



HAL
open science

French Policy Localism: Surfing on ‘Positive Energie Territories’ (Tepos)

Alain Nadaï, Olivier Labussiere, Ariane Debourdeau, Yannick Régnier,
Béatrice Cointe, Laure Dobigny

► **To cite this version:**

Alain Nadaï, Olivier Labussiere, Ariane Debourdeau, Yannick Régnier, Béatrice Cointe, et al.. French Policy Localism: Surfing on ‘Positive Energie Territories’ (Tepos). *Energy Policy*, 2015, 78, pp.281-291. 10.1016/j.enpol.2014.12.005 . halshs-01096942

HAL Id: halshs-01096942

<https://shs.hal.science/halshs-01096942>

Submitted on 20 Dec 2018

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L’archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d’enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

French Policy Localism: Surfing on 'Positive Energie Territories' (TEPOS)

Authors draft, please refer to the published version for any situation

Alain Nadaï – CIRED - Jardin Tropical, 45 bis, Avenue de la Belle Gabrielle, 94736 Nogent -sur-Marne Cedex, France - Tel. 33 (0) 1 43 94 73 87 – nadai@centre-cired.fr

Olivier Labussière – PACTE, Institut de Géographie Alpine – 14bis, avenue Marie Reynoard, 38100 Grenoble, olivier.labussiere@ujf-grenoble.fr

Ariane Debourdeau – AgroParistech – 16, rue Claude Bernard, 75005 Paris - ariane.debourdeau@gmail.com

Yannick Régnier - CLER - 2B, rue Jules Ferry - 93100 Montreuil, France - Tel. 33 (0) 1.55.86.80 - yannick.regnier@cler.org

Béatrice Cointe - CIRED - Jardin Tropical, 45 bis, Avenue de la Belle Gabrielle, 94736 Nogent -sur-Marne Cedex, France - Tel. 33 (0) 1 43 94 73 80 - cointe@centre-cired.fr

Laure Dobigny - CETCOPRA – 17, rue de la Sorbonne, 75005 Paris - dobignyl@gmail.com

Abstract

This paper is interested in sustainable energy initiatives in French rural areas. It follows up the UK debate about 'localism'. UK policy localism has been cast as neoliberal, framing communities as competent and competitive actors, morally responsible and accountable for their destiny.

In France, the emerging policy localism is surfing on an ongoing political structuration of innovative rural territories – 'Positive Energie Territories' (TEPOS). The paper presents and discusses the results of a rough census (undertaken in 2012) of significant experiences in this domain. It points to a few experiences and depicts them as risky, trial-and-error transcalar processes that endow locally emergent energy issues with a political dimension. To this extent, they amount to a different way of doing energy policy.

The analysis points to an ambiguity in French policy localism. This localism may pave the way for an upscaling of the ongoing TEPOS political structuration, or tend to make TEPOS into demonstration territories within a neoliberal RTD policy approach. In the latter case, it may not necessarily fit territories to pursue their political structuration with a view to the energy transition.

Highlights

- The paper bears witness to the emergence of a French energy policy localism
- It presents a sample of significant local rural experiences in the climate energy domain in rural France
- These experiences are risky, trial-and-error transcalar processes
- They amount to a different way of doing energy policy
- French localism surfs on these innovative territories while remaining ambiguous about the status that it confers on them

Keywords

France – rural - energy transition - localism - grass roots initiatives

Content

Introduction	4
1. Ten rural experiences and five upshots	4
11. Ten significant initiatives	6
12. Crêtes préardennaises: the remote rural embedding of citizen energy projects	7
13. Biovallée: from a river basin to low-energy building, retrofitting experiment	8
14. Five upshots	9
Energy as a concrete and manageable vector for local development and territorial conversion...	9
Policy plans vs. local politics: an uneven engagement in climate-energy policy programmes	9
Beyond installed energy capacity: a variety of achievements including the construction of local capacities for action	10
Some innovations that reach beyond their territory	11
The local and historical dimension of innovating experiences.....	11
2. A different way of doing energy policy	12
21. Political innovation: the local as a 'site for'	12
22. Resources in and for action	13
3. Surfing on TEPOS: the emerging French policy localism	14
Conclusion	16

Introduction

Local initiatives in the field of climate energy have received growing attention over the past decade. The success of climate energy urban initiatives has also blurred the rural / urban divide in this domain. This paper is interested in sustainable energy initiatives in French rural areas, a subject that has not been strongly covered in the literature. In redressing this neglect, we are following up the UK debate on 'localism' at a moment when 'territories' are emerging in the French arena in energy policy drafts.

