



Solutions for a sustainable world

GREEN SOLUTIONS AWARDS 2019

DISCOVER THE WINNERS!



BUILDINGS



DISTRICTS



INFRASTRUCTURES

Contest powered by



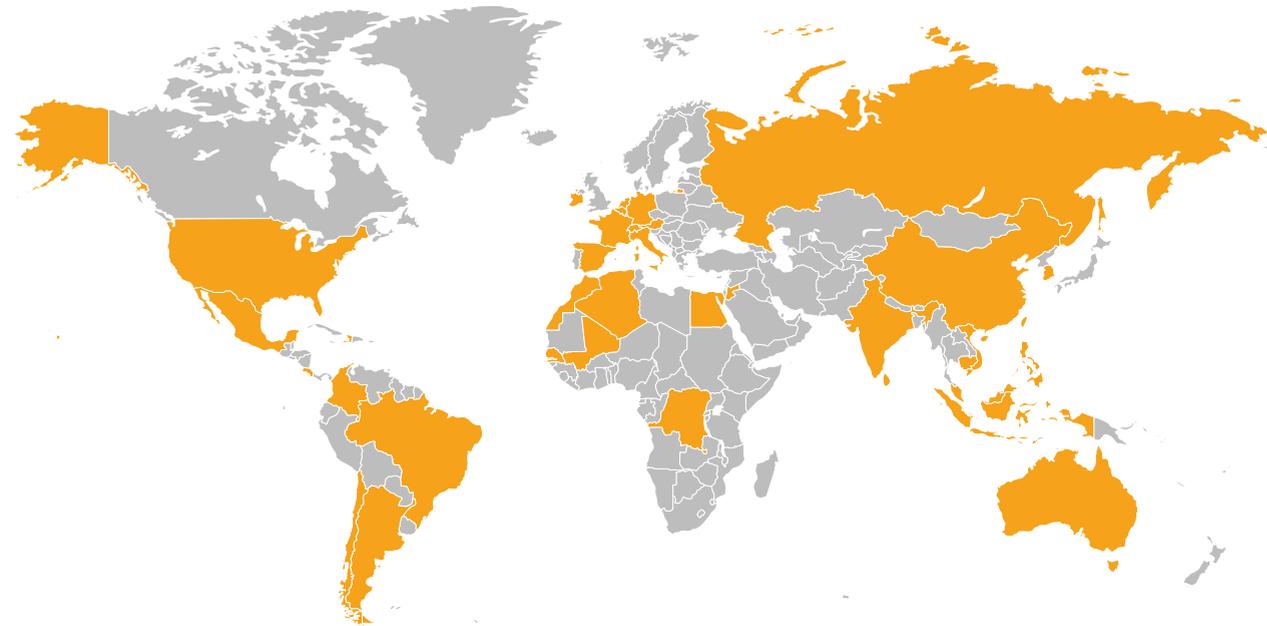
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GREEN SOLUTIONS AWARDS

37 PARTICIPATING COUNTRIES
192 CANDIDATES



EDITO



Announced for decades by the scientists, the consequences of climate change are here, and time is running out to complete our transition towards zero carbon. To move forward on this path, let us start by **making the multiple solutions implemented all over the world by pioneers a standard**. They are **within reach**, as long as we **know how to identify them!**

By **bringing innovative and tried and tested solutions to the attention of a wide audience**, we seek to contribute to this transition through the Green Solutions Awards. Inspiring, showing that it is possible to build differently and explaining in a concrete way how, with whom and at what cost: all this information can lead professionals to concretely change their practices.

Bio-based or recycled building materials, local supply chains, reuse, renovated buildings, bioclimatism, natural ventilation for summer comfort free from air conditioning, renewable energy networks, and natural sanitation of water: our

juries have selected **inspiring, effective and highly replicable projects** among nearly 200 candidates. Discover them!

Christian Brodhag

President of Construction21

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www.construction21.org

GREEN SOLUTIONS AWARDS

BRINGING OUT INNOVATIVE CLIMATE SOLUTIONS

Around the world, solutions to build resource-efficient and resilient cities already exist. Let's make them known!

In 2019, 192 projects, all delivered, were entered in one of the 8 categories of the competition. No less than 37 countries from all five continents are represented.



