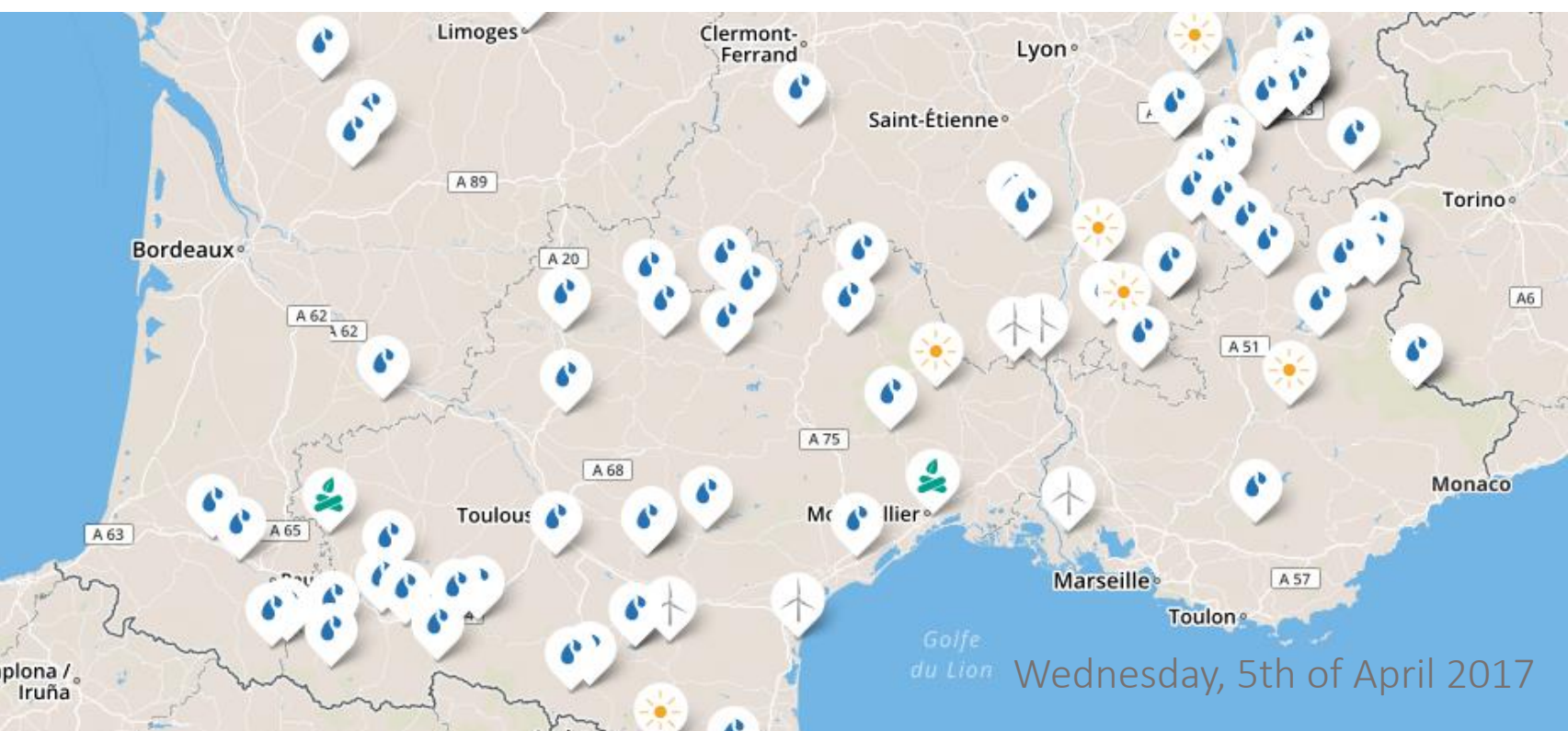


ENERGY & OCCITANIE

We met them for you...



Wednesday, 5th of April 2017

WHOM DID WE MEET ?



Raphaëlle VIENOT

P.4

Head of Energy Transition and Circular Economy for Occitanie Region



Clarrisse DULAC

P.6

Junior Manager at Enercoop Languedoc-Roussillon



Thomas MARTY & Christian MERCIER

P.8

Economist in Civic Service & Les Survoltés d'Aubais Project Manager



Stéphane BOZZARELLI

P.10

Head of the Southern Agency at Quadran Energies Libres



Hubert PSCHERER P.11

Communication Manager



ENERFIP

P.13

French Crowdfunding company



Michael GERBER P.12

Community officer



Raphaëlle Lamoureux P.14

Head of the territorial animation division



WHY DID WE MEET THEM ?