In the UK, the development of local energy projects has been impressive since the beginning of the 1990s (Burch, S., 2010; Seyfang, 2010; Seyfang & Smith, 2007; Seyfang et al., 2013; Middlemis and Bradley, 2010; Walker & Devine-Wright, 2008). The emergence of the 'local' in the UK (energy) policy discourse and documents has triggered a critical analysis of the content and reach of this 'localism' (Walker & Devine-Wright, 2008; Walker et al., 2010). The debate has bounced on an ongoing and similar debate in the field of urban experiences and development policy (Marvin Guy, 1997; Purcell & Brown, 2005). The term 'local trap' was coined by academics in order to shed light on the fallacy of idealising the 'local' as the optimal scale for (climate-energy, development) policy.

This emergence of the local in UK politics has been related to Third Way thinking (Giddens, 1998) and its reinterpretation by the coalition of the Big Society Project (Cameron, 2010; Julian C. and Dobson J. 2012). Analyses have broached and discussed here a neoliberal framing of communities. These have been cast as individualised, structured, competent if not competitive entities, morally responsible, accountable for their destiny and possessing a capacity for self-regeneration (Amin, 2005; Geoghan, 2009). At the same time, policy support to hard-pressed communities has been reduced and the types of support made more competitive (reduction in grants, development of competitive tenders, refundable loans and market based-processes) (Catney et al., 2013). These results raised concern about both the equity and the efficiency of UK localism, because it does not empower the actors to whom it delegates public missions (Park, 2012; North, 2011). All in all, this debate has underlined a conditionality of the local as a relevant scale for climate energy action and policy, and its embedding into other scales (national and transnational).

Our paper draws on research results about rural France – both recent papers about wind power development and a research project about local energy-climate initiatives – so as to pursue this argument by characterizing both the political reach of such initiatives and the type of framing at work in the emerging French policy localism.

The first part presents the main results of a 2012 research project about local energy-climate initiatives in rural France, digging into a few examples to draw lessons. On this basis, the second part discusses the role of the local as a scale for action in the domain of climate energy. The third part discusses the issues raised by the upcoming French policy localism.

1. Ten rural experiences and five upshots

In France, with some exceptions (Dobigny, 2009; Yaçın-Riollet et al. 2014; Nadaï and Debourdeau, 2013), few analyses have dealt directly with rural experiences in the field of climate and energy. Analyses have mainly addressed the roles of local authorities and regions in the electricity sector, looking at the urban/rural divide in the historical equalisation of electricity tariffs throughout the

national territory (Poupeau, 2007), the evolution of these roles up to the current liberalisation of the electricity sector (Bouvier, 2003; Poupeau, 2000) and the development of local climate energy policies (Chanard et al., 2011; Bertrand and Rocher, 2013).

The notion of 'territory' has only very recently attracted interest in the French energy policy arena, as attested by the 2014 National Debate about the energy transition and the July 2014 draft law on it.¹ 'Territory', 'local' or 'collectivity' here signify a realm that has a variable perimeter. It can be a commune, the analogue of the English parish. It can be a group of communes: 'communautés de communes' are local institutions that have emerged since the 1990s in the wake of territorial decentralisation. It can also be a Natural Regional Park (PNR, based on voluntary engagement of parishes in sustainable charter) or a 'Pays' (based on the voluntary gathering of 'communautés de communes' endowed with competence in the field of local development²). The 'region', which refers to an administrative level (eg. DREAL for the environment and planning regional administration) and to a political entity (ie. the Regional Council), plays an important part in the interface between the national and the territorial levels. There is a trend towards regionalisation of climate energy policy since the Grenelle de l'Environnement³, a national debate which took place in 2007 and led to the adoption of two laws in 2009 and 2012. 'Territory' or 'local' is a way of indicating collectives of different types, more or less institutionalized.

Local experiences are emerging into public visibility. There has been no administrative follow-up of rural initiatives at the national level. A European network such as Energy Cities, promoter of the 'Covenant of Mayors' (CoM) (CoM, 2009) at the European level, has been very active in France since the early 1990s. It is mainly targeted, however, at urban experiences. The distinction between urban and rural initiatives is not really acknowledged, even though energy issues are different in urban and rural spaces. Rural areas offer more space for renewable energy infrastructures and production. Individual cars may remain a major mode of transportation in these areas, whereas urban spaces offer multiple opportunities to phase out individual motorised transportation and replace it by soft modes and public transportation. Energy efficiency in the building sector mainly concerns private homes in rural areas and collective housing in urban ones. These differences can be perceived as a source of complementarity or of antagonism.

