

March 5 & 6, 2015



Energy efficiency policies

French Embassy
Washington

 Ville de
SAUMUR



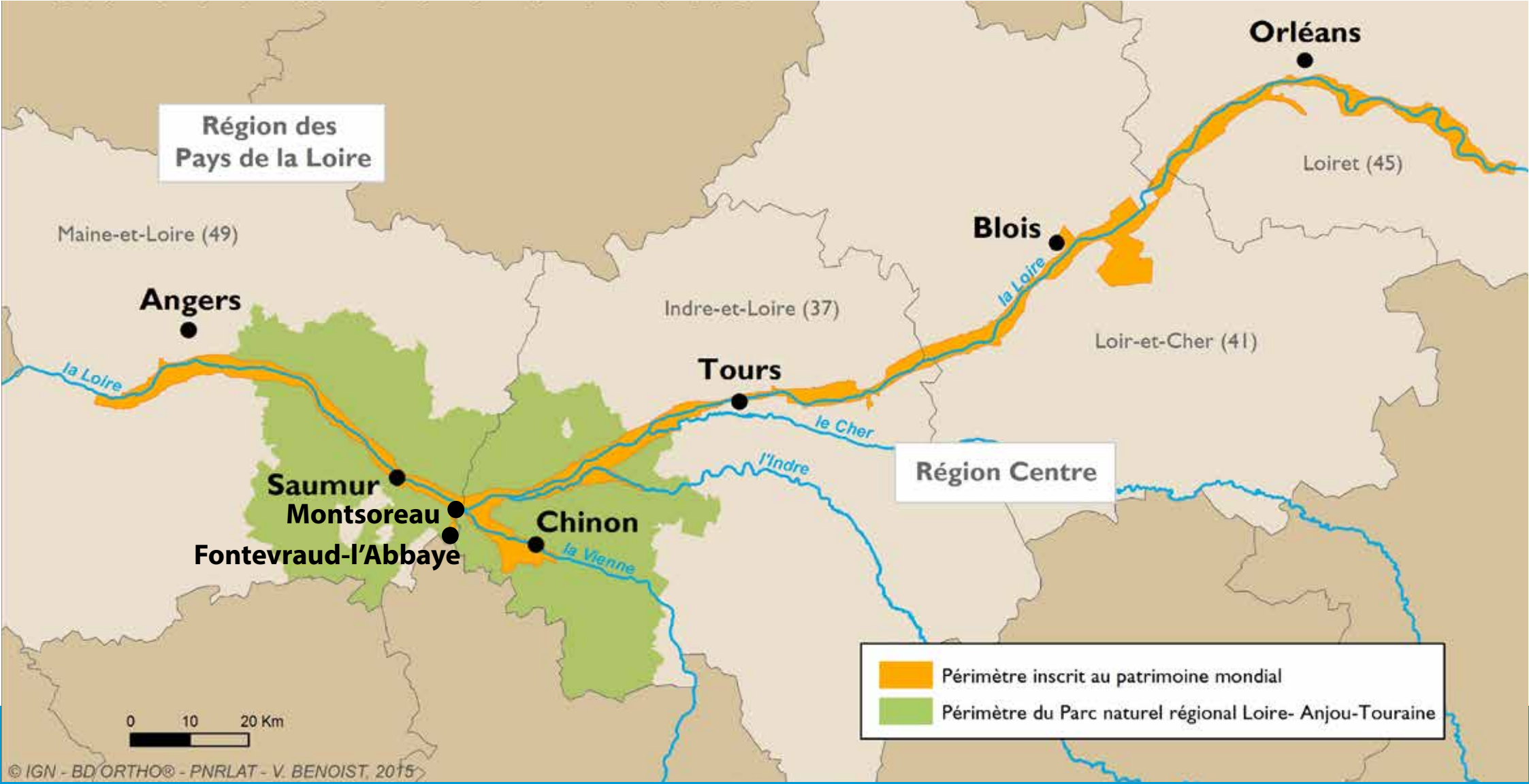
☎ Ville de
SAUMUR

**Land of Wine
and Equitation Capital City**

Population : 27093 inhabitants

Total surface of the district :
66 km², among them 150 ha hectare are
classified as protected area

