

### **FOREWORD**

#### **EUROPAN\_30 YEARS AND EVEN + CREATIVITY**

The europan competition's 30th birthday was celebrated at the Cité de l'Architecture & du Patrimoine in December 20181. The 15th session of the biennial competition is outstanding for both the significance of the birthday and for its youthful visionary sharpness. Productive Cities in a second consecutive session is one of the timeliest themes for the evolution and transformation of our society

#### **VILLES ET ARCHITECTURES EN DÉBAT** (CHANGE AND CONTINUITY)

In a book to be published in March 20192, Chris Younes, Alain Maugard and Céline Bodart underline the importance of competition stratification, one theme leading to another in a chain reaction at the rhythm of the resulting projects; starting with the theme «Changing Lifestyles and Housing Architecture», which takes up where the last PAN<sup>3</sup> left off, and then the resulting projects; in the first session, sites were chosen with a certain degree of contextual abstraction and distance by the candidates.

Ideas from the first batch of winning projects, once selected and analysed, outlined a path for the themes that were to follow. These in turn developed further under the influence of subsequent projects. This dance has now been joined by the cities, the sites and local partners, all vital actors in the process. Undoubtedly, this productive cycle feeds the ecosystem Chris Younes mentions. «To participate in Europan is to become part of a «creative transcultural ecosystem».

#### **PRODUCTIVE CITIES 2: THE PRESENCE OF LIFE**

The 15th session, productive cities 2, is no exception and if diversity and spatial sharing of urban activities remains an issue, three other topics emerge now as pertinent: resources, mobility and social and spatial equity.

Like a virtuous trio in the «decontextualization of a set of relationships that permits their realization in other

Where the sites in the 14th session dealt with the legacy of 20th century urban planning / industrial zones, infrastructure, city entrances, urban divides / residential resilience / parking lots, «zones» in search of urban meaning, those in the 15th session confront the borders and edges, the in-between, areas often neglected where human and cultural resources merge with the landscape and environment. Merging to such an extent that they are sometimes invisible.

We could almost be discussing the landscape's «informal heritage», a portrait of cities and peripheries, countryside and changing nature for the better, unchartered, an extremely contemporary subject, a foundation for «tomorrow».

Participants in the 15th session are going to be nomads, explorers, internal migrants, self-imposed wanderers, hikers and perhaps makers!:

«The carefully studied edges form a new typography defined by their common border between earth and sky; as if all sensitivity can appear only in this single layer in a world where the environment and objects come into contact in an impressive tumult.»5

This comment by Michel Corajoud is not insignificant: questions of scale in the most recent sessions, issues of territory, landscape and nature, resilience of life brought to the Europan competition6 particularly by landscape architects contain an environmental dimension echoing many of today's expectations.

Very large sites have found their place in the competitions, and yet, sometimes, the smaller the scale the more the development is precise and leads to future accomplishments, as with E13 Saint-Brieuc / De la Terre à la Mer. Work carried out after the competition developed a sense of landscape as seen from the city and public space. Two downtown squares will soon be transformed along lines that are anything but functionalist.

Europan 15 is moving away from the concept of «production in the city close to home», re-situating the issue to better question urban ecosystems, whether metropolitan or territorial, dense or sparse.

The site visits are going to bathe us in Charente estuary's unique light, take us into Saint-Omer marshlands and upstream of Le Havre near the oil industry fumaroles. We'll be walking along the Haute Deûle canal, seeing the Garonne from Parc des Coteaux and walking down the narrow streets of the vernacular French Riviera. We'll be following the line of a motorway that ahs disappeared as well as another one not yet built and we'll be going under a soon-to-disappear motorway interchange where the tram stop «Free Thinking» is to be built.

In other words, the three topics, resources, mobility and equity, in relation with place and site, give rise to rich, varied and multifaceted developments. And since it's also the subject, there is a consideration of what already exists, the repairing or transforming to create a rich, productive city with prospects for a more sustainable social life, respectful of the environment, of diversity, its inhabitants and visitors, of universal as well as local resources is the opposite of the phenomenon of exclusion or separation between urban and periphery.

« e city is eating itself, it's no good» as Mark Brearley said about London.

#### A EUROPEAN CLASSIFICATION OF 47 SITES

As with every session, the nine French sites are grouped with other sites in Europe, europan's unique European system.

