

The French offer to promote sustainable cities at international level

At the crossroads between economic, social and environmental issues, the development of urban territories is one of the major global challenges of the 21st century, and this is particularly so in emerging countries. The promotion and the implementation of sustainable urban development at the international level is therefore an essential feature in the ecological transition that is being undertaken by the public authorities. With this purpose in mind, they provide support for the structuring of a French sustainable city offer for export via the Strategic Orientation Committee for Eco-industries (COSEI). More specifically, this desire takes the form of a strategy to federate French actors around a shared international vision of sustainable urban development and to promote their work. It is in this context that the brand Vivapolis was created, a vector for the international development of French companies in the urban development industry.

The planet is facing an unprecedented urbanisation phenomenon. The share of urban dwellers, which currently stands at 52%, is expected to rise to 67% in 2050, that is 6 billion individuals [1] or an average increase of 65 million people per year. The stakes in terms of urban design, the construction of housing and infrastructures and the management of urban services are therefore considerable, and should represent a world import potential of 280 billion euros in 2017 [2]. Faced with the complexity and diversity of the issues involved (climate change, quality of life, inclusive growth, social cohesion, etc.), an increasing number of experts advocate a global and integrated approach to urban development, which is considered to be more efficient than the so-called "silo" approach [3].

Harnessing French creativity to increase competitiveness

Sustainable urban development is a cross-cutting topic that encounters issues related to a number of industrial sectors (water, waste, transport, construction, energy, air quality, etc.), and involves a large number of diverse stakeholders, both public (local authorities, government departments, public agencies, research organisations, etc.) and private (large and small businesses, professional federations, associations, etc.).

In order to consolidate the French offer, promote it internationally and make it more competitive on world markets, the public authorities and the private sector have

implemented an approach designed to structure the offer, in particular via the work of the international working group of the Strategic Orientation Committee for Eco-industries (COSEI: see box 1).

The major supporters of this approach include:

- **7 professional federations:** the competitiveness cluster ADVANCITY; the French Association of Private Companies (AFEP); French Architects Overseas (AFEX); Club ADEME International; France Green Building Council; the French Eco-industries Association (PEXE) and the engineering federation SYNTEC INGENIERIE;
- **5 government departments:** the Ministries of Ecology, Sustainable Development and Energy (MEDDE); Regional Equality and Housing; Foreign Affairs and Foreign Trade; and Economy, Industrial Recovery and Digital Economy;
- **7 public bodies and agencies:** the Agency for the Environment and Energy Management (ADEME); Assistance Technique France (ADETEF); the French Agency for Development (AFD); Groupe Caisse des Dépôts; the French Scientific and Technical Centre for Construction (CSTB); the French Partnership for Cities and Territories (PFVT); and UBIFRANCE.

In the course of the work of the COSEI, the various stakeholders collectively identified the specificities of the French offer, which they have formalised in the form of a shared vision of integrated and sustainable urban development (box 2).



Box 1: The Strategic Orientation Committee for Eco-industries (COSEI)

Co-chaired by the Minister of Ecology, Sustainable Development and Energy (MEDDE), and the Minister of Industrial Recovery, the COSEI brings together the various stakeholders (companies, unions, and public actors) and ensures dialogue between the public and private sectors on the opportunities for development in the eco-industrial sectors, in particular at international level. Created in 2008, it is now one of the 14 sector strategic committees of the French National Industry Council (CNI). The secretariat of the COSEI is jointly provided by the General Commission for Sustainable Development (CGDD) and the General Directorate for Competitiveness, Industry and Services (DGCIS).

