

## **POWERTY Project**

### **STATE OF ART & SWOT analysis**

## STATE OF ART: ENERGY POVERTY AND RENEWABLE ENERGY

**Objective: to describe the starting scenario and the scope of energy poverty and renewable energy in your region, focusing on regional needs.**

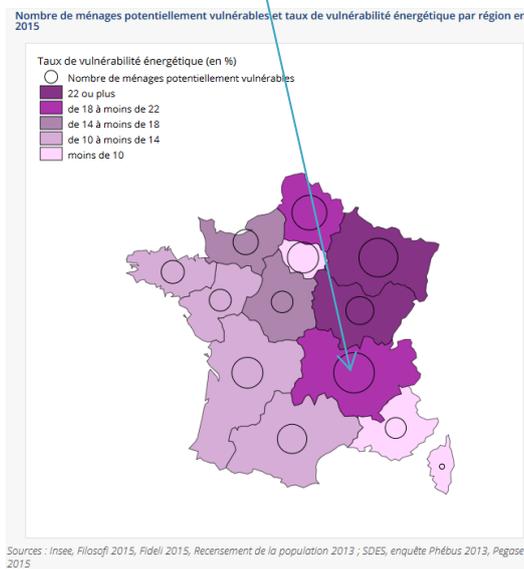
### 1. Brief Picture of the Region

#### **In France:**

- 1 out of 5 French people feel cold
- A modest household pays its energy bill 1,925€ compared to 1,584€ for an average household
- The energy bill is the 2<sup>nd</sup> cause of unpaid bills
- Every € invested in energy retrofit represents a saving of 30 c€ in health care costs

(Source: INSEE - National Institute of Statistics and Economic Studies - 2019)

**In our region, 19% of households are in a vulnerable energy situation: 1 out of 5. The majority of them are social buildings with very poor energy performance and very few vulnerable groups have access to sustainable energy solutions.**



### 2. Renewable energy sector. Brief Description

*Auvergne Rhône-Alpes has significant renewable energy sources (solar, hydro, biomass) distributed throughout the region that could be made accessible to these communities.*

*Renewable energy production reaches 43,583 GWh, representing 35.5% of the region's energy production in 2016. Auvergne-Rhône-Alpes is the leading French region in terms of hydraulic production. Hydropower accounts for nearly 90% of renewable electricity production, while other renewable electrical energies (photovoltaic solar, wind, biogas or waste electrical recovery) are growing strongly: +8% compared to 2015, +165% since 2010. Three-quarters of thermal renewable energy production comes from biomass. The other thermal renewable energies (heat pumps, solar thermal, thermal recovery of biogas and waste) are*

constantly increasing: +6% compared to 2015, +48% since 2010, in particular driven by the development of heat pumps.<sup>1</sup>

*Wood energy: the key stakeholders in the wood energy sector (production and consumption) have created a forum for exchange, sharing, work and co-construction: the Auvergne-Rhône-Alpes Wood Energy Strategic Committee.*

*Biogas: the Region is in charge of the implementation of a regional biogas scheme. A biogas club brings together the key players in this sector. AURA-EE manages an observatory of the biogas sector in Auvergne-Rhône-Alpes region.*

*PV plants: Recently, the Region has set up a working group on "Excellence of the solar sector" and "New economic models". AURA-EE leads the regional governance.*

*Energy communities: the "Auvergne-Rhône-Alpes Citoyennes et Locales Energie" (AURACLE) network brings together project leaders, local authorities, institutional players and support structures that wish to share their experience in setting up renewable energy production projects involving citizens. It currently has around fifty members and is led by Auvergne-Rhône-Alpes Energie Environnement (AURA-EE).*

### **3. State of Play of energy poverty in your region**

*At national level, several new laws have been passed that allow the collective production of renewable energy and self-consumption of energy. Although this new legal framework provides new opportunities to help mitigate energy poverty, policy and subsidy programmes at regional level have not yet been adapted to address energy poverty in a more effective manner. It is necessary to identify the technologies and innovative elements of low cost that best adapt to the situation of vulnerable groups, as well as the forms of financing, operation and maintenance of renewable facilities that are more appropriate for this type of group. At a national level, several public bodies support and finance housing improvement projects for a vulnerable population: ANAH (National agency for housing improvement), ADEME (agency for the environment and energy management), a cluster RAPPEL (network of actors against poverty and energy poverty in housing), an observatory ONPE (national observatory on energy poverty) and foundations (Abbé Pierre for instance). At a local level, local agencies support vulnerable people. Energy poverty is the competence of the "Départements", intermediate scale between the region and the municipality. Lots of local authorities have identified actions aimed at vulnerable population in their action plan.*

### **4. Link to the RIS3**

*The regional innovation strategy's objective is related to exploring and developing new fields of innovation, addressing social challenges, such as energy poverty. The opportunities considered in RIS3 are fundamentally based on the development of new innovative solutions for energy networks and storage, including renewable energies as well as energy intelligent buildings.*

### **5. Policy Instruments. Regional and National Plans and Policies on renewable energies and energy poverty**

*There are no financing and legal instruments that facilitate the development of collective or individual energy renewable projects for those affected by energy poverty.*

### **6. Legislation, Regulation**

*At national level, several new laws have been passed that allow the collective production of renewable energy and self-consumption of energy. Although this new legal framework provides new opportunities to help mitigate energy poverty, policy and subsidy programmes at regional level have not yet been adapted to address energy poverty in a more effective manner. It is necessary to identify the technologies and*