Of course, the European forum debates<sup>8</sup> makes it is easier to understand these groupings: site representatives discuss first the sites themselves during the workshops, then analyse the short-listed projects and then the selected projects. These exchanges are published in the European Results Catalogue.

Below, topics and classifying are proposed by the European Scientific Committee and follow each site's presentation.

#### I- IMPLANTING - PRODUCTIVE MILIEUS AND USES

The challenge for cities to be both productive and sustainable is to interlink resources, mobilities and conditions of fairness. There are two aspects to implanting new dynamics or reactivating resources such as urban farming and educational, research or creative forces: productive milieus and productive uses.

PRODUCTIVE MILIEUS: This is the level where a natural, cultural, social or economic environment is implanted or revitalised symbiotically, by contrast with the architecture of objects or the urbanism of technocracy. So what is needed is to activate human and nonhuman resources and an ecosystem of partners, while at the same time paying attention to integrative values between nature and culture. > Saint-Omer is in the dialogue with:

Barcelona (ES) - Helsingborg (SE) - Palma (ES) - Raufoss (NO) - Rotterdam Visserijplein (NL) - Tuusula (FI)

PRODUCTIVE USES: Uses can become productive if they go beyond their own functional limitations: productive uses work as a trigger that can initiate dynamics of change in a way that transforms the surrounding environment. They are a response to a situation in which an absence of dynamics has led to a powerful «use-ambition», the demand for a credible programme, a catalyst for change that fits smoothly into the existing context.

> Pays de Dreux is in the dialogue with : Innsbruck (AT) - Oliva (ES) - Rotterdam Groot IJsselmonde (NL) - Uddevalla (SE) - Visby (SE) - Wien (AT)

#### **II- CREATING PROXIMITIES**

This is about establishing proximities between living and working, stimulating productive relations both within residential areas and between residential areas and monofunctional production zones, introducing collective activities and work practices into residual spaces that add quality to housing conditions. Secondly, it is about rethinking the transition between high-speed metropolitan mobility and the low speed of neighbourhoods and urban centres. Proximities are made in the physical space of the city, but also at temporal and actors' scales, allowing new exchanges between urban actors and users.

INTERFACES AND SHORT CYCLES: The creation of interfaces contributes to the transformation of infrastructures of mobility, logistics, commerce or general services, by shortening production cycles. Such interfaces can also generate new kinds of relations between residential and farming activities, between housing and services, between spaces and communities. Interfaces generate a permanent dialogue between uses and users, between scales and functions, between identities and innovations. The interface is not a stable state, but a fluid space. It needs incremental and adaptive processes and open source projects, rejecting comprehensive and predefined master plans.

- > Auby
- > Floirac \_Bordeaux Métropole
- > Romainville are in the dialogue with:

Casar de Cáceres (ES) - Halmstad (SE) - Rotterdam Brainpark I (NL)- Selb (DE)

#### **III- CHANGING METABOLISM**

This is about working with the relations, processes, flows and multiple forces of the site in order to find a new balance between them. These sites are large in relation to their contexts, and contain a variety of agents (human and nonhuman) with long- and short-term cycles, and far-reaching ecological, economic and territorial implications.

FROM LINEAR TO CIRCULAR ECONOMY: Characterized by a "linear" economic approach, either monofunctional or with an obsolete economy, the site aspires to incorporate other resources and uses that create synergies and new potentials for interaction. These new elements will play an important role in the functioning of the whole as a circular economic system, because they will be able to catalyse flows and processes more integratively and efficiently.

- > Port-Jérôme-sur-Seine and
- > Rochefort Océan are in the dialogue with: Charleroi (BE) - Enköping (SE) - Graz (AT) - Karlovac (HR) - Laterza (IT) - Warszawa (PL)

MULTIPLYING AND CONNECTING AGENCIES The site must incorporate new agencies, new layers of functions that may lead to balanced growth. It is important to well define and connect the sites' future agencies (about air, water, soil, flood, programmes, activities and users). The final design will be something more than the sum or multiplication of circular urban economies.