Sustainable Renovation Grand Prize



Sustainable Construction Grand Prize



Sustainable District Grand Prize



Sustainable Infrastructure Grand Prize



Energy & Temperate Climates



Energy & Hot Climates



Low Carbon



Health & Comfort

SHARE YOUR PROJECTS WITH AN INTERNATIONAL AUDIENCE!

The Green Solutions Awards provide **additional legitimacy** to innovative and replicable projects so that they can be **noticed by potential customers and partners**. Generating more than 4 million views on the Web and social media, they offer candidates **exceptional visibility** that helps them develop their business.

This **digital presence strategy** is strengthened by the **relay of 100 partners** directly addressing their network and by events (TV sets, conferences, podcasts, webinars...).

«Thanks to the Green Solutions Awards, my clients were provided with the assurance they can trust me; they now give me more flexibility. This allowed me to share our multidisciplinary approach when designing buildings.»

Marc Campesi, Manager of Diagonale Concept, international winner of the 2018 Sustainable Renovation Grand Prize with the eco-renovation of KTR France's head office

«We have already been contacted by other cities which draw inspiration from our concrete project, highlighted by the contest. Working with the city of Copenhagen, we had an ambitious partner. The Green Solutions Awards were an opportunity to showcase the project in detail.»

Carmen Muñoz-Dormoy, CEO of Citelum, international winner of the 2018 Sustainable Infrastructure Grand Prize with the Smart Lighting System in Copenhagen



IN 2020, JOIN THE

GREEN SOLUTIONS AWARDS

BECOME A SPONSOR

- ▶ **YOU ARE:** A company committed to developing more sustainable buildings and cities.
- ▶ **HOW:** Your company highlighted at each step of the contest's communication plan (print, web, events).

BECOME A CANDIDATE

- ▶ **YOU ARE:** A contractor, a designer, a consultancy agency, an investor, a building company, an industrial...
- ▶ **HOW:** Publish a case study of your most innovative projects.

BECOME A PARTNER

- ▶ **YOU ARE:** A media, a fair, a professional association or a university
- ▶ **HOW:** Your logo displayed on each communication material of the contest.

OUR INTERNATIONAL MEDIA PARTNERS



... AND MANY MORE IN EACH CONSTRUCTION21 COUNTRY. JOIN US!



TWO QUESTIONS TO CATHERINE PAPILLON, Global Head of Sustainable Development/CSR, BNP Paribas Real Estate



BNP Paribas Real Estate, project manager for the 17&CO real estate complex, located at Porte de Saint-Ouen in Paris (17th arrondissement).

How is your company committed to fighting climate change?

The **climate change topic and its impact on the real estate business is part of our Corporate Social Responsibility (CSR) strategy.** In fact, in our operations and service offers, we are **committed to taking into account the climate change challenges, optimising the environmental footprint of our activities, promoting circular economy and making the environmental quality of our products and services a lever to increase performance both in finance and in use.**

Whether in construction, operation or renovation, we offer our customers energy-efficient and environmentally friendly solutions, respectful of the health and well-being of corporate as well as residential real estate users.

What actions did you put in place regarding sustainable development/CSR?

In our different businesses, we develop solutions to **meet the new requirements and uses of our clients** (investors, companies, individuals, or local communities), and thus to positively contribute to the challenges of climate change and urban transformation.

It is in this context that we support some initiatives in the real estate industry such as the Low Carbon Building Label (BBCA), the French Institute for Building Efficiency (IFPEB), the HQE-French GBC Alliance, or Biodiversity and Circolab, and of course Construction21 and its Green Solutions Awards.

We have also set **ambitious goals to reduce CO₂ emissions and to increase environmental quality:**

- 100% of the operations we deliver in corporate property are certified and reach certifications with the highest performance levels: excellent or exceptional.
- In residential, 100% of housing delivered in 2020 will be certified.
- 100% of office and housing operations delivered in 2020 will benefit from a carbon footprint audit.

In 2019, we will build, with our different businesses and countries, 3 roadmaps: one on **reducing greenhouse gas emissions from our activities**, the second on **biodiversity** and the third on **circular economy**.