Box 2: The French vision of a sustainable city

The sustainable city has four key characteristics:

- **It places humans at the core of the project.** by offering the best possible quality of life to all those who use it (residents, workers, visitors, tourists, etc.), regardless of their age, health, or social status; it is a welcoming, mixed and multi-purpose city that at the same time provides a place for living, working and leisure.
- **It seeks to optimise its performance** by consuming fewer natural resources, of a high environmental quality, and by optimising the integration of **urban functions**. It thus seeks to make the urban territory more attractive, both for economic activities by increasing its competitiveness, and for the inhabitants by making the city more “desirable”;
- **It is based on strong and participatory governance**, associating all public and private stakeholders with the local public authorities (the guarantors of the city's strategic vision and the steering of integrated public policies) in the design, financing and operation of the city. These include financial institutions, large and small businesses, architects, town planners, consultancy firms, ministries and their respective agencies, public operators, universities and researchers, associations and NGOs, etc.;
- **Rather than serving as a model, it encourages an approach that can be adapted to various contexts** and adds value to specific local, geographical, climatic, historical and cultural features.

The idea is therefore not to provide "turnkey" cities, but to propose a partnership-based and integrated way of perceiving urban development that unites all stakeholders around long-term and people-centred visions.

Figure 1. The French vision of a sustainable city





Vivapolis - the umbrella brand of French stakeholders in the urban development industry on the international stage

The stakeholders of the COSEI have also created the brand Vivapolis, in order to unite French stakeholders, both public and private, who wish to promote this common ambition of sustainable urban development at international level.

The Vivapolis approach is based in particular on an internet site, www.vivapolis.fr, which focuses on:

- the promotion of France's showcase cities by the General Commission for Sustainable Development (CGDD), highlighting exemplary initiatives that have been carried out in France and that are part of the ÉcoQuartier (Eco-District) and ÉcoCités approach backed by the Ministry of Regional Equality and Housing (MLET);
- the promotion of French business references abroad (examples 1, 2 and 4);
- the referencing of French companies in the sustainable urban development sector.

Other promotional tools are also developed in this context, such as virtual showcases (example 3).

Although the Vivapolis approach is equally directed towards developed countries (see example 2 on Oslo) and developing ones, it focuses in particular on certain strategic regions such as China, Brazil, Morocco and Turkey.

Example 1: Design of an eco-district in Gaziantep (Turkey)

The French engineering group BURGEAP, along with Turkish and French partners, is supporting the municipality of Gaziantep in the implementation of a global sustainable urban development project which the city council wishes to become a national showcase. After having drafted the Territorial Climate Energy Plan (PCET) for Gaziantep, with the financial support of the French Agency for Development (AFD), the engineering group now provides the local authorities with technical assistance for carrying out engineering studies (energy and water) for a future eco-district.

Example 2: Make Oslo a smarter city

With a view to saving energy, reducing maintenance costs, and improving management of its facilities, the city of Oslo (Norway) wished to make its urban lighting network smarter. The French company STREETLIGHT VISION responded to this request by installing a management system for the city's public lighting switchboards, making it possible to control each individual streetlight, to dynamically adapt lighting levels according to need and thus reduce the city's electric bill by 50%. This solution, based on a centralised management software system used in many other cities and smart programmable logic controllers, also makes it possible to install a large number of sensors in the streets to monitor the entire city. The city of Oslo thus intends to use the lighting network to install environmental sensors, electric vehicle charging stations, information panels and traffic monitoring and control equipment to make the city smarter.

Example 3: 3D virtual showcases to promote the French offer

The aim of this project is to create a virtual model of a district or city, referencing a maximum number of French firms. The districts chosen will correspond to actual projects planned by the authorities of the countries concerned.

Following a request for proposals in July 2013 by the Ministry of Foreign Trade, two French consortia were selected to create 3D sustainable city simulators:

- one consortium, led by EIFFAGE, EGIS and GDF-SUEZ will work on the city of Astana in Kazakhstan,
- the other, led by ARTELIA and VEOLIA, will work on the city of Santiago in Chile.

In addition to providing decision support to local authorities, these simulators will also serve as the preferred international promotional tools for the French sustainable city offer.

Example 4: An urban strategy for Wuhan based on the circular economy model

Faced with unprecedented urban growth, the municipality of Wuhan (China) is engaged in a vast and ambitious programme to manage its effluent. The French company ARTELIA and its partners thus proposed a comprehensive plan for a circular economy on the Greater Wuhan scale, constituting a genuine strategy for the management of sewage sludge. The study was conducted in a collective manner with an integrated approach with regard to key urban services. It includes, in particular, integration of the regional development strategies of Greater Wuhan, an overhaul of the existing networks and utilities, the development of synergies, and the technical, economic and environmental assessment of the various scenarios put forward.