The TEPOS network – TEPOS stands for Territoire à Energie Positive (POSitive Energy Territory) – has been one of the first collectives to broach these differences and endow rural experiences with a degree of public visibility. This network was set up in June 2011 by a French NGO engaged in the development of renewable energies: the 'CLER - Network for the energy transition'. It gathers together rural local authorities and stakeholders such as energy and farming cooperatives, small and medium size enterprises, specialised NGOs and engineering offices, all working for the energy transition in rural territories. A territory recognised as 'TEPOS' is heading towards energy autonomy (or '100% renewables'), meaning an average annual coverage of energy consumption by local renewable energy production (electricity, heat and mobility). Moreover, it is committed to share any possible excess production with surrounding territories, particularly urban ones, for the sake of territorial cohesion. TEPOS territories also adopt specific approaches dealing with economic, social, environmental and democratic issues. They approach energy issues with political, strategic and

¹ A national debate about the energy transition was organized by the French government in 2014, leading to a Spring report about the national strategy for the energy transition (SNTEDD) (FR, 2014a, 88 pages). It was followed by a summer draft law about the energy transition (FR, 2014b, 66 pages). The occurrences of terms (resp. FR 2014a/FR 2014b) in these texts - territory (130/27), local (51/29), collectivities (34/63), communities (5/1), transition (329/19), decentralisation (1/0) - attest to the rising importance in the debate of territories and collectivities at a local level, and to the ambivalence of the French State when it comes to decentralising public policy.

² Pasqua Law (FR, 1995) and Voynet Law (FR, 1999).

³ A decentralisation draft law is also under parliamentary debate. It proposes to endow regions (the political entities) with competencies in the field of environment and energy (FR, 2014c).

systemic commitment aimed at local development. As of April 2014, the TEPOS network listed 50 members.

The CLER became engaged in 2007 in the Grenelle de l'Environnement, and more recently, in 2013, in the national debate about the energy transition. Reasons that have been adduced by the CLER for defending the enrolment of territories in the governance of energy are that energy resources are physically available and energy saving potentials can only be tackled on site; that energy resources can be a source of local value and development; that mayors are the first interlocutors of citizens who are increasingly facing fuel poverty issues and are responsible for the general interest and, as a consequence, for public service concerning energy; and that territorial authorities have been endowed with legal competences which, albeit not directly in the domain of energy, allow them some margin of action in this area.

11. Ten significant initiatives

A list of French rural initiatives in the field of energy has been compiled with the aid of the 'CLER - Network for the energy transition'. In March 2012, more than 150 qualified prospects – ie. potentially interested or interesting contacts for the TEPOS network - were identified through CLER's listing and the French RES league action (www.ligue-enr.fr). Many of them corresponded to individual memberships, possibly from the same territorial entities. A first step consisted in pooling individual memberships according to local initiatives. This list of experiences was complemented with other significant experiences that were not, at that time, members of the CLER network but well known.

The enquiry into each of the experiences was undertaken in various ways: elements provided by the CLER, surveys on the Internet (including <http://www.ligue-enr.fr/>), semi-direct interviews (2012 TEPOS conference, September, Biovallée), bibliographic elements, network cartographies to visualise the relevant entities in each case (hand-drawn by CLER for Le Mené, Val d'Ille, Crêtes Préardennaises, Biovallée data-processing mappings using 'issue crawler' for Le Mené, Val d'Ille, Crêtes Préardennaises).

Ten significant initiatives have been identified (Cf. fig.1). 'Significant' here means initiatives including either innovative settings or installed artefacts or capacity. Given the small number of initiatives existing at the time of the census (2012), these may be considered to provide a good representation of the range of rural initiatives in the climate-energy domain at that time.

When analysing these initiatives, the apparent outcomes achieved (installed capacity, 'plans') are of course insufficient. A classical argument against the relevance of local initiatives is their reduced quantitative significance (installed capacity, energy production). Our interest in analysing these initiatives, however, lies in the fact that their processes matter as much as their outcomes. The trial-and-error process that underlaid their emergence provides an opportunity for networking – exchanges with other territories, identifying sources of financing, common barriers or solutions to project developmen. It results in a diverse, branching and progressive political structuration,, which sometimes leads to innovative outcomes having a reach on a national scale. Thus local initiatives are more than small-scale quantitative contributions. They invent ways of doing energy policy that are different from policy plans and programmes. These are the dimensions of the experiences that we would like to present by developing five upshots which emerge from the analysis.

Fig 1: 2012 census, summary description of ten significant experiences in the field of climate-energy in rural France

In presenting these upshots, we will build on all the experiences summarized in Figure 1. We sometimes mention specific dimensions or episodes of some of their processes. But for the sake of

clarity we mainly rely on two processes that have been subjected to in-depth enquiry and found particularly interesting: ‘Biovallée’ and the ‘Crêtes préardennaises’. We start by presenting milestones and dimensions of these two processes before turning to the upshots of our analysis.