EPF Montpellier Energy Forum, April 5th, is going to present various subjects about the future of energy. Our beloved region, Occitanie, located in the south of France between the Mediterranean sea and the French Pyrenees, has ambitious goals for 2050.

Our group wants to show how different actors of the Occitanie region are contributing to those objectives, lending their own energy and innovative spirit to this ambitious project :

How is Occitanie becoming the leading positive energy region by 2050 !

Therefore we met the main actors of the Occitanie region, to understand their solutions, their perspectives, their strategies and their ideas to overcome the huge gap between today and tomorrow.

It is important and exciting to understand that everybody has a role to play in this project, even YOU, reading these lines....



How does the **REGION OCCITANIE** contribute to Occitanie becoming the leading positive energy region ?



Raphaëlle VIENOT answered our questions ...

I'm the Head of Energy Transition and Circular Economy for Occitanie. My team is composed of many engineers who are developing our path towards becoming France's leading positive-energy region. Since 2005, we have been turning today's ideals into 2050's reality.

THE GOAL : TO RELY ENTIRELY ON LOCAL RENEWABLE ENERGIES BY 2050!

What are the main objectives ?

My team of 9 engineers in Montpellier and Toulouse are currently developing the region's strategy, the way we will achieve our goal by 2050.

Two significant variables must be focused on :

- Reducing common energy **consumption** by **-50%**
- Increasing renewable energy **production** by **+250%**.



6 groups of experts (volunteers) are working on the strategy, sector by sector :



Buildings

Agriculture

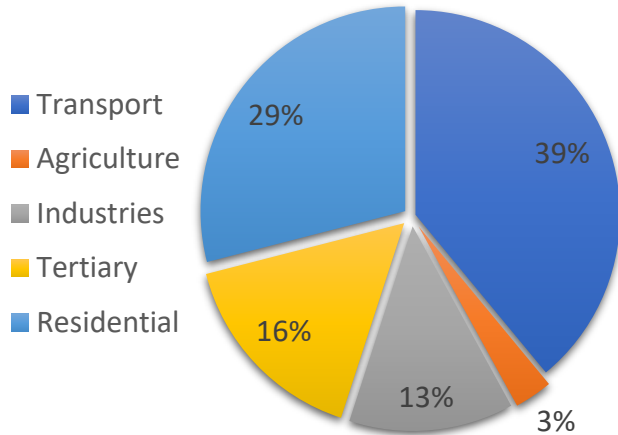
Industry

Territory

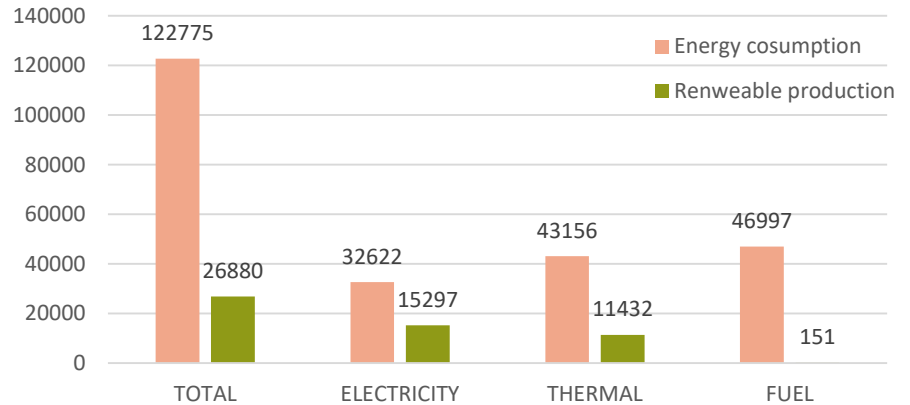
Transport

Socio-Economic Impact

How is it today ?



Energy consumption in OCCITANIE by sector (2014)



Coverage of consumption by renewable energy (2014)

Why is this region the best candidate to become a leader ?