52 monuments are classified as Historic Monument



S Ville de **SAUMUR**

In the heart of the “Parc Naturel Régional Loire-Anjou-Touraine”
and UNESCO Territory



VAL DE LOIRE
PATRIMOINE MONDIAL



Energy Transition

1st actions :

Buying of 14 electric cars

Year : 2003

Financing : 79118 €

(Town and support from the ADEME - Agency for Environment and Energy Control)

Using of rainwater to supply the toilets
of a municipal room

Year : 2006





2nd actions :

Renewal of the streets lighting :

Year 2007

80% of the lampposts

street lights are replaced by sodium-vapour lamps for a gain of 27% of the contract power (target reached in 2009)

The number of electric cabinets was reduced from 300 to 150

Financing : partnership public/ private
14,5M € spread over 15 years



Lights switched off for the night (from 1 am to 6 am)

Since April 2012, the 2nd

Estimated financial gain : 80 000€

Disadvantages :

Evening activities

Monuments lighting (castle)

Insecure feeling



Maison de l'enfance

Clos des Amandiers



Urban renewal program :

Infrastructure rehabilitation :

1216 houses from 2006 to 2013

Cost : 24,5M€

Financing : National Agency for Urban Renewal (ANRU), Saumur Habitat (Office for social housing in Saumur), Region Pays de la Loire, Town of Saumur

Deconstruction / Rebuilding :