12. Crêtes préardennaises, the remote rural embedding of citizen energy projects

The Community of Communes of Crêtes Préardennaises (CCPA) (95 communes; 22,940 inhabitants; 22,000 km²) is located in northeast France. It was established in 1995 as a follow-up to a gathering of 90 communes from a very low-density populated rural area during the late 1980s. CCPA’s unusual size – CC’s are usually much smaller – is the consequence of an early collective choice, asserting a certain scale of political assemblage and solidarity so as to gain economic power. At the time, the establishment of this association created tension with local politicians, some of whom perceived it as a threat to their personal agenda.

In 2001, in the wake of a decentralisation law, the left-green government enticed communes to gather and devise a territorial project with a view to sustainable development: a ‘Pays Charter’ (FR, 1999). The Charter was a way for the French government to empower communes so as to steer territorial development.

In the Crêtes préardennaises, the ‘Pays’ was tailored to the CCPA perimeter. Its board, the Conseil de Développement (CdD, made up of 4 persons from members of local NGOs), was installed as a political entity in charge of devising views and projects. The CCPA acted both as an institutional mattress – it had already gained local recognition – and an executive partner. The process for devising the Charter turned into an experience in deliberative democracy and citizen participation. In 1999, citizen workshops were set up as part of the Charter process in order to devise projects and actions with an explicit political dimension and in different domains such as urban services, valorisation of local resources and culture. Described by all the protagonists as an intense ‘laboratory for ideas’ and a “unique experience”, the process was actively steered by dedicated members of the CdD. It resulted in a 2003-2006 programme of actions for local development that was supported and co-funded by the region and the French State. From 2001 until 2007, a ‘school of the territory’ taught local actors about local and sustainable development and social economy. The ‘Universities of Pays’ (9) brought together up to 130 territories so as to share their experiences.

The process included a workshop on local resources, which gave rise to important developments in the field of energy. A first outcome was an unprecedented local wind power charter, adopted in 2004, which fully addressed issues such as benefit sharing (redistribution of wind power revenue to both land owners and farmers through the local land consolidation association) and the articulation of wind power development and other land (agricultural) uses. Institutional barriers to the development of co-operative wind power delayed the development of the first citizen wind farms – (‘Les ailes des Crêtes’ [Chagny - Bouvellemont –Jonval]⁴) – which finally took place in 2014.

A second outcome was the setting up by some active members of the process of the Ardennes Local Energy Agency (ALE08), as part of the Save EU Program. The ALE 08 brought the local initiative into a national and international ReN activist network. A 2009 meeting on social financing organised by the French energy agency (ADEME) in Paris was the occasion for the ALE 08 to meet with non-profit initiatives in the field of ReN financing (Solira, Nef)⁵. This resulted in the collective establishment of co-operative funds in 2011: ‘Energie partagée’ (‘Shared Energy’) (2011). The ALE also undertook the setting up of the first regional branch of Enercoop, a co-operative renewable electricity producer and provider⁶, in order to sell the electricity produced by the local cooperative wind farms. In 2014,

⁴ <http://energie-partagee.org/les-projets/tous-les-projets>

⁵ <http://www.solira.fr/Qui-sommes-nous>, <http://www.lanef.com/>

⁶ <http://www.enercoop.fr/>

Energie Partagée supported the development of 30 co-operative ReN projects in France, and Enercoop members established six other regional branches, all of which considered themselves part of the Energie Partagée movement. The ALE 08 also contributed to the development of various renewable energies sources such as wood-energy, biomass, methanisation, solar thermal and photovoltaic, and to the promotion of energy saving (housing energy retrofitting programme in 2006-2010, eco-construction, etc.). It also caused the CCPA to devise a local climate-energy plan (2010-2013).

Overall, the Crêtes illustrates a case in which the local socio-spatial configuration (low density rural area) raised issues and sustained a unique political structuration (large CC, superposition Pays-CC) in the view of local development. Within this perspective, local actors took ReN development into their own hands and rendered it operational. Supportive policy framework (the 'Pays' policy), contingent encounters and the articulation of the local socio-spatial configuration (farmers, non-profit organisations) sustained an innovative assemblage of ReN energies (wind power charter, regional Enercoop, Energie partagée movement).