Occitanie is a very particular region. We have a huge range of natural resources, including : Wind, Sun, Hydraulic, Biomass, Floating windfarms, ... and we're lucky to have a clement climate.

We also have a lot of innovative companies working with top-notch research labs, developing new technologies every day.

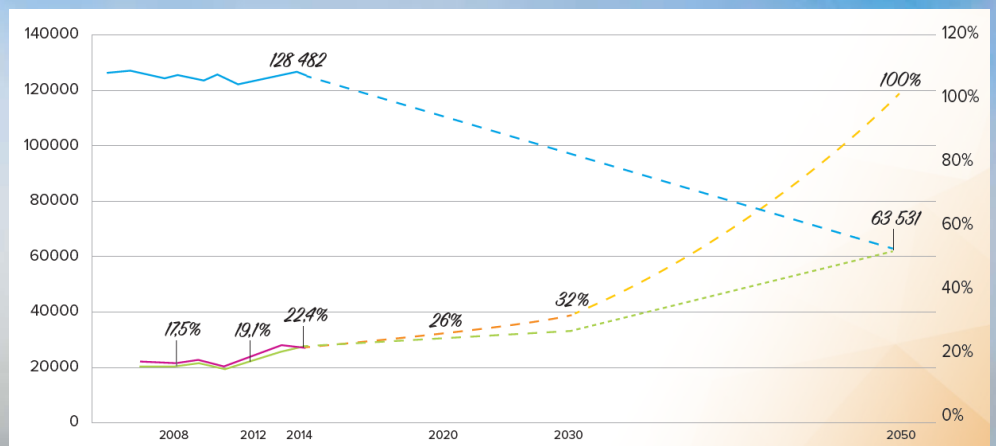
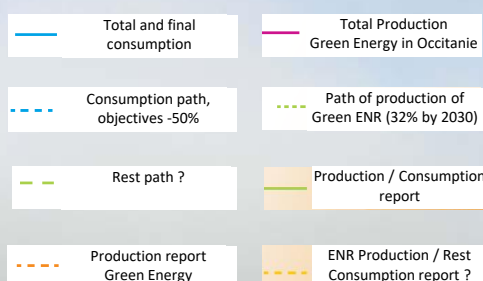
OBSTACLES

- Administration and procedures are complex and long, so that it is difficult for individual citizens to act by themselves, without consulting expensive expertise.
- 140 organizations of citizens are fighting together to interrupt the development of new windfarms in the south.

SOLUTIONS

To unite everyone behind this project, we must **communicate** clearly and get people **involved**. The key will be to provide **pedagogical resources at all levels** and an **easier access** to emergent projects to the public.

The main perspectives :



How does **ENERCOOP Languedoc-Roussillon** contribute to Occitanie becoming the leading positive energy region ?



Clarisse DULAC answered our questions ...

I am a graduate of EPF Montpellier Engineering School. Since I have always invested a lot in my projects, I wanted to give my work a meaningful goal. That's why I've dedicated myself to the development of renewable energy in my region. Today I celebrate my 1st year at Enercoop !

What is ENERCOOP ?

Enercoop is an activist co-operative, founded in 2005. Its objective is to supply 100% renewable electricity within a short circuit: as close as possible to the consumer.

Enercoop is a SCOP ("Société Coopérative d'Intérêt Collectif"), which means it doesn't aim for profits.

The company is split between different co-operatives, implanted in 10 French regions. Enercoop Languedoc-Roussillon was founded in 2012 and has 13 employees.



What ENERCOOP REPRESENTS :



Enercoop eases communication

Enercoop unblocks complicated situations

Enercoop helps consumer's decisions by providing knowledge

Enercoop is focused on knowledge transmission in a rising sector

If you have an ambitious idea : we can help make it reality !

What is Enercoop's contribution to the region ?

The key to the success of Enercoop lies in innovation: offering a full accompaniment to clients with an idea for producing renewable energy. This includes administrative operations and technical work, as well as legal and economic support.

Afterwards, we are the first to buy the newly-produced energy, and we resell it to local consumers.

What is Enercoop's solutions for the region ?

- Today, 94% of our renewable energy comes from hydraulic installations governed by local independent energy producers.
- We will involve citizens and local actors to create an energy short-circuit: citizen-producer=citizen-consumer.
- We will incite citizens or group of citizens to invest in photovoltaic panels and take full advantage of their energy production.
- Consume differently and consume less : to move from global-scale overconsumption of electricity to moderate production on a local scale, in order to combine energy consciousness and energy efficiency.
- Build a new governance system for energy supply : It should be transparent, democratic and open to everyone!