- > Champigny-sur-Marne
- > Marseille\_La Cabucelle are in the dialogue with:

Borås (SE) - Guovdageaidnu (NO) - Nin (HR) -Rotterdam Vierhavensblok (NL) - Täby (SE) - Weiz (AT)

#### A EUROPE OF PROJECTS, POOLED EXPECTATIONS, **ISSUES AND ACTIONS**

It's important to recall the intuitive affinities put forward by Europan. By focusing on Europe, the cultural and sociological area with its similarities and differences, it's possible to come up with projects that are inventive, creative and hopefully innovative and that go beyond site and context issues. Once the sites have been classified, the projects themselves present surprises and unanticipated connections. This is the richness of an evolutionary methodology. By looking a little bit closer, site expectations can increase the content of each file.

This is the principal of a collaborative method that has become more and more common and is at the heart of the competition procedure and the association of various actors (jury / site representatives) and once again after the competition when work begins with the winning teams.

The theme «Productive Cities 2» is very ambitious: it requires finding positions and solutions that are not limited in scale but are nevertheless rooted in a spatial, architectural, designed reality. This can be theoretical and conceptual, while offering the possibility to act. Candidates have complete competition freedom and will find the space they need and expect.

«If you throw a rock in one place, ripples spread out far and wide. ey do not remain where the rock was thrown. e same goes for an architectural project. If the ripples reach distant shores, you have to go there to understand the results of my gesture. e idea of co-evolution assumes its full magnitude if one does not limit oneself to a small territory ... »

This is the europan distinctiveness, part of its «DNA». The manipulation of scale is essential to a working proiect.» 2

#### WELCOME TO THE 15TH SESSION OF EUROPAN! TO WORK!

- <sup>1</sup> 13.14.15 décembre 2018\_ www.europan30ans.org
- <sup>2</sup> Villes et architectures en débat, vision d'Europan, sous la direction de Chris Younès et Alain Maugard, Ed.Parenthèses, to be published in March 2019
- <sup>3</sup> Programme d'Architecture Nouvelle, PCA, 1972-1988
- <sup>4</sup>Gilles Deleuze et Félix Guattari, l'anti-Œdipe, 1972
- <sup>5</sup>Michel Corajoud, 1981, « le paysage c'est l'endroit où le ciel et la terre se touchent »
- <sup>6</sup>Cultivating the city/projet lauréat Amiens E<sub>14</sub>
- 7 Quoted by Djamel Klouche dans Architecture d'Aujourd'hui HS december 2018, « Concevoir des Villes Productives, les promesses d'Europan 14 ».
- <sup>8</sup> Forum intersessions 14&15, Brussels, November 2018

## **GENERAL INFORMATIONS**

#### **SITE REPRESENTATIVE:**

Agence d'Urbanisme et de Développement Pays de Saint-Omer Flandre Intérieure

#### **ACTOR(S) INVOLVED:**

Communauté d'agglomération du Pays de Saint-Omer, villes de Saint-Omer, Saint-Martin-lez-Tatinghem, Longuenesse, Arques et Salperwick

#### **TEAM REPRESENTATIVE:**

Architect, urbanist, landscape architect

#### **EXPECTED SKILLS WITH REGARDS TO THE SITE'S ISSUES AND CHARACTERISTICS:**

Given the problems that the site poses, the Municipality, its partners and Europan would like the teams to contain at least the following skills: architecture, urban design, landscape architecture, design. The teams can add other complementary skills depending on the problems that present themselves: e.g. hydrologist, programme developer, sociologist, urban project manager.

#### **COMMUNICATION:**

Communication after the competition, December 2019

#### **JURY - 1ST EVALUATION:**

With the participation of the site representatives.

#### **JURY - PRIZE SELECTION:**

Ranked selection: with winner (12.000€) / Runner-up (6.000€) / Special mention (no reward)

#### **POST-COMPETITION INTERMEDIATE PROCEDURE:**

Meeting with sites representatives and 3 selected teams, organized by Europan France in Paris / On-site meeting with sites representatives and 3 selected teams organized by cities and partners / Assistance and consultancy to the cities and partners, also their collaborators, for the implementations processes by Europan France

#### MISSION GIVEN TO THE SELECTED TEAM(S) FOR THE IMPLEMENTATION:

Following the competition, the Municipality and its partners intend to:

- Build housing on the Bloc de 10 site
- Produce a programmatic study for the cité du Verre glass centre
- Conduct urban studies

# FOREWORD BY THE PRESIDENT OF THE AUD (URBANISM AND DEVELOPMENT AGENCY)

The Communauté d'Agglomération du Pays de Saint-Omer (Saint-Omer Conurbation), an area with more than 100.000 inhabitants, is made up of a network of mid-sized towns and rural communes structured around an urban cluster of 5 communes encompassing almost 45,000 inhabitants. Its history and development have been closely linked with the presence of water, with its marais (marsh), which has gained international recognition, and with its productive activities, in particular glassmaking, brewing and agri-food activities, and its paper and cardboard industry.