13. Biovallée: from a river basin to low-energy building, retrofitting experiment

The Biovallée area comprises four communities of communes (South of Valence) - CC du Grand Crestois (CCGC), CC du Diois (CCD), CC du Pays de Saillans (CCPS) and CC du Val de Drôme (CCVD) - and 102 municipalities. This perimeter approximately covers the watershed of the Drôme river from the southern foothills of the Alps to its confluence with the Rhône. This large-scale area of political cooperation is an inheritance of a pioneer experience dealing with the management of the Drôme river in the early 1990's. *'Our river was a sewer, wastes were flowing into and it was not good for swimming'*, remembers the Biovallée's resident. In 1992, a Water Act induced local communities to engage in a new device, a Water Management and Development Plan (SAGE). The four communities were identified at the national level as an experimental area to implement a SAGE and to act as the first local water commission of France. This experience, internationally acclaimed, paved the way for new developments in organic farming and tourism based on better living standards in the early 2000s.

In 2005, the Rhône-Alpes region launched a sustainable development policy to support regional 'Grand Projets' (GDRA) (local initiatives, politically ambitious, with a potential international visibility). In 2009, a few mayors from the Biovallée were ambitious to turn their area into a 'rural Freiburg', a reference to the famous German city projects that started with eco-districts, and to obtain financial support (10 M€ from the Region, 5M€ from the department of Drôme) to develop such an experimental place for high-standard solutions including renewables and efficiency buildings. *'In the mayors' minds, the project prevailed over the administrative procedure. They wanted to be free from the usual technical and anxious approach characteristic of energy issues. Energy is an abstract matter; they wanted to convince,'* said a local official. Instead of developing a climate and energy territorial plan (PCET), not sufficiently stimulating to pool local energies, they formed a scientific project committee to find the best way to start. Local competencies with national engagement in alternative energy networks and national policy processes were located in the Drôme Valley (Enertech, an engineering office specialised in thermal simulations and engaged in several pioneering experiments in efficient buildings; the négaWatt Institute, dedicated to training, research and engineering studies in energy efficiency solutions).

The director of Enertech, engaged in the Grenelle de l'Environnement in 2007, failed to promote in this process the idea that the refurbishment of residential buildings could be a legal requirement. The Biovallée project provides him with the opportunity to test an alternative 'market' solution by making global low-energy retrofitting offers to private owners. This model consists in assembling the local officials as energy advisors, with craftsmen collectives as coherent entities to propose energy

and cost efficiency solutions, and the experts (Enertech, négaWatt) as trainers and conductors. This creates a new agency through which private owners are empowered so as to make strategic choices about how to make the appropriate investment for the more cost-efficient energy solution. Thus two key emerging dimensions, which are not usually addressed together, are adjusted through this new socio-technical collective: the first is the decentralisation of housing policy; the second the marketization of an energy-efficient refurbishment offer in private housing, still neglected today by the building sector.

In 2014, seven craftsmen collectives (38 companies) are working on six pilot projects and four new offers. The framing of the whole process is a key point: even if it is based on local resources and skills, this experiment is conceived as a demonstration at the national level. It therefore imposes restrictions on craftsmen collectives as to the composition of their groups or their technical choices, but also on home owners. The Biovallée has to demonstrate that a comprehensive energy-efficient refurbishment at the BBC level (Low Consumption Building, ie 80 kWh/m²/yr primary energy) and at an average cost of 300 €/m² is a reality for a private house. Locally, the challenge is to diminish the energy bill of households, to develop a new source of profits for craftsmen or prepare them to anticipate the competition with building majors, to create local jobs and keep people in the Biovallée.

This political vision has been such a hit for other rural areas in France that, before its end, the experiment had been reproduced in others territories, and workshops are now emerging in several regions to train future conductors of such local developments. This networking is highly supported by the négaWatt Institut, which considers the refurbishment experiment in Biovallée as the first action capable of making the ambitious energy transition scenario of the négaWatt NGO come true for the building sector.

14. Five upshots

Overall, the analysis indicates five upshots.

Energy as a concrete and manageable vector for local development and territorial conversion

The first upshot is that collective rural initiatives in the field of energy have been mainly initiated because of issues of local development. Most interesting is the extent to which energy is framed as a domain through which territorial development can be translated into concrete and manageable terms. In many cases, it is framed as an issue of territorial conversion: climate energy projects are the occasion for endowing the territory with renewed identity, projects and solidarities. In Loos-en-Gohelle, which is located in the declining mining territory of Nord Pas-de-Calais, major issues are how to value the mining heritage and how to foster an attractive post-mining economy. In the Crêtes Pré-ardennaises (cf supra), an very sparsely populated area with no real economy apart from agriculture, a major challenge in the 1980s was to find ways of creating territorial value and limiting the rural exodus. In Montdidier, the first ReN (public) developments were aimed at easing and redeploying the local Distribution System Operator in the upcoming liberalising of the electricity sector. In the Pays de Figeac, mutualised PV development was motivated by the need to diversify both the activity of the agricultural cooperative SICASELI (Fermes de Figeac) and the local economy.