ABOUT

European leader in real estate services, BNP Paribas Real Estate covers the entire life cycle of a property: Promotion, Transaction, Consulting, Expertise, Property Management and Investment Management. With 5,400 employees, BNP Paribas Real Estate locally advises owners, tenants, investors and local authorities in Europe, the Middle East and Asia.

BNP Paribas Real Estate, a BNP Paribas Group company, generated €968 million in revenue in 2018.



This prize is supported by



SUSTAINABLE CONSTRUCTION GRAND PRIZE WINNER



AUTONOMOUS HOUSE B

Single house
Bouskoura, Morocco

This house is a good example of an autonomous building in a warm climate. As a semi-underground house, it benefits from the thermal inertia of soil surrounding it. The solar protection of the facade and the **natural ventilation make the regulation of the sun's thermal input possible according to the seasons and times of day, without any air conditioning or heating system.**

Autonomy is both energetic and water-based. Electricity is obtained through solar panels, while **water comes from recovery cisterns and is filtered** for domestic and drinking use. Sewage water is treated using phyto-purification.

The clever use of local climate characteristics and resources is also visible in the choice of materials. Despite its contemporary architecture, this house is made up of a wooden structure filled with mud bricks.

The comfort of the occupants was sought through **the modular layout of the house.** The configuration and distribution of the rooms can thus be modified according to one's desires or needs.

In regions where individual housing is popular, the autonomous house B represents an innovative alternative to limit the impact of this type of construction on the environment.

Contractor: Oualid Belakbil
Construction manager: Archibionic
Myriam Soussan et Laurent Moulin architectes
Manufacturers: Orientatelier Menuiseries bois; Menuiserie acier El Amri; Argilex

SPECIAL MENTION



TECHNICAL HIGHSCHOOL FOR HEALTH PROFESSIONALS

Education building
Ettelbruck, Luxembourg

Contractor: Public Building Administration
Designer: Fabeck Architectes
Consultancy agencies: Betic Ingénieurs-Conseils S.A.; Daedalus Engineering SARL; EBP Schweiz AG; SECO Luxembourg
Others: D3 Coordination; Dehne; Kruse Brandschutzingenieure

SPECIAL MENTION



POPUP DORMS

Student residence
Vienna, Austria

Contractor: WBV-GPA
Construction manager: Obermayr Holzkonstruktionen GmbH
Environmental consultancy: LANG Consulting
Designer: F2 Architekten
Others: OeAD Housing Office; home4students



TWO QUESTIONS TO LOUIS ENGEL, Safety & Sustainable Development Director, PAREX



Why is your Group committed to fighting climate change?

We believe that **all players in the construction chain must be mobilised to fight against climate change** and we decided to play our part. For several years, we have **taken an active role in improving the thermal efficiency of buildings** by developing our External Insulation Finishing System (EIFS) offer.

What actions did you put in place regarding sustainable development?

Our **“BUILDING RESPONSIBLY” sustainable development programme** is based on 4 commitments, to meet the environmental, social and societal challenges we face:

- **innovating**, continuously, to contribute to sustainable construction;
- **reducing** our environmental footprint throughout the life cycle of our products;
- **acting** for and with our employees;
- **anchoring** our sites in their territory.

To go further in our commitment to fight climate change, we have deployed for 3 years our Climate Program, a 3-step approach which consists of:

- **measuring** the greenhouse gas emissions related to our activities in all countries where we operate,
- **reducing** these emissions,
- **adapting** and **mitigating** impacts of some residual emissions by financing ecosystem restoration projects through reforestation and agroforestry.

At the end of 2018, we achieved the first part of our goals: measurement of greenhouse gas emissions in all the countries where we operate; pursuance of action plans set up with our suppliers within our industrial units to reduce CO₂ emissions; planting of 58,000 trees for 2 years to mitigate 100% of emissions related to business trips as part of 10 agroforestry projects supported by PUR Project in the main countries where we operate.

This positive momentum encourages us to continue to reduce our emissions while **contributing to the development of local communities**.

Our ambition is to **integrate these sustainable development actions into all our activities** in order to contribute to the growth of sustainable construction.