By participating in the EUROPAN competition, the territory wishes to take the opportunity to outline a shared vision of the contemporary challenges of the productive city, as applied to its urban cluster, in harmony with its waterrelated identity. By tackling an archipelago of sites with big development potential within a single project, our town is contributing to the emergence of a shared vision of the future of productive milieux, in particular the future of productive water. The aspiration is to undertake a project that contributes to the well-being of local people and to social inclusion by overcoming administrative boundaries and the traditional segmentation between City and Country.

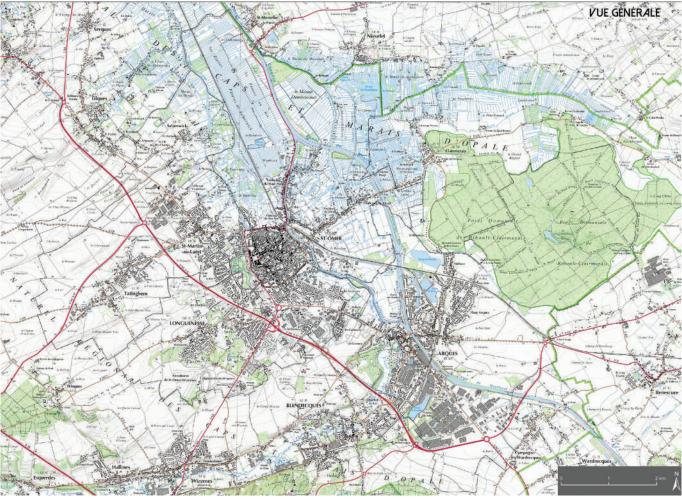
Reflecting this, the site proposed for the EUROPAN 15 session is the outcome of a collective approach that involves the Communauté d'Agglomération du Pays de Saint-Omer, the Agence d'Urbanisme et de Développement Pays de Saint-Omer Flandre Intérieure and the communes of Arques, Longuenesse, Saint-Martin-Lez-Tatinghem, Saint-Omer and Salperwick.

It is an area of innovation and creativity that will give the candidate teams in this new session and opportunity to express their talent in the construction of the contemporary productive city.

François DECOSTER, Mayor of Saint-Omer – President of the Communauté d'Agglomération du Pays de Saint-Omer - President of the Agence d'Urbanisme et de Développement Pays de Saint-Omer Flandre Intérieure.



e Marshland FR-SAINT\_OMER-C-AP10



Map IGN FR-SAINT\_OMER-C-M2

# RELATION TO THE THEME OF "THE PRODUCTIVE CITIES 2"

The Pays de Saint-Omer Flandre Intérieure occupies a privileged geographical position at the crossroads between the European Metropolitan Region of Lille, the cross-border coastline between the English Channel and the North Sea and the Brussels region. This advantageous positioning contributes to its economic, residential and touristic attractiveness. It also enables it to develop and implement an ambitious strategy of cross-border cooperation with its Flemish neighbours, particularly West Flanders, on the issues of employment, the economy, tourism, culture, sport, the environment and water.

Water is everywhere within the territory. It is one of the primary elements binding it together. Wetlands, quays, fountains, groundwater, Neuffossé Canal and the channelled River Aa, the Hem, shape a high quality and multiform landscape.

Historically, human settlements in the Saint-Omer region have always had a special and productive relationship with water.

The relationship is first of all agricultural: marshes are a foundational resource that remains important to the St Omer area today. The first inhabitants (5th and 8th centuries) found a rich source of fish here. In the 10th century, Saint-Bertin Abbey had the first canals dug, opening the way to cultivation, which was extended across the upper marsh in the second half of the 12th century, with the opening up of a new access to the sea. The current meshwork of market gardens in the marshlands has its origins in a process of reshaping that began at the end of the 18th century and ended in the second half of the 19th. Throughout its history, ambitious drainage projects have been been carried out on the marsh: canals or "wateringues", pumps operated by windmills and subsequently hydraulic pumps were used to regulate the level of water in the polders. The marsh was also used from the Middle Ages until the 19th century for fish farming and for the collection of peat to be burned for heating.