Policy plans vs. local politics: an uneven engagement in climate-energy policy programmes

The enrolment in public policy programmes such as climate-energy plans is uneven. It is not a condition for concrete achievements or developments. In France, the Plan Climat Energie Territorial (PCET) is the main policy instrument targeted at local territories in the field of climate-energy policy. It is a plan proposed by the French Government to local territories as a way to lay down both a

diagnosis of GHG emissions and a strategy for mitigation and adaptation.⁷ It proceeds in five steps: prefiguration, diagnosis and mobilisation, devising a program of actions, implementation, evaluation, and fosters a progressive and participatory construction of a programme of actions. The PCET was adopted through the 'Grenelle' Laws (2007 and 2009). It was made mandatory for collectivities above 50,000 inhabitants and is open to collectivities of less than 50,000 inhabitants on a voluntary basis. 465 PCET are currently under development or developed.

In some initiatives, such as in the Pays Thouarsais, the devising of plans or schemes that decide and publicise orientation plays a structuring role apart from public funding, to which it provides access. In other cases, such as Val d'Ille, Montdidier or Loos-en-Gohelle, energy climate plans or schemes emerge in a process that is already on track and possesses a strong dynamics. In such cases, plans are developed to provide the initiative with increased visibility and with a type of label. Such labelling can also bear on accessing EU funding (in relation with the Covenant of Mayors initiative), for it provides external evidence of an ongoing dynamics (eg., Crêtes Pré-ardennaises).

Yet, as illustrated by the case of Le Mené or Biovallée (cf supra), some territories intentionally chose not to engage in such a plan, preferring to explore climate-energy issues and related solutions through project development and local politics rather than by developing an encompassing, panoptic and quantified view of their energy consumption and GHG emissions (cf. supra).

The case of the Crêtes Préardennaise is illustrative of the potential shortcomings of PCET. In 2014, the CCPA decided to develop a PCET with a view to reviving political momentum. When entering a PCET, a territory can receive funds for the animation of the process – ie. public participation and co-construction – but, unlike the 'Pays' at the time (1999), the PCET does not provide financial support for the implementation of actions. Nor are these actions defined in advance of the PCET, since their definition is supposed to be co-constructed and emerge through public participation. A detailed analysis of the CCPA-PCET prefiguration meetings showed that the PCET was perceived as somewhat of an empty shell. In the absence of funding or of a delimited set of actions, local representatives and CCPA members were looking for concrete issues to foster the interest of local mayors and inhabitants in the plan. The result was a difficult process which, despite the adoption of a formal program (2014), failed to reach any significant level of mobilisation.

Beyond installed energy capacity: a variety of achievements including the construction of local capacities for action

The survey attests to a variety of achievements as to actual realisation such as installed capacity or reduction in energy demand. In 2012, Le Mené (methanisation unit, oil mill for biodiesel, wood-fired heating plant and network, participatory wind energy, low-energy buildings, eco-construction, ReN start-up incubator, etc.), Kaysersberg Valley (wood heating plants and wood supply industry, citizen solar installation, small hydro units, public and civic wind project), Montdidier (energy consumption reduction, publicly-owned wind power, wood-fired heating plant and network, solar PV) and the Pays Thouarsais (wind park, collective methanisation unit, wood heating plants, solar installations, shared energy management) were the most advanced initiatives in this dimension. Loos-en-Gohelle (home energy retrofits, eco-construction, thermal solar energy and wood boiler in public buildings, solar PV, R&D platforms on eco-materials / eco-construction / recycling / solar PV) and the Crêtes Pré-ardennaises were at an intermediary stage and scale of realisation. Loos-en-Gohelle had an impressive record of demonstrator experiments, but these were more salient as showcase projects than as actual contributors to the local energy mix. Val d'Ille (wood-fired heating plant and network, solar PV) and Biovallée had started with soft-type experiments (eg., organisational, institutional)

⁷<http://www.pcet-ademe.fr/>, consulted 15 October 2014.

rather than with the development of concrete large-scale technological artefacts, but these may be planned and developed in the near future.

Beyond this variety of achievements, local processes show the many barriers that local energy projects face in their development, including access to financing, access to policy support, grid connection and other institutional lock-ins. They are definitely risky processes marked by successive proofs (Nadaï and Debourdeau, 2013). The need for problem reformulation and innovative solution design remains constant. It is a source of innovation in the sense of developing new connections and new networks, comparing experiences and looking for tailored solutions. In the end, the way in which capacity for action is developed proceeds on a step-by-step, trial-and-error basis, which endows these processes with kind of a non linear progression.