ABOUT

Major player in construction chemicals, PAREX is a world leader, specialist of dry mix, providing solutions for the building community and acting in 3 fields: facade protection and decoration, tile setting and flooring systems, waterproofing systems and technical solutions for concrete and civil engineering.

We operate in 23 countries with 74 production sites and bring together 4,500 employees worldwide. Our ambition is to be the preferred partner on our markets and in the local economic and social structure around our sites. Since May 23rd, 2019, PAREX has been part of the SIKA Group.



ENERGY & TEMPERATE CLIMATES WINNER



NEW POLICE OFFICE Office building Molenbeek-Saint-Jean, Belgium

Contractor: Zone de Police Bruxelles-Ouest
Construction manager: Bureau d'architectes Emmanuel Bouffieux (BAEB) **Consultancy agency:** TPF - Engineering S.A. **Structures consultancy agency:** ABCIS-Van Wetter S.A. **Thermal consultancy agency:** NEO & IDES sprl **Manufacturer:** BAM Belgium - Galère Sa **Certification companies:** Bruxelles Environnement IBGE; Arcadis Belgium



FIVEWIN SCIENCE & TECHNOLOGY MUSEUM Housing and public building Zhengzhou, China

Builder: Henan Fivewin Architectural Design Co., Ltd. **Designer:** School of Architecture, Zhengzhou University



NEWTONPROJECT HOUSE 1

Collective housing
Berlin, Germany

Designed as an iconic project in Berlin's sustainable Adlershof district, this project aims to exceed the KfW Efficiency House 40 Plus standard. The result is a **positive energy building** whose main innovation comes from the **photovoltaic elements of the facade**. These elements are arranged in such a way that they are difficult to see. As a result, the building fits into the surrounding urban fabric and its **gardens and access areas contribute to the permeability of the soil**.

The carbon footprint of the construction has also been the subject of a lot of work. Concrete was used only for the structure, which is covered with wooden curtain walls **using cellulose and recycled wood-based insulation**. Above all, the deconstruction phase has not been forgotten, since this building will be dismantlable at the end of its life.

Another important issue was also taken into account from the design stage. **The interior design can evolve over the different phases** of the building's or its occupants' life, with partitions separating the apartments easily redesigned.

Contractor: Newtonprojekt GbR
Construction manager: Deimel Oelschläger Architekten Partnerschaft
Structures calculist: Lichtenau Himbürg Tebarth Bauingenieure GmbH
Thermal consultancy agency: pi Passau Ingenieure GmbH
Others: Dr. Ing. Gabriele Holst; Büro 1.0; Low-E Ingenieurgesellschaft für energieeffiziente Gebäude



DOMINIQUE CAMPANA,
DIRECTOR OF INTERNATIONAL AFFAIRS, ADEME



Media Library Wild South, in Reunion Island - 2018 international winner of the Green Solutions Awards, in the Energy & Hot Climates category ©Hervé Douris



ADEME, the French Environment and Energy Management Agency, cooperates and develops **partnerships at European and international levels**, in order to share knowledge and best practices, and to support the ecological transition on the global scale.

In the building sector, the Agency collaborates with its counterparts from **Mediterranean countries, West Africa and South-East Asia** to disseminate best practices: development of public policies and regulations, training plans, deployment of exemplary projects. Technical expertise and project funding mechanisms are combined thanks to ADEME's involvement in the **Building Energy Efficiency Programme (PEEB)**, conducted jointly with the French Development Agency (AFD) and Giz.

ADEME relies in particular on the **experience of the French overseas territories**, which have developed approaches and tools specific to tropical climates, in order to share them with its partners located in the intertropical area. Thus, for its first edition in 2018, the **MOOC** (Massive Open Online Course) **"Sustainable construction in humid tropical zones"** was attended by 500 learners, one third of whom were located outside France, and particularly from French-speaking Africa. Translating the MOOC into English will further broaden its dissemination.

ADEME is particularly committed to this topic, while air conditioning demand is exploding in emerging countries, often located in the world's warmest climate zones: the scenario trend of the International Energy Agency shows that the energy for air conditioning demand could triple by 2050. 70% would correspond to the residential sector. **Promoting bioclimatic approaches** seems particularly crucial to reduce the building energy demand, by combining performing and non-polluting systems when these are unavoidable, as in climates with high humidity levels.