The relationship is also industrial: channelling work on the river Aa began around 800 at Arques. The first canal linking to Saint-Omer, the Haute Meldick canal, was dug around 1100. What might be called a hydraulic bypass around the city was then created, and the first link to the sea - "le Grand Large" - and a first port were built to develop commerce. As commerce grew, the opening of a new canal - "la Grande Rivière" - and a new port in 1165 made it possible to accommodate much larger vessels. With these developments, Saint-Omer became by 1300 one of the big cloth production centres of Flanders and one of the most populous cities after Paris. Devised by Vauban for military purposes, the navigable link between the Aa and the Lys (Saint-Omer-Aire via Arques) was only dug over the period 1753-1771. Its successive adaptations in the 19th and 20th centuries enabled several industries to settle and prosper in Arques: mills, brickworks and in particular glass production formed a solid industrial nucleus. Although the industry retains a strong presence, the end of the 20th century was nevertheless marked by the closure of many factories and the adaptation of the glass sector to the new global conditions. The presence of water also explains the historical presence of paper factories and breweries in the area.

And finally, there is also a fast-growing relationship with tourism: while the market gardening function continues, the landscape and flora and fauna of the region and the different forms of national and international recognition (Ramsar, UNESCO Biosphere Reserve, exceptional heritage site, City of Art and History...) make it a very popular tourist destination. Several hundreds of thousands of tourists visit the audomarois (Saint-Omer area) every year.

Drawing on this water-related identity, The Conurbation, the towns in the urban cluster and the Urbanism and Development Agency now wish to re-examine the notion of productive water in the heart of the town, in particular in its urban, social, landscape, economic and energy-related aspects.

#### A RENEWED PRODUCTIVE URBAN **FABRIC**

Pays de Saint-Omer Flandre Intérieure is an area with a population of around 270,000. It consists of mid-sized towns and rural communes and is structured around an agglomeration of 105,000 inhabitants and two communautés de communes (CC - associations of local authorities), CC du Pays de Lumbres (pop. 23,690) and CC de Flandre Intérieure (pop. 102,000).

The urban cluster encompasses 45,000 inhabitants across 5 communes. It has a direct interface with the audomarois marshes.







Aerial view - 2015 FR-SAINT\_OMER-C-AP9

Given the territorial organisation, the community project as defined identifies complementarity between the urban and the rural as a fundamental priority for the area. The urban cluster is home to several functions:

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."+03/%645)36\*#**5**) &\$ 0.1"/:3\$ (5000 employees) in the commune of Arques;

& 4 \* % &"/35&\* ".4" \* / - : - 0 \$ " 5 &/%5 ) & communes of Longuenesse, Saint-Martin-Lez-Tatinghem and Salperwick.

In order to tackle the gradual erosion of the urban cluster, particularly marked on the heritage site of Saint-Omer, the community is pursuing policies to revitalise the urban centres and reclaim the functions of urban centrality. It is a collaborative enterprise between the municipality and the Conurbation, with the following objectives:

At the scale of the urban cluster:

At the scale of the Heritage site:

03 & / 0 7 " 55 )&&# 6 \* - % \* 1 ( % % & 7 & wasteland, notably with the aim of building 1000 homes in the town centre through a variety of urban renewal operations;

0 & 7 \* 5 "5-)\* & \$ 0 / 0 . '\*6\$/ \$ 5 \* 00 / 4) & town centre. Particularly noteworthy are the socalled "La Station" project and support for retail activities.

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 (& /) " / \$5&) &2 6 " - \* (5 ':1 6 # - 4 \$ " \$5&0 support new mobility practices.