The energy sold comes from :



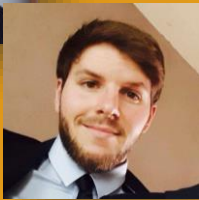
94 hydraulic power stations

14 wind power installations

2 biomass plants

21 photovoltaic installations

How does **Les Survoltés d'Aubais** contribute to Occitanie becoming the leading positive energy region ?



Christian MERCIER and Thomas MARTY answered our questions ...

Christian MERCIER is a retiree, he has been in charge of the project since 2011.

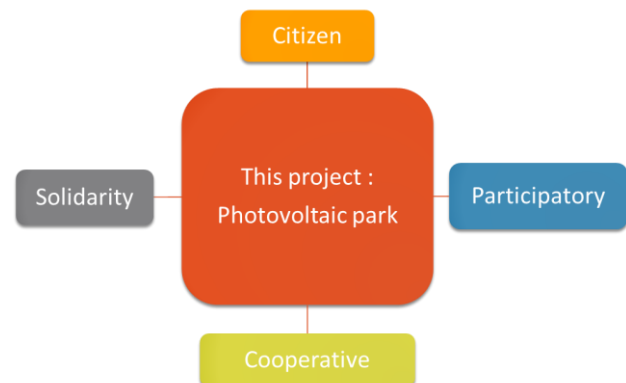
Thomas MARTY, master in economics, is doing a 7-month civic service at Les Survoltés d'Aubais. In the future, he would like to work in renewable energies, possibly at Enercoop.

What is Les Survoltés d'Aubais ?

Les Survoltés D'Aubais is a citizens' association that advocates the development of renewable energies on its territory. It was created in 2011 to combat shale gas, nuclear accidents, depletion of natural resources and global warming.

What is the project ?

The aim is to produce photovoltaic electricity on an old landfill. The project is carried out by citizens, local authorities or local actors.



Main characteristics of the project :



Technology : Fixed crystalline panels

Area : 4000 m²

Production : 360 000 kWh/year

Power consumption : 150 households

Date and place : End of 2017, Aubais

What do we mean by “participatory citizen project” ?

The initial investment is €330 000. €100 000 of that sum is regional aid : €1 from the region for every euro donated by citizens, with a limit of €500 per citizen. The objective is to privilege unitary investments of €500 maximum. Citizens commit themselves via SAS Voix des citoyens or Energie Partagée, or make donations.

OBSTACLES

- Acceptance of projects by the inhabitants.
- Very lengthy administrative procedures.
- Transforming citizens into stakeholders.
- France's energy production is very centralized.

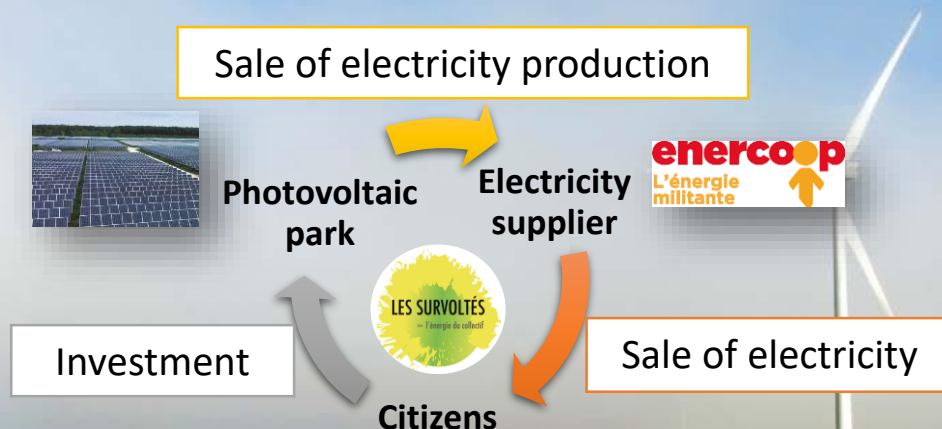
SOLUTIONS

- Call for projects by the Occitanie region: promoting the emergence of projects and providing financial assistance.
- Help from Enercoop to develop the project.
- Financial support from the ADEME for non-compulsory studies.
- Reflection on the environmental and landscape issues with Biotope.