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<sup>1</sup> source: Regional observatory for climate, air, energy and greenhouse gases (ORCAE) - key figures 2019

*innovative elements of low cost that best adapt to the situation of vulnerable groups, as well as the forms of financing, operation and maintenance of renewable facilities that are more appropriate for this type of group.*

*Is self consumption allowed? In which conditions? Is it possible to share energy between consumers? Is the « aggregation » regulated?*

## **7. Financial Support and Instruments**

*Please include a brief description of the main financial and fiscal support at national and regional level.*

*Let us know about your financial instruments regarding renewable energies, i.e. Operational Programmes, Structural Investment Fund Strategies. Include specific financial and fiscal (for instance, tax exemptions) support in your region and general results if available. Any EBI-related program or similar (European Bank of Investments) EU funding.*

*Is there private financing or strategies? Bank agreements, finance ease, etc. Any experience in public-private partnership?*

*Are vulnerable groups beneficiaries of these instruments? Are there some specific financial instruments addressing these groups?*

## **8. Preliminary Good Practices**

### ***Innovative renewable energy technologies:***

- *Air-bois wood fund - This local fund subsidizes the replacement of obsolete wood heating equipment with high-performance equipment. An additional bonus is given to vulnerable households to facilitate their access to these technologies.*
- *Toit vosgien (résidence J. Ferry) - Social landlord which builds passive and low-tech housing supplied by RES.*

### ***New financing formulas:***

- *Third-party investment by citizen cooperatives - production of wood or solar heat (e.g. Buxia énergies ou ForestEnr)*

### ***Regulatory framework:***

- *Convergence of renovation assistance schemes for precarious households - New mechanism (January 2020) to help investment in renewable energy and energy savings 'Ma prime rénov' managed by the ANAH, which supports households in their renovation projects.*

### ***Empowerment of vulnerable groups and social innovation***

- *Programme CEE AEELA / MSA - "Energy Saving Accelerator for Farmers' Housing" with accompanied self-rehabilitation.*

## **9. References**

*Ministry for an Ecological and Inclusive Transition: <https://www.ecologique-solidaire.gouv.fr/lutte-contre-precarite-energetique-cheque-energie-aides-renovation-energetique>*

*RAPPEL national network: <https://www.precarite-energie.org/>*

*National observatory of energy poverty: <http://onpe.org/>*

*"Energie solidaire": <https://www.energie-solidaire.org/>*

*Please include a bibliography index and references (reports, statistics, websites, etc.).*

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## SWOT analysis

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### TOPIC 1. INNOVATIVE RENEWABLE ENERGY TECHNOLOGIES AIMED AT VULNERABLE GROUPS, INCLUDING COLLECTIVE AND URBAN ENERGY SYSTEMS.

#### WEAKNESSES

- Lack of data
- Tackles energy retrofit but not RES
- High-Tec technologies sometimes difficult to implement

#### THREATS

- Scattered population in rural areas

#### STRENGTHS

- Interesting initiatives that are getting off the ground (cf. Énergie solidaire)
- Third-party investment by citizen cooperatives.

#### OPPORTUNITIES

- Wood energy widely and easily available in our region and citizens acculturated to it

### TOPIC 2. NEW FINANCING FORMULAS FOR RENEWABLE ENERGIES SUITABLE FOR VULNERABLE GROUPS.

#### WEAKNESSES

- Complex and time-varying procedures, sometimes incompatible with each other and unsuitable for RES

#### THREATS

- Remaining costs still too high

## STRENGTHS

- .....

## OPPORTUNITIES

- The laws have become more flexible so that citizens can invest in renewable energy: crowdfunding, energy communities, etc.
- The investment costs of RES are getting lower

## TOPIC 3 IMPROVEMENTS IN THE REGULATORY FRAMEWORK FOR RENEWABLE ENERGIES AND VULNERABLE GROUPS

## WEAKNESSES

- Regulatory framework: electrical energy is encouraged despite a higher cost for the consumer
- Lack of technical means and local manpower: craftsmen, social and health trades, etc.

## THREATS

- Fuel poverty is not within the region's competence, it's managed at a lower level

## STRENGTHS

- Government financial support for the most modest households
- Structures and a network of actors who provide support to people in vulnerable situations
- Fuel poverty taking into account in SECAPs equivalent (mandatory for all local authorities with more than 20,000 of inhab.)
- Public policies that combine social, climate and air quality issues

## OPPORTUNITIES

- Municipalities are obliged to have at least 25% of social housing
- Local authorities implement voluntary social housing plans

- New laws that allow the collective production of renewable energy and self-consumption of energy

**TOPIC 4 EMPOWERMENT OF VULNERABLE GROUPS AND SOCIAL INNOVATION TO STIMULATE CITIZEN PARTICIPATION OF THESE SOCIAL GROUPS**

**WEAKNESSES**

- Beyond financial barriers, there are also social obstacles and obstacles to citizen involvement in the energy issue
- Difficulties in getting access to housing, in doing works

**THREATS**

- Energy retrofit improve comfort but do not allow households to get out of poverty

**STRENGTHS**

**OPPORTUNITIES**

- Easier participation and stronger interest of citizens in renewable energy projects, cf. Energy communities