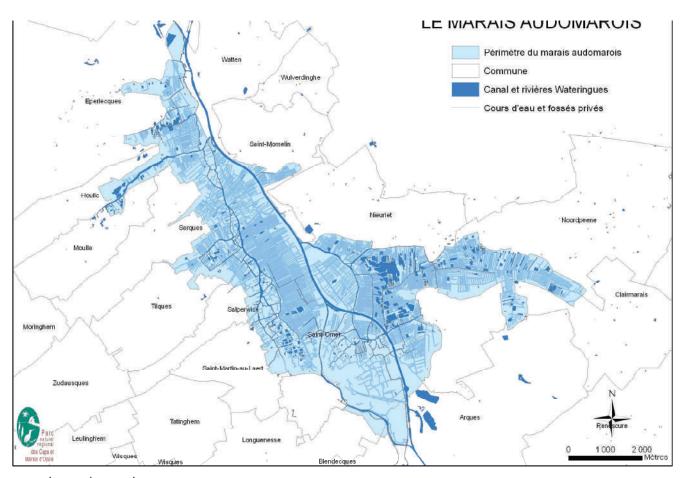
#### THE SPECIFIC REQUIREMENTS OF THE CONURBATION, THE TOWNS IN THE URBAN CLUSTER AND THE URBANISM AND DEVELOPMENT AGENCY

Participation in EUROPAN is an opportunity for the Conurbation and all the actors involved to:

- Construct a shared vision of the urban cluster that is consistent with the identity and history of the territory's relationship with water;
- Transcend and overcome intercommunal boundaries in order to create connections and relations between the project sites that reflect the contemporary practices of local people;
- Develop a project approach applicable across the whole urban cluster and establish dialogue and governance through a multisite project;
- Provide acceptance time for the emergence of projects by testing temporary uses;
- Establish a community culture in all the components of the town: heritage, culture, industry, homes, etc.

From an analysis of the economic, territorial and urban

- Establish a guide plan for the urban and landscape 0 4 6 1 1 0 3 5 \* / % 6 4 5 3 \* " - 3 & 7 \* spects. which includes projects that are already underway or under consideration, from a perspective of productive
  - water, and with a focus on public spaces;
    5 2. 6 3d#miffy types of mixity that can be developed at the urban and architectural scale;
  - Put forward innovative architectural proposals for integration and dialogue with water, the existing On atural landscape and the built fabric;
  - Make recommendations for the terms of engagement in urban projects, the methods of governance, the modes of cooperation between actors and inhabitants (new ways of doing projects, the issue of project governance across 5 communes);
  - Propose immediate foreshadowing solutions on the project sites in order to occupy the spaces and foster their adoption by users.



e audomarois marsh FR-SAINT\_OMER-SS-M2

# WATER AT THE HEART OF THE GEOGRAPHY AND HISTORY OF THE AUDOMAROIS AREA

Historically, the town of Saint-Omer settled on the southern edge of an immense floodplain that extends as far as the town of Gravelines. Water flow on this plain, situated at the same level as the North Sea, is difficult. Extensive efforts to regulate the water level have been going on since the first human occupation. The inhabitants therefore have a twofold relationship with water: water is both a source of riches (agriculture, transport, industry and now tourism), but also remains a source of flood risk.

The relations between the so-called upper town and the so-called lower town, near the water, have evolved over time. In the middle and late mediaeval period, there were numerous links between marketplaces and the port and docks. Fortifications with a surrounding moat marked the boundary between the town and the faubourgs. From the 18th to the 20th centuries, the digging of the Neuffossé canal, the arrival of industries and then the creation of the wide-gauge canal put an end to the exchanges between the upper town (market) and the lower town (docks). The digging of the canals and the advent of the railway reinforced the physical separation between the town and the suburbs and marsh. In the 20th century, the end of the traditional wetland activities (fish farming, peat, boat travel) and the development of market garden exports by train and then by road, further diminished the links between town and marsh.

Today, the objective of the "Maison du Marais" (marshland centre) and the "La Station" project is to re-establish the lost links between town and marsh. The EUROPAN project is therefore part of this dynamic to develop new links between town and water.

#### WATER IN THE TERRITORY

# LE MARAIS AUDOMAROIS (THE AUDOMAROIS MARSH)

The marais audomarois is a territory that has been entirely shaped by human beings over 13 centuries of history. It represents an exceptional cultural and natural legacy.

Covering almost 3730 ha and 14 communes, it consists of more than 13,000 land and water plots interwoven with 700 km of waterways that belong to more than 5000 people. It is the biggest wetland zone in the former Nord-Pas de Calais region. The aquatic flora of the marais audomarois represent one third of France's total aquatic flora

There are 56,000 people living in the communes that make up the marais, including some one hundred families that live on islands. These inhabitants, though they own vehicles, may have to use boats to return to terra firma and get to their place of work. In France, this is a unique example of marshlands that have been cultivated and inhabited for several centuries.

