

*In energy planning, knowing the energy consumption of a territory (community, municipality, regional or national natural park, department, region) is usually the first step to consider. A territorial energy audit provides, possibly during several years, a clear picture of the energy consumption, by sector (buildings, transport activity for people and goods, private and public services, industry, agriculture, fishing) and by energy source (petroleum products, electricity by sources, renewable energies sources).*

*This audit can be completed through a territorial energy planning, which offers a territorial energy prospective with different scenarios. They compare the impact of a business-as-usual scenario with those of an energy management policy that limits consumptions and promotes local resources. Energy consumptions can then be translated into greenhouse gas emissions, household expenditures, investments, etc.*

*Our clients' demands are not just studies about consumption and energy production of a territory, but ultimately they are linked to the issues of climate change that more often ask to define practical means to achieve a Factor 4 scenario (reducing energy consumption by 4): actions, training, financing. This is frequently done through a Climate & Energy Territorial Plan (PCET) including an assessment of greenhouse gas emissions.*

*A presentation of our tools is available in the corresponding document.*

## AN OVERVIEW OF OUR REFERENCES



### **Regional Natural Park of Grandes Causses, of Oise-Pays de France, Pays des 7 rivières, Pays Sud Bourgogne - 2010-2013 (ongoing)** **Climate & Energy Territorial Plan (PCET)**

Under a voluntary approach or for the implementation of the Grenelle Environmental Law, AERE has realized several Energy Territorial Climate Plans, including an energy audit phase, strategic orientations with energy scenarios and the implementation of an action plan. All these studies demand several rounds of workshops and consultation with stakeholders, councilors and the general public. We also provide a diagnosis of economic and climate change vulnerability of these territories and orientations to implement adaptation measures.



### **Provence-Alpes-Côte d'Azur Region (PACA) - 2011-2012** **Towards a 100% renewable energy system**

Regional scenario and action proposals for a successful energy transition in the Provence-Alpes-Côte d'Azur, subcontracting for the négaWatt Institute. AERE was responsible for transport activities and renewable energies (without biomass).



### **Alsace Region - 2011-2012**

#### **Updating energy scenarios and evaluation of the regional climate, air quality and energy Plan (SRCAE)**

Data analysis of the regional environmental assessment (realized by Atmo-Alsace), synthesis of the assessment and simulation of new energy scenarios based on new actions implemented since previous scenarios and regional goals of the SRCAE. Realization of several scenarios, with varying levels of action, as a decision-making tool for the SRCAE development.



### **Haut-Languedoc Regional Natural Park (PNR) - 2012**

#### **Support for the Climate & Energy Territorial Plan (PCET) assessment**

In 2009, AERE realized the PCET of Haut-Languedoc PNR. In 2012, AERE has been commissioned to guide an assessment carried out internally by the Park, of actions implemented under the PCET. We have assisted the Park in updating data from the diagnostic tool and results analysis.



### **Alsace Region - 2008-2010**

#### **Support for the "Energivie" program**

Analysis of current actions, updating of the action program, proposal for a charter of stakeholder engagement.

The Alsace Region is implementing the "Energivie" program in order to limit its greenhouse gas emissions. The project has analyzed the impact of activities and suggested corrective actions. A charter of commitment, for the program and for actions reducing energy consumption by 4 (Facteur 4), is under negotiation with regional stakeholders, both public and private.



### **Regional Natural Parks (PNR) of Languedoc-Roussillon Region - 2008-2009**

#### **Energy territorial planning**

Study for energy planning in the PNR of Pyrénées Catalanes, Narbonnaise en Méditerranée and Haut-Languedoc. On this occasion, AERE performed, with its own funds, a detailed analysis of impacts due to climate changes in different French regions. The aim was to provide a baseline scenario for France in 2050.



### **City of Embrun, city of Beausset, Provence-Alpes Côte d'Azur Region - 2008-2009**

#### **Energy planning**

Energy planning for these two municipalities, with an "on-the-ground" approach (realization of an energy cadastral plan, action proposals able to be applied by energy managers, study of electricity generation on water supply).

### **City of Tignes - 2008**

#### **Support for the city planning and sustainable development project (PADD), renewable energy component**

This study includes optimization of transport activities, the potential assessment of renewable energy sources and proposal of a specification for environmental quality of buildings. Concerning the transport sector, a best case study on ski resorts was done, proposals of improvement in transport activities were studied with service to the city of Bourg-St-Maurice. A comparison was done between transport systems by bus rapid transit, tramway or train. AERE coordinated the project.



### **Grand Besançon community - 2006-2007 & city of Grenoble - 2006-2007**

#### **Energy planning**

Assessment of energy consumption, forecasting, renewable energy and control of electricity demand. Realization of scenarios to achieve an energy reduction by 4 (Facteur 4). In both municipalities, studies have led to votes in deliberative assembly: for Grand-Besançon to apply the "Facteur 4" scenario in all sectors and for Grenoble to decide a "Facteur 4" renovation in buildings.



### **5 Regional Natural Parks: PNR du Livradois-Forez - 2005-2006, PNR du Loire-Anjou-Touraine - 2006-2007, PNR de la Chartreuse - 2004, PNR du Vercors - 2002-2003, PNR du Pilat - 2001-2002**

#### **Energy planning**

Balance of energy consumption, of local renewable production, estimation of RES (renewable energy sources) and energy savings potential. Proposal of three scenarios and one action plan to increase local energy production and reduce fossil fuels consumption. Conducting workshops. For Vercors Natural Park the study aimed a 100% RES production and consumption.