Some innovations that reach beyond their territory

Some initiatives deal with innovations that reach beyond their territory. This is the case of the DOREMI project in Biovallée as it is with the process of development of cooperative wind power in the Crêtes Préardennaises that we have previously described.

Early on DOREMI in the Biovallée conceived and developed its model of a 'craftsmen collective' for low-energy retrofitting (individual housing) with a view to development on the national level. The presence of networks of national experts and activists in Biovallée made it a singular territory, remote but connected. The reach of the DOREMI initiative proceeded both through governmental recognition and activist networking: in 2012, DOREMI was awarded a national prize for energy retrofitting local initiatives⁸; In 2013, the experience was mushrooming through the negaWatt and TEPOS networks, which attempted to replicate the project in other places in France.

In the Crêtes Préardennaises, as we have explained, the prospect of developing co-operative wind power projects led to the establishment of the first regional Enercoop, which contributed to setting up the broader 'Mouvement Energie Partagée'. Connections between the ALE 08 and the Rhône Alpes alternative energy activist networks existed and played an important role in this process. But, unlike in Biovallée, here the envisagement of a national demonstration was not present at the start of the process. Instead, it grew as things took their course. The support of the French ADEME, which made its aid for the establishment of a renewable energy co-operative fund conditional upon the funds being on national scale, seemed decisive in this instance.

Other cases are not endowed with an explicit institutional dimension on a national level, but actively contribute, through networking, to the political structuration of an alternative perspective and to know-how in local energy projects. For instance, the Figeac PV solar project, one of the biggest mutualised PV projects in France at the time, was a case in which valuable returns on experience about how to develop co-operative PV projects have been derived and shared in TEPOS networks.

These three examples show that both the way in which projects are anchored in their territory and the way in which they acquire a reach on a broader scale can be multiple.

The local and historical dimension of innovating experiences

The apparent dating of these experiences – back to the first realisation or to the acknowledged start of process (in brackets in fig 2) – does not really correlate with the extent of realisation. Some early starts are not the most developed (eg. Loos-en-Gohelle, Crêtes pré-ardennaises), and some recent initiatives are gaining visibility and scale (eg. Biovallée, Val d'Ille). Some processes are made up of discontinuities, triggered by sudden opportunities such as the election of a new mayor (eg. Montdidier, Val d'Ille); others seem to take off once institutional support or recognition is provided

⁸ http://www.territoires.gouv.fr/IMG/pdf/131213_dp_palmares_reno_energetique.pdf, consulted 15 October 2014.

(eg. Crêtes pré-ardennaises and the 1999 Decentralisation Law; Biovallée and its regional recognition as GPRA; Pays Thouarsais and CLIC).

Figure 2: Dating of the apparent start of the ten significant experiences in the field of climate-energy in rural France (insert here)

The lack of correlation between apparent dating and extent of realisation should not come as a surprise in view of the trial-and-error and contingent character of these processes. Local successes are like icebergs (Yalçın-Riollet et al., 2014; Nadaï and Debourdeau, 2013): they are the visible part of longer processes of local development and capacity-building that enable local collectives to seize the opportunities opened by market or policy environment. Understanding the territorial and historical processes of capacity-building requires an archaeology of these processes that goes back beyond the first realisation – as was done here for Biovallée or the Crêtes pré-ardennaises.

2. A different way of doing energy policy

To a certain extent these upshots echo factors of successes - local group of active members, local competencies, role of policy support - that have been pointed at (Seyfang et al., 2013; Burch, 2010). As suggested by Seyfang et al (2013), policy support is an important factor, yet not an obligatory passage for experiences to succeed. In our sample, several experiences have developed in the interstices of policy programs, or have made use of them for heterogeneous ends. In turn, these experiences have a *political* dimension in the sense suggested by Andrew Barry (Barry, 1999). First, they point at otherwise unrecognised issues in relation with climate energy projects. Second, by following their own path in relation with the spatiality of processes, they sustain innovative problem (and solution) framing.

2.1. Political innovation: the local as a 'site for'

The notion of site, proposed by Andrew Barry, is helpful in order to grasp the role of the local as a scale for action and problematisation while acknowledging its networked and multiscale dimension, as emphasized in our results.

Analysing the on-site opposition movement to the Newbury highway project in England in the 1990s, Barry shows how this movement brings the damages caused by the project into public existence. He focuses on this demonstration as a way of rendering manifest and fostering a political perspective, a political 'sight' making Newbury into a political site. The damages caused by the project are brought into public existence by pointing to them on site, translating them into words and connecting these narratives with a chain of reference and a public space where they can be tested: in the case of Newbury, artistic, press and media networks played an active role in this publicising. Most interesting to us is Barry's analysis of the way in which the spatiality of the site first allowed for an interplay of relations among police, press and opponents, whereby these damages can be spatially indicated and rendered manifest – for instance, by using the presence of press people as witnesses so as to stage a dramatic protest action with trees that were to be condemned by the project. Barry uses the Newbury case in order to distinguish between two types of politics. The term 'politics' is generically defined as the set of institutions, organisations, procedural rules, governmental techniques and practices. The 'political' is a repertory of contestation and dissension, which expands the space of politics beyond its conventional exercise (and intelligibility).

