

Financing smart cities

'Smart Cities & Sustainable Development' is the name of the new programme, developed jointly by the European Investment Bank and Belfius Bank, to finance intelligent cities. A first in Belgium – and in Europe – which should enable communes to benefit from financing at reduced interest rates in order to progress towards the status of Smart City. The rules of the game have been set and the kick-off was given last year in June.

The challenges in terms of urbanisation are immense. According to a recent McKinsey report, by 2030 some 57 trillion Euros will have to be found to create and maintain roads, electricity power plants and pipelines. But the Smart Cities programme is based on local statistics: more than 70% of Europeans live in urban areas, a proportion which is as high as 98% in Belgium! And there is another worrying reality: in developed countries the public authorities should devote 4% of their GDP to infrastructure. In Belgium, this proportion is only 2%.

This demographic concentration is considered to be a source of challenges in the cities, which generate almost 85% of the GDP, but consume 75% of the energy produced in order to do this and are responsible for 80% of CO₂ emissions.

It is within this context that the Belgian-European 'Smart Cities' project is positioned, a project which claims to be 'sustainable and intelligent'. In practical terms, the 589 communes and cities of Belgium can, from now, obtain financing at reduced interest rates. The credit line is available to public authorities and to others, but always for the benefit of the local administration.

This preferential rate financing is being made available by the European Investment Bank (EIB) and Belfius, and involves a total of 400 million Euros. The two banks are each contributing 50% of this. At Belfius, they say they do not underestimate the budget pressure felt by communal bodies for some years, "but the annual charges for such an investment will be more easily able to be financed thanks to the triple A rating of the EIB", believes François Franssen, Head of Strategy at Belfius.

Pim van Ballekom,
Vice-president of the EIB
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Senior Banker at the
European Investment Bank (EIB)

Financing small and large scale projects

Pierre-Emmanuel Noel, Senior Banker at the EIB, considers the financial line destined for Smart Cities as to be like a three stage rocket: “The institutions which consider the points to be focused on, the financial stage and finally those undertaking the projects”. In the eyes of Pierre-Emmanuel Noel, the objective of the EIB is not to finance 8 projects of 50 million Euros each. “The small communes will also be involved”. On the other side of the coin, the 50 million Euro ceiling does not prevent the EIB from financing larger scale projects, even if it does recognise that in Belgium, projects of over 50 million Euros are relatively rare. But the effect of urban concentration is substantial here: 40 of the 262 Walloon communes account for 65% of the population. For projects representing investments of under 25 million Euros, the agreement for preferential financing will be given by Belfius and audited by the EIB. Above this figure, and up to the authorised ceiling of 50 million Euros, the agreement will be given jointly by the two banking bodies. Once the credit line has been instigated, the commune will have a maximum of three years to finalise its project. For the aim is to finish before 2020, the end date of the European programme for CO₂ emissions.

Pim van Ballekom, Vice-president of the EIB, considers that the ‘Smart Cities & Sustainable Development’ programme” is a first in Belgium and also in Europe. The objective is in fact to set a ream dynamic in motion around ‘Smart Cities’,

in line with the Europe 2020 strategy. The aim is for intelligent, inclusive and sustainable growth, so that this approach becomes the new norm for constructing the cities and communes of tomorrow”.

Development priorities

In order to benefit from these credit lines, the communal projects have to be judged ‘sustainable and intelligent’ in three precise areas: mobility, urban regeneration, energy efficiency/renewable energies. There are many examples of what could constitute an integrated project.

Where mobility is concerned, this could be an overall plan associating electric vehicles with a policy to reduce cars in cities and encourage bikes. There is also the question of the road network, public transport, urban transport management or inter-modal transport hubs.

In the domain of urban regeneration, there could be a project to create an eco-district, a hospital or a cultural centre within the framework of rehabilitating an industrial eyesore.