ABOUT

ADEME participates in the implementation of public policies in the environment, energy and sustainable development fields.

In order to enable progress in environment-friendly approaches, the Agency provides companies, local authorities, public agencies and the general public with expertise and advice. ADEME also funds projects - from research to implementation - in all its areas of intervention.



This prize is supported by



ENERGY & HOT CLIMATES WINNER



UNIVERSITY OF ENVIRONMENT

Education building
Valle de Bravo, Mexico

A minimal carbon footprint was the main objective behind the construction of this building. To achieve this, stakeholders drew inspiration from **traditional constructions and uses of buildings in the region**, while providing innovative solutions.

This complex of buildings has thus been conceived to allow the **university's courses to be held indoors as well as outdoors**. This has led to a deliberate greening of spaces and a reduction in built spaces. **Plants are also present on the roofs of buildings**, functioning as a natural insulator. The construction is made of compressed earth blocks for the walls and the window frames are made of wood, **reducing the carbon footprint by 70%** compared to a standard building.

In addition, in the absence of heating and thanks to **exclusively natural ventilation**, the only environmental impact factor, water consumption, has been the subject of particular attention. A **rainwater harvesting and black waters treatment system** allow the university to be almost autonomous, while solar water heaters cover domestic hot water needs.

Contractor: Miguel Campero Cuenca
Designer: Oscar Hagerman
Investor: Federico Llamas

SPECIAL MENTION

©Essam Arafa, Waleed Arafa, Tariq Al Murri

BASUNA MOSQUE
Religious building
Sohag, Egypt

Contractor: Dar Arafa Architecture
Construction Manager: Dar Arafa Architecture
Others: Hisham Negm; Ahmed alHadary Amr Haggag Waleed Samir; Bishoy Nagy



©Stéphane Brugidou



**LOW CARBON
WINNER**



SPECIAL MENTION

©Envirobat Centre et éco-construction sud-touraine

ECOCONSTRUCTION CENTRE OF BEAULIEU-LÈS-LOCHES

Demonstration center
Beaulieu-lès-Loches, France



Contractor: Communauté de communes Loches Sud Touraine
Construction manager: 180°
Architectes Consultancy agency: SOCOTEC
Thermal consultancy agency: EFFILIOS
Structures consultancy agency: ARCABOIS
Other: C2A



SPECIAL MENTION

©GERES - Fertl Ink

KONSEGUELA BUSINESS AREA

Activity zone
Konseguela, Mali



Contractor: Groupe Énergies Renouvelables, Environnement et Solidarité (GERES)
Construction Manager: GERES
Construction company: Entreprise Karim Dembélé + artisans et apprentis VN
Developer: Association la Voûte Nubienne (AVN)
Others: Al-Mizan - Architecture, development, Ecology in Sahel; Association Malienne d'Éveil au Développement Durable (AMEDD)



AEREM FACTORY

Factory
Pujaudran, France

A factory does not necessarily mean a giant carbon footprint, whether in the construction or operating phase. This is proven by this 3,800 m² **positive energy factory**. Heating and cooling are generated by a **geothermal heat pump**. Electricity is obtained through a **photovoltaic generator and waste recovery**.

The carbon footprint during the construction phase has been reduced by using locally produced **straw-filled wooden walls** less than 30 km away. The buildings are also completely dismountable and designed to be extended.

The design approach is also innovative. AEREM being a SCOP (Cooperative and Participatory Society), **the eco-design of the project was done in collaboration with its occupants**. This results in significant attention to **comfort** (acoustics, indoor air quality, lighting, etc.). The original central position of the offices facilitates exchanges between the various departments.

Finally, the choice to build the factory **in a peri-urban area, near the homes of a majority of employees, reduces the carbon impact of daily travel**.

Contractor: AEREM
Construction manager: Seuil Architecture
Thermal consultancy agency: Soconer

Forestry Brigade



©Bernard Boccaira



In this category we have 2 winners since both projects were really appreciated by the jury, one for its human approach, the other for its technical approach. With no further due, let's present them so you can understand why it was impossible to designate a single winner!



