Terre Plurielle foundation supports a large number of local associations in the areas of health, action to combat disability, education and inclusion.





## Matching UP







## Creation of initiatives around services, development and entertainment

#### Shared innovation

#### Matching Up: three years of open innovation!

Matching Up, the Group's programme of open innovation generates new ideas within the company by bringing together Group employees and regional start-ups to design and build innovative projects together.

#### Zero consumption of electricity in renovated homes

Making existing homes more energy efficient is a key challenge for stakeholders in the housing environment. It is within this context that Bouygues Construction was selected by ICF Habitat Nord-Est

for the Européen Interreg NWE programme with the aim of developing a prototype of the new approach to energy renovation in housing at Longueau.

Find out more at www.energiesprong.fr

#### YHNOVA (Nantes, 44)

The 21 March 2018 saw the opening of the YHNOVA social housing for Nantes Habitat. This is the 1st social housing to be designed using 3D printing thanks to the Batiprint 3D process developed by the University of Nantes at a Bouygues Construction building site.





Find out more about Wizom Réhabilitation at offres-innovantes.bouygues-construction.com

## RAISON 🔤 PLUS

Rights Reserved / Bourgues Construction, Véronique Paul, V. Joncheray, L. Brossier, A. Da Silva, T. Voisin, Antoine Billaud, Willy Berré - Photo credits iSock / MyPhotoAgency Projets: p.10 : Les Fortanelles Toulouse / p.11: Watteau Nantes / p.14 top: Saint Jean d'Illes shared garderis / p.14 bottom: La Forta Macé / p.18: Begles







Shared innovation