And finally, energy efficiency could involve the use of new energy such as solar panels and the replacement of street lighting by LED technology. The instigators of the programme also talk of projects involving photovoltaic, solar water heaters, wind energy, biomass, cogeneration, and the energy efficiency of buildings undergoing renovation. These examples are by no means exhaustive.

And while the financial aid targets three areas in particular (mobility, urban development, energy efficiency), the programme nevertheless does not exclude ICT, explains François Franssen: “An application for a smartphone allied to a sustainable mobility project could also be accepted, but we wished to avoid frightening the communes with technologies which might seem complicated”.

The fact of combining several of these criteria enables a project to fall more easily within the ‘Smart Cities financing programme’.

The project has to constitute a holistic communal plan

In more practical terms, amongst the criteria to be met in order to benefit from reduced interest financing, is the necessity to produce a strategic plan. The project has to give examples along with a financial justification. To this, explains Pierre-Emmanuel Noel, are to be added other eligibility criteria. They are fixed by the EIB in discussion with Belfius which has to ‘recognise certification guidelines’.

The Smart cities programme is being undertaken in parallel with what is referred to as the 'Mayors' Convention', a European initiative which brings together 5,600 willing public authorities which wish to go beyond the environmental objectives of Europe 2020. Within this framework, city mayors are committing to paying particular attention to well-being, mobility, energy management and CO₂ emissions. In Belgium, Daniel Termont, the mayor of Ghent, is one of those behind this convention.

The projects are designed to achieve the objectives of the European programme whose goal is, by 2020, to reduce CO₂ emissions by 20% compared to 1990, to generate 20% of the EU's energy use from renewable sources and to improve energy efficiency by 20%.



François Franssen,
Head of Strategy at Belfius

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The EIB was already financing cities and communes within the framework of sustainable cities, energy efficiency and urban regeneration. With ‘Smart Cities’ projects have to be integrated and include several dimensions. *“This means being innovative where technologies are concerned and inclusive through the participation of stakeholders.*

This does not involve the financing of a solar panel installation on a public building, but of projects which include a vision for the future”, details Pierre-Emmanuel Noel.

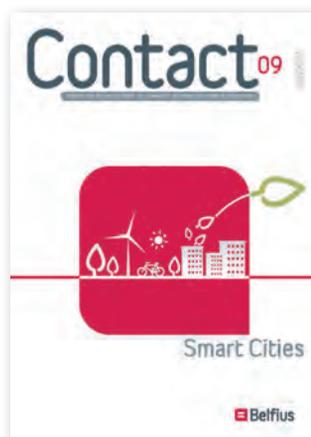
Through this process, the European Commission is hoping to see standards emerge in this domain. Every city is unique. But the challenges are the same, explains Mathias Reddmann of the European Commission. *“The philosophy behind this partnership is to connect cities with companies, industry, SMEs, and the academic world. In pragmatic terms, the objective of Smart Cities is also to incite initiatives which could be replicated in order to associate the needs of the cities and the regions. The idea is to encourage standards to emerge, and to identify eco-districts to serve as references”.*

Resounding success

Following some nine months of existence of the ‘Smart Cities & Sustainable Development’ programme, what is the current situation with the Belfius ‘Smart Cities’ initiative. Just a fine idea with one or two enthusiastic followers, or a real contributor to the urban life of tomorrow? Quite clearly, the latter: eight projects have already received financing (to the tune of 35 million Euros) from the European Investment Bank (via Belfius) and many others are actively being considered.

And their diverse natures amply demonstrate that Belgian communes, cities and administrations have taken the initiative to heart. Among projects to have received finance are the construction of a near zero-energy serviced residence in the commune of Schelle, the redeployment of an industrial eyesore in Wetteren, renovations and extensions to rest homes in Stekene and Kampenhout, and the installation of a CNG fuel station at Harelbeke.