Energy is a job-creating wealth.

It is important to reduce our consumption.

**Technological perfection is not necessary.
The time to act is now!**



How does **QUADRAN** contribute to Occitanie becoming the leading positive energy region ?

Quadran answered our questions....

Quadran is the new independent leader on the green energy production market. It was born on the 30th of June 2013 with the fusion of JMB Energy and Aerowatt. This new company is now within the 5 biggest independent national actors of renewable energy.

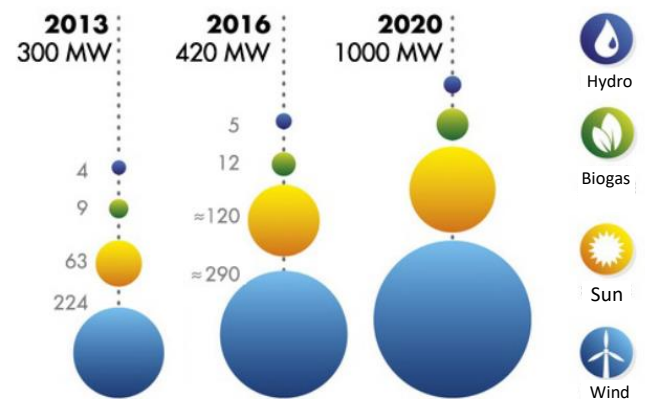
What is the speciality of Quadran ?

Quadran conducts innovative, but risky, renewable energy projects.

It works in collaboration with industrial partners, local authorities, design offices, universities and research organisms.

Quadran's fundamental principles :

- Complementary production : using the benefits of one renewable energy source to balance the deficits of another.
- Control over all the life stages of every electrical plant.
- A strong social presence in the region.



Quadran's renewable energy in a few numbers....



Total installed power: 431 MW

Energy production per year: 931 800 MWh

Annual consumption: 794 000 inhabitants (excluding heating)

What are Quadran's main objectives ?

Quadran wants to help France to reach the European energy objectives for 2020 : reduce greenhouse gas emissions by 20%, save 20% on the global energy consumption, and replace 20% of the energy production with renewable energy.

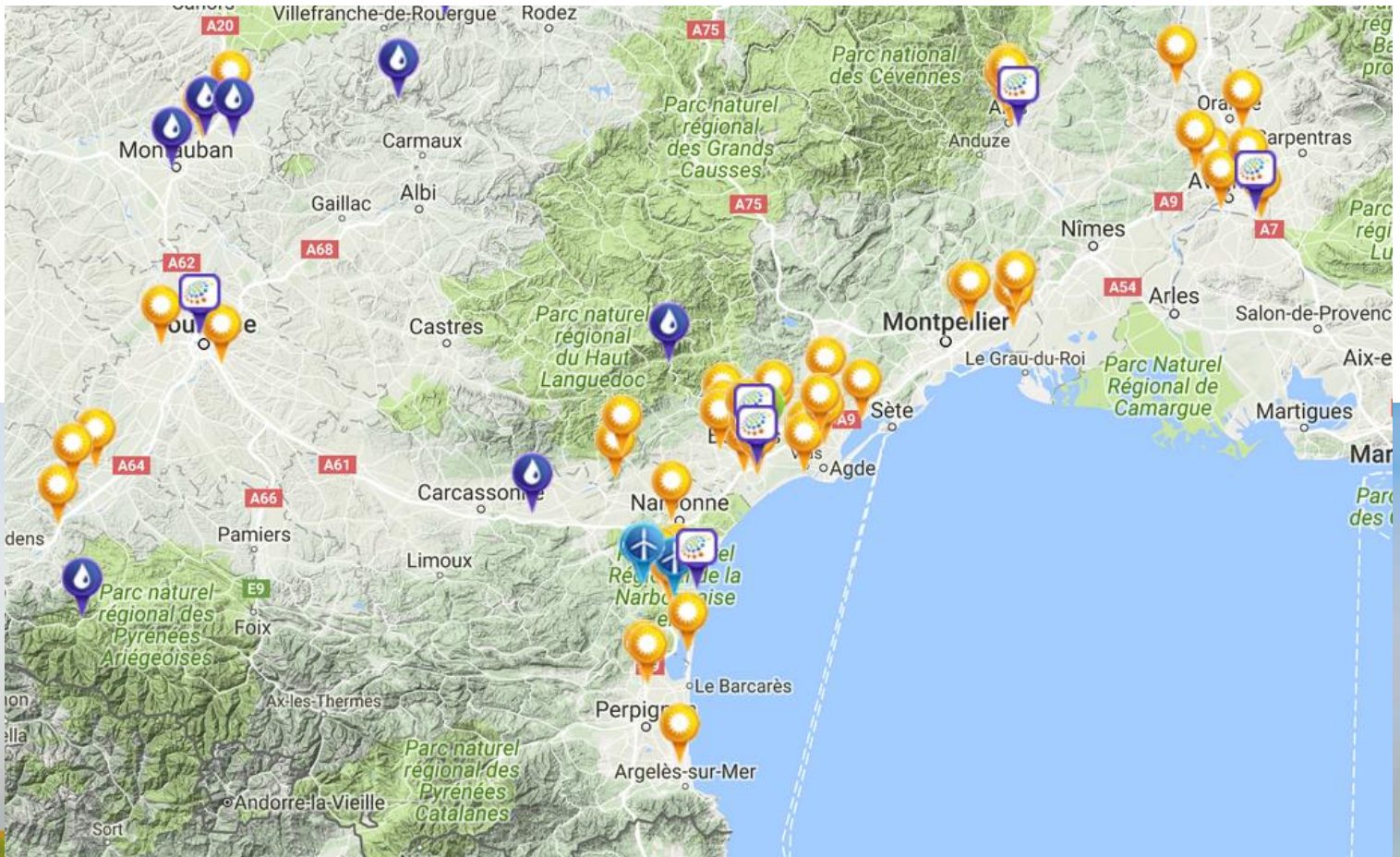
Quadran's strategy :