Apart from its obvious function as a reservoir of biodiversity, the marais audomarois is a wetland like no other, with a rich historical heritage and recognition as a "Land of Art and History". In Saint-Omer, where it occupies 88% of the territory's surface area, the marsh has always been closely linked to the town since its foundation, providing it with its riches and defending it on three sides.

The marais audomarois is France's last market garden marshland. With its system of "Wateringues" – hydraulic polders – and draining structures, variations in water level in the marsh can be relatively well-controlled. At high water periods, the marsh plays an essential role in controlling the risks of flooding into the delta. However, this is not always enough to prevent flooding in the event of very high waters.

The large numbers of boats using the channels causes erosion of the banks, which therefore need maintaining in many places.

The current presence of water in the marsh above all reflects the legacy of work done by human beings centuries ago. Today, however, the water is experienced as much as a problem in flood times, as a blessing in dry periods. It is necessary to market gardening, to breeding, to fishing and hunting, but also for leisure activities and tourism. In parallel, it is a burden in winter, when either early or late floods can cause damage to crops.

The drinking water supply comes from catchments located on an axis running from Tilques to Houlle and Moulle west of the marsh.



La maison du marais FR-SAINT\_OMER-SS-P3



Canal of Neu ossé FR-SAINT\_OMER-SS-P17

The marais audomarois is recognised as an area of international interest under the RAMSAR Convention on Wetlands and UNESCO's Man and Biosphere Programme. These labels, together with the fact that a large part of the territory is registered as a "Parc Naturel Régional des Caps et Marais d'Opale" (regional natural park) reflect the very great value of the local ecological and landscape heritage. (The Convention on Wetlands, called the Ramsar Convention, is an intergovernmental treaty that acts as a framework for national action and international cooperation on the protection and rational use of wetlands and their resources).

#### THE RIVER AA

This is a small coastal river approximately 89 km long. The Aa rises in the hills of the Artois at Bourthes and flows into the North Sea at Gravelines after passing across and draining the marais audomarois. The river rises at an altitude of 122 m and ends at 11 m at the entry to Arques. This part, called the upper and middle Aa Valley covers some 66,500 hectares. Then, the Aa is channelled and crosses the marais audomarois for a distance of a little over 10 km. Finally, having passed the bottleneck at Watten, it flows into the sea 25 km further on through the 120,000 ha of the delta.

The Aa and the marsh are inseparable. The river irrigates the market garden plots which extend over the hectares worked by the family farms.

Saint-Omer, city of water, formerly exploited the canals to trade with Northern Europe via the Grande Rivière, i.e. the channelled part of the River Aa flowing as far as Gravelines. Today, these canals are among the tourist attractions of Saint-Omer, the main town in the conurbation.

#### **CANAL DE NEUFFOSSÉ**

From 1165, a first canal crossing the marsh and the coastal plain linked Saint-Omer to the North Sea via Gravelines. For strategic reasons, an extension to this canal up to Arques was built between 1753 and 1758 in order to protect Saint-Omer's north-east flank. Then, between 1758 and 1771, the canal was extended as far as Aire-sur-la-Lys. This junction between the Aa and the Lys is called Canal de Neuffossé (because it replaced the "vieux fossé" [old moat] dug in the mid-11th century by the counts of Flanders to defend their territory).

In particular, it facilitated the development of exchanges and industry in Arques, in its environments and, to a lesser degree, in Saint-Omer. The canal links Aire/Lys to Saint-Omer over a distance of 18 km.

The Canal and glassmaking are also closely linked. Even today, it is used to transport the raw materials needed for glassmaking at the company Arc France, which employs around 5400 people.

#### THE WATER TODAY

Today, the history of water in the territory is no longer solely limited to "agricultural water", to the "touristic water" of the marsh, to the "industrial water" of the canal or to the "natural water" of the Aa.

Indeed, Pays de Saint-Omer currently faces a major challenge in maintaining and improving the quality of its surface water. To do this, the conurbation is trying to limit the discharge of rainwater onto the networks by facilitating infiltration, recovery or reuse. Improving the quality of catchment water also entails protecting and developing landscape spaces (woods, fields, meadows, etc.) and farming practices that are land-friendly.