A French offer with an international impact...

The Vivapolis approach also helps to spur existing sustainable urban development projects on the international front (see the examples above), in particular the numerous initiatives in China.

... in particular in China

The urban population in China is currently estimated at 690 million inhabitants and is expected to reach over a billion in 2030. Many French companies are established in China, as can be seen in example 4. Indeed, over the last 10 years, more than 200 French sustainable city projects have been completed in dozens of

Chinese cities and provinces. In addition, urban projects of an unprecedented scale are currently being developed in the country's major cities. The MEDDE helps to structure these projects, as illustrated in box 3.

Another major Franco-Chinese eco-district development project is currently underway in Shenyang, the capital of Liaoning Province (north east of Beijing), a city of 8 million inhabitants. The project is part of an agreement signed between the Chinese Ministry of Commerce (MOFCOM) and the French Ministry of Foreign Trade. This agreement also includes an eventual cooperation on eco-districts in the cities of Chengdu and Chongqing (in the centre of the country).

Box 3: The MEDDE: an actor in sustainable urban development in China

The MEDDE is actively involved in sustainable urban development in China. Its many actions include:

- The structuring of an ambitious Franco-Chinese project for a new sustainable city in Wuhan (Hubei Province), an urbanised area of over 9 million inhabitants, in partnership with the Ministry of Foreign Affairs and International Development. This project involves a large number of companies and is underpinned by a bilateral agreement between the MEDDE, the MLET and the Chinese Ministry of Housing and Urban-Rural Development (MOHURD), signed in 2007, renewed in 2013, regarding sustainable urban development.
- Franco-Chinese cooperation since 2007 in the field of "rapid transit" and its integration into sustainable urban development strategies. In this context, the MEDDE participates in the organisation, in China, of the Franco-Chinese forum on Rapid Transport via the "Club éco-mobilité France-Chine" (Franco-Chinese eco-mobility club). This event, which is held in the Sino-French Centre of Tongji University in Shanghai, provides the opportunity for the administrative officials of the two countries, academics, researchers, entrepreneurs and experts to meet and put together their thoughts about French and Chinese cities.

Outlook

The public authorities are working to improve coordination of the various French sustainable urban development initiatives on the international stage. Indeed, in view of the importance of the issues at hand, many initiatives are being structured in France, for example by the French Agency for Development,

for which this issue is one of the strategic areas of focus, and by the French Partnership for Cities and Territories (PFVT), a network of French stakeholders in the field of urban cooperation under the supervision of the Ministry of Foreign Affairs and also co-chaired by the MEDDE and the MLET.

Using VIVAPOLIS

The Vivapolis brand can be used in the marketing of specific projects, products and services, as well as in targeted interventions at trade shows or seminars. All those wishing to adhere to and promote the Vivapolis vision are invited to consult the charter of commitment on the website www.vivapolis.fr

It can also support collective initiatives to promote French know-how in the field of urban export where the stakeholders share the desire to come together under one umbrella. This is particularly the case with the strategic committee of the railway sector of the French National Industry Council (CNI), whose international stakeholder-support strategy is now partly based on the Vivapolis approach.

To find out more:

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[1] United Nations Organisation, 2012. *World Urbanization Prospects. The 2011 revision*. Department of Economic and Social Affairs, Population Division, New York.

[2] Direction Générale du Trésor, 2012. *Analyse prospective des marchés à l'export, par secteur et par pays*. Ministère du Commerce Extérieur. Paris.

[3] For more on this subject see, for example:

Theys (J.) [CGDD], Vidalenc (E.) [ADEME], 2013. *Repenser les villes dans la société post-carbone*. Ministère de l'Ecologie, du Développement Durable et de l'Energie. Paris;

European Commission, 2013. *European Innovation Partnership on Smart Cities and Communities: Strategic Implementation Plan*. European Commission. Brussels.

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