Quadran invests heavily into R&D, in order to be able to break into new markets and predict the evolution of the electrical grid. Its main markets are energy storage, production forecast, electric vehicles, smart grids, etc.

Quadran has nearly 15 locations distributed within the territory, which allow it to be closer to its production sites.

With its 2000MW of installed power, Quadran expects to see high growth within the next years and advance several of their objectives.

Quadran in the Occitanie region :





How does **ADEME** contribute to Occitanie becoming the leading positive energy region ?



ADEME answered our questions....

The ADEME is a public company under guardianship of the ministry in charge of the Environment, Energy and the Sea and the ministry of Education and Research.

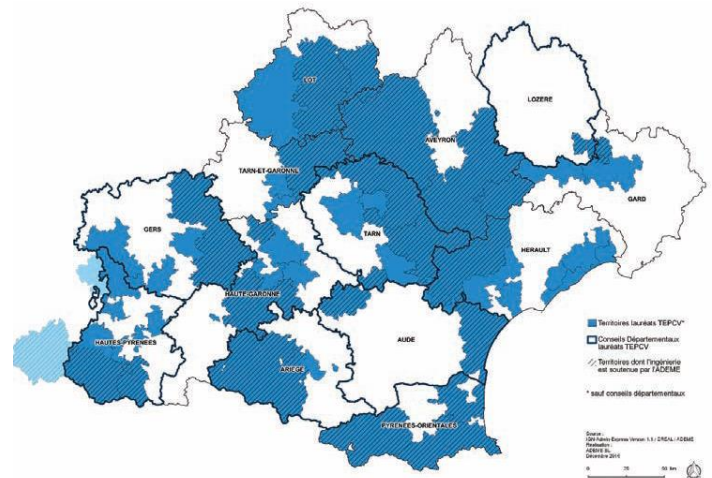
The ADEME participates to the implementation of public policies in the fields of environment, energy and sustainable development.

What is the ADEME Occitanie contribution to the region ?

To allow progress in today's environmental challenges, the agency provides its technical advices and counsels to companies, local authorities, public authorities and to the wide audience. ADEME help with the funding of projects, from research to implementation, in all of the following domains:
waste management, soil preservation, energy efficiency renewables, air quality and fight against noise pollution.

What are ADEME main objectives ?

The main objective of the RDI 2014-2020 strategy of the ADEME is to promote research that supports the energetic and ecologic transition and the fight against climate change in order to prepare and support operational actions of the ADEME.