404 apartments/houses

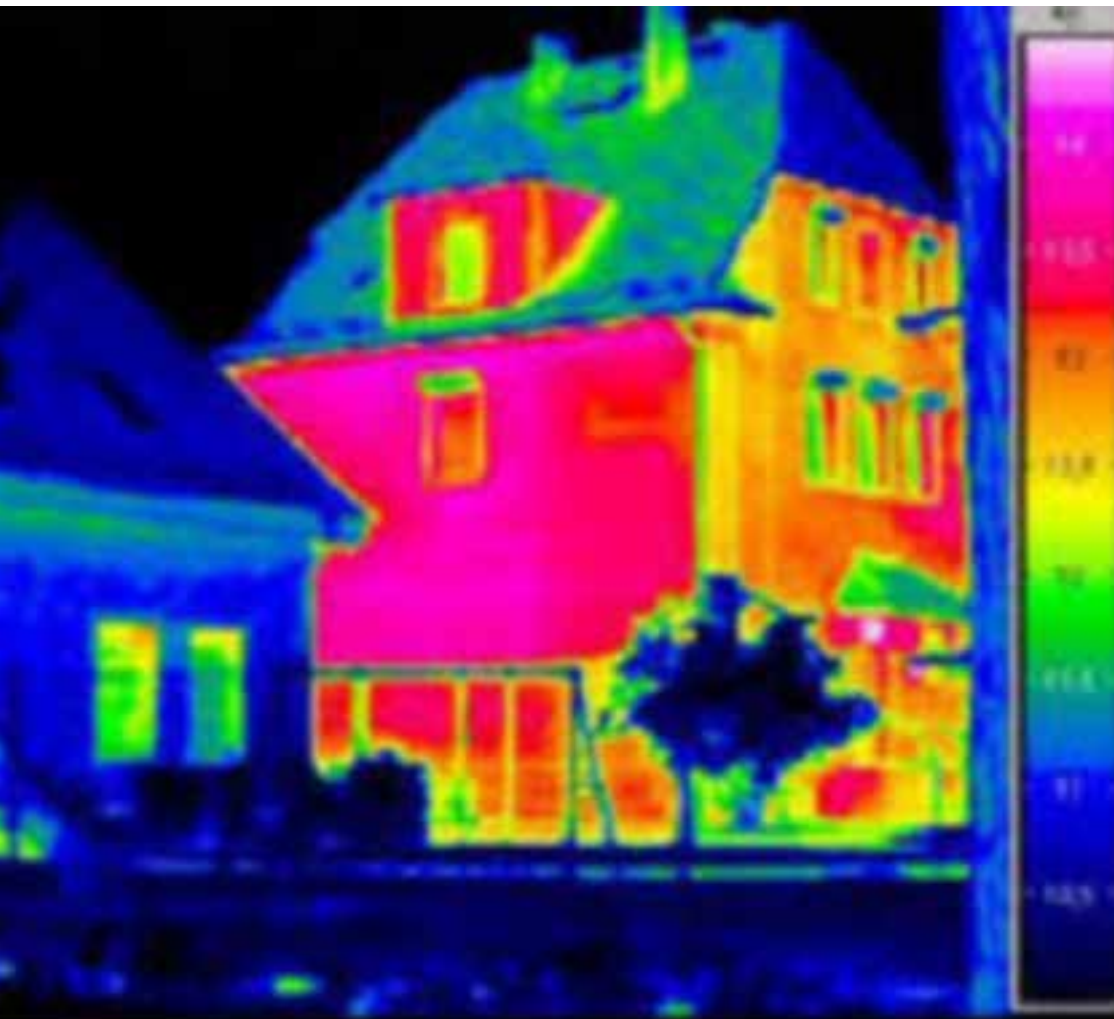
Energy performance 48 kW/m²

Cost : 54,8 M€ (≈ 135 570 €/apartment or house)

Collective district heating :

Energy change (Wood-burning boiler instead of oil)

Thermography



Fuel poverty

Financial support of the precarious families, throughout the Communal Center for Social Action (CCAS)

Amount of the financial allocation : 60000€/ year

Number of families supported : 120

Energy Optimization :

Better insulation of the buildings :

- Thermography of the City (pedagogical tool with the Young Economic Chamber)
- Thermal balance of the buildings (commitment of the City)
- Insulation work supported by the City

Methods :

- Craftspeople who guarantee respect of environment
- Recommended materials : natural, marketed in a short cycle

Financing:

State, Region Pays de la Loire, Town of Saumur,
Sustainable development tax credit



Espace Jean Rostand

Les Aubrières



Save energy : Family challenge for positive energy

The Town departments commit themselves to save energy

Aim : sobriety thanks to eco-gesture

Estimated saving : 8%

Role of the ADEME (initiator) and of the PNR (animator)

To produce renewable energies

Photovoltaics panels

Solar water heaters

Methanization from plant wastes (project to heat the greenhouses)



3 exemples UNESCO :

Ville de
SAUMUR

House of the PNR Loire Anjou Touraine Construction 2006 - 2008

Ambition :

To bring together the innovative technologies that can be used in an individual house (photovoltaic panel, insulation, hemp, wood-pellets boiler, materials without volatil organic compounds, vegetated roof, natural linoleum floor, low temperature floor heating network, dual-flow ventilation)

Energy performance 45 kW/m²

Its « Tuffeau » (local stone) facade allows its integration to a specific environment (the Landscape of the Loire)

Cost : 2 M€ (Region 60%, State 20%, Europe 20%)



VAL DE LOIRE
PATRIMOINE MONDIAL



Head office of Saumur Habitat (social housing)

Construction 2013-2014 : a 2500 square meters large building that receives 6000 to 8000 users / year

Technical features: enhanced insulation, bioclimatic architecture, vegetal roof terrace, natural light..it is the first low-energy building in Saumur

Cost : 5 M€ (Loan and own funding)

With its innovative architecture, it has won a prize to the regional and national urbanism Competition



The energy pole of the “Abbaye Royale de Fontevraud”

Construction 2012-2013 : after 3 years of study, it is the first historical monument in France to benefit from such an equipment

Aims achieved : To cut by half the consumption and by 10 the greenhouse gas emissions with two wood-burning boilers (500kw), 92 photovoltaic panels for heating and hot water

Costs : 6,5M€ financed by the Region and by the support of the ADEME





Energy is added to the program

A hundred children took part to the 3rd edition of the Citizens Day. This year, a new step has been added to the program : the visit of a low-energy house