FORESTRY BRIGADE

Technical building
Brussels, Belgium

The Brigade project is a passive technical building for forest rangers in the Soignes forest in Belgium. It is integrated into the forest environment, which directly inspires **well-being and work activity**. **Light inputs** have been carefully managed, **while interactions with the outside world** are encouraged, particularly thanks to the view on the clearing. It is a simple project, which respects both its immediate environment and the people who come to work there. A preliminary study of the **impact of building materials on indoor air quality** was carried out.

Contractor: IBGE
Constructive manager: Gillion Construct - Entreprise générale
Designer: B612 Associates
Structures consultancy agency: Greisch
Other consultancy agencies: Matriciel; OLM Paysagistes

TADI



**HEALTH &
COMFORT WINNERS**



TADI

High office building
Tianjin, China

The TADI office complex is a fully instrumented 20,000 m² complex of buildings built in a dense urban environment. **Sensors** are used to measure indoor air quality in real time. **Different scenarios for responding to a pollutant peak** have been imagined. Comfort is not forgotten, with the **presence of outdoor green spaces that extend within the premises**. The occupants also benefit from sports or activity halls to relax during their working day.

Designer and Consultant: Tianjin Architecture Design Institute



SUSTAINABLE RENOVATION GRAND PRIZE WINNER



SUSTAINABLE INFRASTRUCTURE GRAND PRIZE WINNER



FLATMETTOEKOMST

Collective housing
Utrecht, Netherlands

Contractors: Mitros; Vios Bouw
Construction manager: Nieuw Utrechts Peil
Designer: ONB
Thermal consultancy agency: Nieman Raadgevende Ingenieurs



WINTER OLYMPIC PLAZA

Office building
Xishi, China

Builder: Beijing Shougang Construction Investment Co., Ltd.
Consultant: China Academy of Building Research



GREENPEACE SPAIN HEADQUARTERS

Office building
Madrid, Spain

For its headquarters, Greenpeace Spain was looking for a building corresponding to the values defended by the NGO. It was therefore essential to work on **the materials used, energy efficiency, but also the comfort of the occupants.** Costs also had to be kept under control.

The result is an innovative renovation, whose design has focused on initiatives that can be easily replicated. **Air conditioning is thus entrusted to an air/water exchanger system** free from chlorofluorinated liquid. This solution also reduces the equipment's power consumption to air pressure boosters alone.

It is a passive building, whose **electricity is produced by a nearby wind turbine.** All heating production is therefore based on electrified solutions.

The materials were subjected to **a life cycle analysis and to an indoor air quality impact-assessment.** The floor is made of cork, while the insulation is made of recycled textile and the paints are organic. Posters announcing the construction of the project have been recycled into lamp shades.

Finally, **the carbon footprint of this renovation was compensated** by reforestation in Nicaragua.

Contractor: sAtt Triple Balance
Construction manager: sAtt Triple Balance
Designer: sAtt Triple Balance
Developer: Greenpeace España
Thermal consultancy agency: Alter Technica Ingenieros

Construction company: 3B Ingeniería y Consultoria
Other: Maria Gil de Montes
Environmental consultancy: Fundacion para la Salud Geoambiental



CHANGYUAN RIVER WETLAND NATURAL PARK

Depollution system
Qixian, China

Project holder: Qixian District
Construction managers: Phytorestore; IPPR
Manager / Dealer: Management Committee of the Changyuan River Wetland National Park
Funding: French Development Agency (AFD)



MANONO

Solar installation
Manono, Democratic Republic of Congo

Project holder: SNEL National Electricity Company
Builders: Enerdeal; Groupe Forrest



MIJNWIJTER HEERLEN

Heating & cooling grid
Heerlen, Netherlands

The heating and cooling developed and operated by Mijnwtaer B.V is probably the most innovative district heating grid in Europe. It uses a resource that remained untouched until the municipality of Heerlen conducted a study in 2005 into the possibility of using water from the ancient mines filled with groundwater over the decades.

The **geothermal source** heats and cools **250,000 m² of buildings:** large office buildings, supermarkets, shops, educational buildings, industry and 400 dwellings.