Smart Cities & Sustainable Development



In the B2G* information magazine ‘Contact’ published by Belfius, Marc Raisière, President of the Belfius board, clearly explains in his editorial the reasons for his company’s commitment to the ‘Smart Cities & Sustainable Development’ programme and its collaboration with the European Investment Bank. The concept of ‘Smart City’ is explained in detail in the magazine which also illustrates this with several concrete examples. There is also a focus on European aid and subsidies which can be obtained by Belgian public authorities: provinces, cities and communes.

For more information and download of the magazine (French or Dutch) > www.belfius.be/smartcities

*B2G > Business to Government

Sint-Gillis-Waas – a sustainable administrative centre

Another project, and which we look at in more detail, is for new administrative centre at Sint-Gillis-Waas. This is one of three ‘administrative centre’ projects, the other two being at Gembloux, close to Namur, and Bierbeek, near Wavre.

The Sint-Gillis-Waas authorities wished their centre to be innovative, and sustainable. It was to offer a new type of public service provision to citizens, with a front and back office concept. The building had to be flexible and easily adaptable, with access for handicapped persons, and it had to integrate into the town’s chateau and park.. Where the construction itself is concerned, the building will be passive and generate itself a large proportion of the energy needed for heating and cooling, thanks to geo-thermal techniques and heat pumps.

Belfius and the European Investment Bank recognised the project for its forward-thinking nature, and it thus became one of the first to receive a grant within the framework of the initiative.

The organizations also believe that this project can serve as an example to others. The objective is clearly to lessen the borrowing burden for communes, CPAS (social security bodies) and inter-communal associations, in order to support them in innovative and sustainable development approaches.

Jean-Claude Verset & Tim Harrup ✍

FUTUROCITÉ: a Walloon PPP to facilitate communes in building up their projects

Although the Smart Cities programme is arousing enthusiasm within communes, the obstacles in the way of making it a success are not to be underestimated. Administrative delays, political logic and insufficient skills are just some of the potential brakes to realising projects designed for the long term. Frank Butstraen, Director General of the Futurocité not-for-profit organisation, specialising in providing assistance to communes, takes a look at the major obstacles to be overcome. *“Agoria and the Walloon Union of Enterprises are pushing the private sector to commit to intelligent city projects, but they are confronted with the political agenda set by the elections and the financial situation of the communes. Long term projects do not attract the mayors, who fear that the fruits of their efforts will be reaped by others, after the elections”.*

To this may be added a lack of internal competence.

“At the financial level, drawing up a budget demands a total understanding of the implications of a strategic plan, and this requires help from the private sector. But the rules involving public tenders mean that anyone advising a commune may be excluded from such tenders”. And finally, an ambitious holistic project involving several departments of a communal administration, may come up against intra-communal fiefdoms, everyone protecting his own particular domain for fear of losing a part of his power.

Frank Butstraen believes that the solution lies in the communes subscribing to a strategic plan with a platform which enables the principal of Smart Cities to be integrated in modules. But it will doubtless be long road to get from where we are now to there... All of these obstacles explain the creation in Wallonia of the Futurocité not-for-profit organisation, a public private partnership (PPP) which enables the cities and communes to be approached without fearing the suspicion of wishing to influence a tender. This body is financed by the Walloon government to the tune of 50% in the form of operational budgets, while the private sector supplies materials and resources in the domain of consultation.

According to Frank Butstraen, there still remains one obstacle: the inability of numerous communes to draw up a specification and a business plan for Smart Cities projects. *“Drawing up a mobility plan requires skills which the communes may not necessarily possess”.* And the Belgian political context should not be forgotten: *“A Walloon PPP has no authority in Flanders or Brussels. For private companies, this situation seems absurd”.* He calls for a situation such as that in France, where the law allows partnerships to be established between the public and private sectors to test concepts and free up funds which, in their turn, will enable a call for tenders to be made in two or three years. This is what Montpellier, Nice and Lille have done.



Frank Butstraen,
Director General of the Futurocité

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