ADEME Occitanie in a few numbers....



13.6 M € of financial support

Around 320 backed projects

Total regional investment: 55 M€

How does **ALE Montpellier** contribute to Occitanie becoming the leading positive energy region ?



ALE Montpellier answered our questions....

The Local Energy Agency of Montpellier is a law 1901 association cofounded in December 2007 by the city of Montpellier, the Montpellier metropolis and the Languedoc-Roussillon region, with the support of the ADEME and Europe.

What is the ALE Montpellier contribution to the region ?

In the framework of its energy and water information space, ALE proposes neutral, free and objective advices to the particular that wishes to engage an approach to controlling the energy and water consumption of their homes. In addition of the individual appointments and in order to connect with a larger public, the energy and water information space organize many events during the whole year.

What are ALE Montpellier main objectives ?

The ALE is working to change the habits and mentalities regarding housing, transport, way of life and consumption. This agency is a proximity tool, of help with the decision. It's a place of exchange and counsel in the matter of energy and water.



ALE Montpellier in a few numbers....



24 districts and 141 contacts

47 share houses

925 information requests

5 "Climate Coffee" and 10 buildings analysis.

How does **ENERFIP** contribute to Occitanie becoming the leading positive energy region ?



ENERFIP answered our questions....

Enerfip.fr is a French crowdfunding platform dedicated to renewable energies. It proposes to citizens to become actors of the energy transition by investing their savings directly into renewable energy projects or helping the energy transition.

What is the ENERFIP contribution to the region ?

Enerfip proposes a cost-effective and optimized saving: no charges over account management, no fee and the full service is free for investors.

For citizens, Enerfip aims to bring the possibility to choose precisely where are going their savings and for what it is going to be used.

What are ENERFIP main objectives ?

Act for a more responsible, fair and sustainable economy. Allow every citizen to be part of the energy transition.

Offer an adapted solution to project leaders for crowdfunding opportunities. Help with the renewable energies development on the French territory. Prove that it is possible to bring together personal and general interests. Give back their « common goods » status to renewable resources



ENERFIP in a few numbers....



230 photovoltaic projects (Over 30 MWc developed in France)

1,5 MW biomass boiler developed, funded and functional.

600 MW of hydroelectric concessions developed.

How does **3SLR** contribute to Occitanie becoming the leading positive energy region ?



3SLR answered our questions....

Within the scope of the 2014-2020 programming of the European funds, the European Union asked regions to set a research and smart specialization strategy (3S).

What is the 3SLR contribution to the region ?

After a long debate, the State and the Languedoc-Roussillon region defined 7 innovation fields for which the region has differentiating assets, a potential for growth and intend to put itself amongst the European leaders.

What are 3SLR main objectives ?

- 3S concentrates the help and investments of policies on the priorities, challenges and essential needs for a knowledge-based development.
- 3S bets on the strong suits, competitive advantages and the huge potential of the region.
- 3S supports innovation, whether it is based on technology or on the practice and new uses, and stimulates investment from the private sector.
- 3S fully commits to the collaboration of the stakeholders and encourage innovation and experimentation.
- 3S's actions are based on facts and set up tested control and evaluation systems.

3SLR in a few numbers....



125 individual interviews

Over 200 participants to the launch conference in April 2013

Over 250 participants in July 2013 and 300 in December 2013

WHAT WE SHOULD REMEMBER ...

The Occitanie region is a pioneer in the development of renewable energy with exceptional natural energy sources such as wind, solar, biomass, hydroelectric, geothermal and marine energy. Her ambition is to become the leading region in Europe for renewable energy.

A positive energy region is a territory whose energy needs are fully covered by renewable energies.

The reasons for this policy are, to improve Occitanie's energy independence and economic competitiveness and fight climate change.

Every actor in this book play an important role in this big process.

**By 2050, Occitanie has great chances to become
the leading positive energy region in Europe !**



The best 4rth year team !

**Fanny THIBON, Alexandra LIOTARD, Xavier BOUSQUET, Elie Georges YOUNES,
Estelle CADARS, Théophile BILLETTE, Sara MEZZIOUANE-RIOU, Sandra JOSEPH,,
Louis CHAMBOLLE et Xavier BERGEAUD**

EPF Montpellier – 05/04/2017