In this '5GDHC' grid (5th generation), the energy from heating and cooling is exchanged between customers. Surplus is stored in the water present in the mine galleries for later use. Cooling buildings in the summer helps to charge the storage with heat for the winter.

This network makes use of a **system of heat pumps** that are positioned near the end users. The large reduction of energy demand allows CO₂ emissions per unit to be reduced by about 65%.

The easily reproducible nature of this technology is its main advantage. 5GDHC technology can be adapted to all types of thermal energy sources. Pilot projects are already under development in Parkstad-Limburg, near Heerlen, while the **European D2Grids project** plans to roll-out this type of thermal grids throughout Northwest Europe.

Project holder: Mijnwtaer BV
Builder: Mijnwtaer BV
Manager / Dealer: Mijnwtaer BV



TWO QUESTIONS TO JEAN-PIERRE FRÉMONT, Local Authorities Director, EDF



Citelum, the connected management project of the public space of Dijon Metropole ©Jacques Blanchard

Why is your company committed to fighting climate change?

As players committed in a sustainable and concrete way in the fight against climate change, EDF and its specialised subsidiaries offer numerous energy services and **expert solutions that are increasingly adapting to the needs of local authorities**, as well as to the energy transition challenges. Our ambition is to contribute to strengthening the economic activity and **innovation of territories**, to improve the **life quality of the inhabitants**, to build sustainable cities, while respecting low carbon requirements of the 21st century.

Through our **adaptability**, our technological expertise and our wide range of skills and solutions, EDF asserts the reliability of its advice and the relevance of its technological choices, in the service of energy transition and green growth.

This allows our customers to have a **forward-looking view**, to benefit from expert solutions and relevant advice. They thus have access to efficient energy services that are adapted to many different situations and needs, in the service of a **carbon-free performance**.

What actions did you put in place regarding sustainable development?

The world of energy is changing. Energy is becoming more and more decentralised, carbon-free, digital. The customer is becoming more and more involved in his consumption and energy savings. Wind, sun, sea: we try to make the best use of natural resources.

All these innovations also make us change and evolve. **This desire for transformation**, this will to remain close to customers and territories, at the heart of energy transition and climate issues, is our **new strategic horizon CAP2030**: being a responsible electricity provider, champion of low carbon growth.

We have committed to reduce by at least 40% our already low CO₂ emissions between 2017 and 2030, to become carbon neutral by 2050, and to develop 30 GW of solar energy by 2035.

In addition, we have selected six Corporate Responsibility Goals, in line with the UN's 17 Sustainable Development Goals:

- Climate and carbon
- Human development of Group employees
- Offers to customers, in particular to vulnerable customers
- Energy efficiency
- Dialogue and consultation
- Biodiversity conservation

ABOUT

As a major player in the energy transition, the EDF Group is an energy provider that is increasingly present in the field of renewable energies and energy services. EDF and its subsidiaries, through the EDF Energy Solutions, offer performance and energy efficiency solutions to serve their customers in France.

EDF and its subsidiaries are already offering new energy solutions for connected urban lighting, residential heating, charging electric vehicles, local electricity production, energy storage, thermal smart grids and smart electricity grids, etc.



This prize is supported by



©SPL Lyon Confluence / Desvigne Conseil - Jean-Philippe Restoy (Regard du ciel)



SUSTAINABLE DISTRICT GRAND PRIZE WINNER



LYON-CONFLUENCE

Urban renewal
Lyon, France

This district is a very inspiring example of urban planning for a large-scale low-carbon district. Between 2000 and 2030, the SPL Lyon Confluence, a local public redevelopment company, **will have developed or rehabilitated an area of 150 ha**, half on an existing district, half via new buildings and public spaces. In 2019, 500,000 m² of new high environmental performance buildings (passive and positive energy) have already been built and an additional 70,000 m² is planned for renovation in the short term.

30 photovoltaic installations supply more than 2 MW of electricity, equivalent to the annual consumption of 1,000 households, and a smart grid is under development.

Beyond the carbon footprint and energy considerations, this district is a model of **urban and social mix**. It offers offices and many facilities and shops, but also a wide variety of housing for all ages (student and senior residences, social housing, intergenerational housing).