The use of water as an energy source is also a potential application. In future, the geothermal use of underground water, alongside solar power, wind power or waste heat from industry, could be a source of heat.

Finally, every year, between 40 and 175 million m³ of fresh water from rain and rivers is discharged into the sea by pumping, to prevent flooding, despite the fact that West Flanders in Belgium experiences fresh water shortages in summertime. A so-called "eau robuste" (robust water) project for the redistribution of water across the two regions is currently being explored. The impact of this project on the territory is potentially significant (biodiversity, landscape, usage, public space, etc.).



Arques area FR-SAINT\_OMER-PS-AP13



Arques site FR-SAINT\_OMER-PS-P<sub>34</sub>

# **URBAN CONTEXT** AT CONURBATION SCALE

### **HIGHLY CONTRASTED DEMOGRAPHIC CONDITIONS**

In recent decades, the urban cluster has undergone a "peripherisation" of economic activities, services and housing production. These trends are exacerbated for the historical centre, which has lost population. At the same time, the population of the conurbation has grown by 4400. These mechanisms generate major social and territorial disparities, gradually leading to a concentration of the poorest households in the urban centre.

#### Demographic trends

CAPSO is structured around its urban cluster, which consists of 5 communes: Saint-Omer (pop. 14,443), Longuenesse (pop. 11,029), Arques (pop. 9852), Saint-Martin-lez-Tatinghem (pop. 5897) and Blendecques (pop. 5022). There are three other communes with over 2000 inhabitants: Éperlecques (3582), Wizernes (3317) and Racquinghem (2296). The north-western part of the territory is made up of smaller communes.

Like many areas, the Audomarois is experiencing a gradual erosion of its urban centre and to a greater degree of Saint-Omer town centre, whereas the more rural communes located on the western edge of Pays de Saint-Omer have experienced significant population growth.

Since 1999, the rural communes have seen their populations grow faster than the rest of the territory. A typological analysis reveals a fairly clear correlation between community size and rate of demographic growth. Globally, the more populous a commune is, the slower its rate of population growth. By way of comparison, between 1999 and 2014, the rural and suburban communes saw their populations grow by more than 17.2%, whereas the communes in the urban cluster lost 2166 inhabitants, representing a fall of 4.5% between 1999 and 2014.

Within the SCoT (urban masterplan), the proportion of single households remains relatively low compared with the situation observed in the Lille metropolitan region, the coastal conurbations or the Belgian territories. It is similar to that of the peripheral areas of big urban centres.

However, this observation masks significant disparities within Pays de Saint-Omer. In fact, the communes in the urban cluster and the village centres present a proportion of single households a clear 30% higher than that observed in rural communes.

They also show a small proportion of couples with

The significant proportion of the 15-29 age group within the urban cluster seems to demonstrate the attractiveness of main towns for young working people.

Similarly, the proportion of people over the age of 60, and particularly aged 75 or above in the main towns and the communes of the urban cluster shows that population ageing is more pronounced in the larger towns in Pays de Saint-Omer.

On the other hand, the significant proportion of under 14s and people aged 30-44 within rural and periurban communes illustrates the persistent attraction of villages for families with children.

Social and societal trends in the territory

The analyses conducted in particular for the revision of the Schéma de Cohérence Territoriale (territorial masterplan) and the Plan Local d'Urbanisme Intercommunal (intermunicipal local urban plan) revealed an underlying peripherisation of economic activities, services, retail facilities and housing production. In other words, the development trajectory of the centre has been the opposite of that of the periurban and rural communes, which have recorded sustained demographic growth and significant urban expansion.

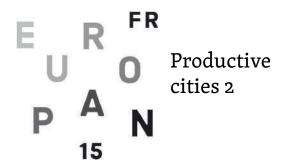
These mechanisms alter territorial conditions. First, the growing disconnection between the home and the workplace leads to increased travel practices, which necessitates an in-depth review of mobility policies in a territory where the public transport network is recent and the private car still the dominant mode of transport. Second, they drive a certain "social specialisation" marked by a strong concentration of the poorest households in the town centre.

These dynamics influence changes in the built fabric. The gradual abandonment of the old housing stock in favour of new dwellings on the outskirts is accelerating its deterioration and the resurgence of squalid living conditions.



Overhead view ofthe Maison du Marais site

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# **SAINT-OMER**

# **MAKING WATER PRODUCTIVE**

Site brief