Lyon-Confluence, a real laboratory for urban innovation, represents a new way of conceiving the city **by developing a wide variety of solutions**, whether in terms of mobility, digital technology or health and well-being of its inhabitants.

Project holder: Société Publique Locale Lyon-Confluence
Developer: SPL Lyon Confluence
Consultancy agency: Enertech
Assistance to the contracting authority: TRIBU; Hespul
Funding: European Commission

SPECIAL MENTION



©wohnbund.consult

SIMMERING SMART CITY

Urban renewal
Vienna, Austria



Project holder: City of Vienna, MA 25 Urban Renewal
Developers: BWSG; Stadt Wien, Wiener Wohnen
Operators: Kelag Energie und Wärme; Wiener Stadtwerke; Österreichische Post AG; Sycube
Others: Siemens AG; Austrian Institute of Technology (AIT)

SPECIAL MENTION



PAZHOU WEST AREA

Urban renewal
Guangzhou, China



Builder: South China University of Technology
Project holder: Administration Committee of Pazhou Exhibition & Convention, Headquarters and Internet Innovation Industry Cluster, Guangzhou

INTERNATIONAL JURIES



President of the jury

**GRAND PRIZES
(DISTRICTS / INFRASTRUCTURES)**

 **DAVID ALBERTANI**
R20 - Regions of Climate Action



President of the jury

**BUILDINGS GRAND PRIZES
(CONSTRUCTION / RENOVATION)**

 **MIRJAM
MACCHI HOWELL**
Swiss Agency for Development
& Cooperation / Global Alliance
for Buildings & Construction (GABC)



President of the jury

**ENERGY & CLIMATES
(TEMPERATE / HOT)**

 **JEAN-MARIE
HAUGLUSTAINE**
University of Liège



President of the jury

**LOW CARBON
HEALTH & COMFORT**

 **CHRISTINE
LEMAITRE**
DGNB / German Sustainable
Building Council



Jurors

 **TALA ABU SHUGAI**
Ministry of Infrastructure
Development

 **JEAN-FRANÇOIS DANON**
Paris Métropole Aménagement
(PMA)

 **XUN LI**
China Academy of Urban Planning
and Design (CAUPD)

 **CARLO RATTI**
Carlo Ratti Associati /
Massachusetts Institute of
Technology (MIT)

 **NANCY THOMAS**
Inspiring more Sustainability
Luxembourg (IMS Lux)

Jurors

 **RAQUEL DIEZ**
Spanish Green Building Council
(GBCe)

 **RÉGIS LE CORRE**
ESPI Group

 **PASCAL SIMOENS**
University of Mons

 **JUN WANG**
China Academy of Building
Research (CABR)

Jurors

 **LÉO ATTIAS**
FIABCI

 **CÉDRIC BAECHER**
Nomadés

 **MARCO D'EGIDIO**
Independent Engineer

 **DAVID DORNBUSCH**
Clean Tuesday

 **ZHIBING MAO**
China Construction Group Co., Ltd

 **PILAR MERCADER**
University of Séville

 **BRAHMANAND MOHANTY**
Asian Institute of Technology /
ADEME

 **ANG KIAN SENG**
Buildings & Construction
Authority (BCA)

Jurors

 **CÉDRIC ANBERGEN**
BSolutions

 **MUSTAPHA CHAFIK**
Al Omrane Holding

 **MARIA PERALTA**
La Salle

 **ANTOINE PERRAU**
Lab Réunion

 **QINGQIN WANG**
China Academy of Building
Research (CABR)



NATIONAL JURIES



Belgium

NATHALIE ABRASSART University of Mons
JEAN-MARIE HAUGLUSTAINE University of Liege
STÉPHANIE NOURRICIER Passive House Platform (PMP)



China

MENG CHONG China Academy of Building Research (CABR)
DECI DAI Architectural Design and Research Institute
of Tsinghua University
CUNDONG LI China Architecture Design & Research Group
YANHUI LIU China Architecture Design & Research Group
ZHIBING MAO China Construction Group Co.,Ltd



France

CÉDISSIA ABOUT City of Paris
ERIC AUBSPIN Phosphoris
NATHALIE AUBURTIN Cadre de Ville
FLORE BIENFAIT Solution ERA
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