This multiscale dimension of the site – as a place and a networked spatiality for politicisation - mirrors very well the multiscale, yet locally anchored, dimension of the energy processes that we have analysed. In the Crêtes pré-ardennaises, for instance, the extremely low density of the rural space triggered the issue of local development, enticed local actors to gather and assemble into a

large collective whereby wind power could be seized as a means for operationalising local development. We have described the way in which the issue of local development was worked out through wind power and networking, eventually paving the way to the emergence of a genuine political (in Barry's sense) version of renewable energies: a national 'shared energy movement'. Similarly in the Mené (Yalçın-Riollet et al, 2014) or in Figeac (Cointe, 2014), where spatially embedded issues raised concerns leading to the emergence of politically innovative solutions for these territories.

22. Resources in and for action

As we pointed out in discussing our upshots, the anchoring of processes in the local is very diverse. Beyond this diversity, the material process of harnessing renewable energy resources has a relational dimension. These energies should not be reduced to the physical dimension of their flow-resources (wind, water stream, sun radiation). Harnessing them is a material-relational process, which has a definite potential. The socio-technical collectives that emerge in this process are related to the spatiality of the resources and to their relational materiality (Bennet, 2010).

For instance, the wind power process in the Crêtes Préardennaises reflects typical issues of landscape and benefit-sharing in wind power development. The development of renewable energy projects recurrently raises issues because of the ways in which new energy technologies interfere with the current practices and management of local resources (land, landscape). The role of landscape commons (Nadaï and Labussière, 2014) and of inherited socio-spatial configurations (Labussière and Nadaï, 2014; Nadaï, 2012) in the development of wind power has been observed. These analyses have shown that wind power potentials differ qualitatively, depending on the ability of planning processes to account and 'play with' these inherited socio-spatial configurations (Nadaï and Labussière, 2013), thus endowing them with a new actuality as part of wind power development.

The point here is not to reify local resources, nor to argue for the protection of local inherited socio-spatial configuration (such as landscape). It is to point out ties and attachments - in the specific sense of a "faire-faire" proposed by actor network sociology (Latour, 2000; Gomart and Hennion, 1999) - that set collectives into motion and action. Local socio-spatial configurations are part of the processes of harnessing new energies: they are part of the steering of these processes (they provide grasp, collectives, ties to lean on and evolve from) and are steered by them (they are a resource that is transformed in the course of the process).

As Marres has argued (2007), 'no issue, no politics': issues « spark the public into being », in Dewey's pragmatic sense of a collective of concerned actors. And the public brings issues into politics. The mayor of Loos-en-Gohelle stated: 'When I receive a petition, I say to myself: I'm lucky, my citizens are alive, and this petition pushes me to open one of those debates that local democracy truly needs'. This process is far from mechanical - witness the intense and incessant work carried out by very active groups of local actors in the Crêtes Préardennaises or in the SICASELI cooperative in Figeac. Such work contributes to making the local into a site at which some dimensions of energy, which are imperceptible on a larger scale (because these dimensions do not raise issues on other scales), emerge as issues and call for a public to perform solutions. There is thus a 'make exist'» potential of the local – akin to the Newburry site spatiality - because problem setting and solving are worked out by a public that emerges amidst resource-related issues for and at the local level.

Localism, in turn, should not be discussed exclusively in the light of whether the local is given or constructed (as advocated by Purcell and Brown, 2005) – it is both, since it is inherited and reactualised - but in the light of how this potential ought to be accounted for, so as to be mobilised in the energy transition. This points to the local not as a delimited geographical container, but rather as a site for the anchoring of climate energy projects. It is a site whose political potential is transcalar

and can be sustained by national / transnational networks and policy frames if they contribute to enabling local actors to embrace the material-relational dimension of local processes.

We now turn to the French policy context and emergent localism in order to discuss this dimension.

3. Surfing on TEPOS: the emerging French policy localism

The French energy policy context has been historically centralised. For instance, in the electricity sector, centralism is rooted in a complex game of players embedded in the historical construction of the perequation, the rural / urban divide (Poupeau, 2007) and the dominance of electro-nuclear technology, which together contributed to limiting the place and role of territories in energy policy.

There have been many attempts to change this approach to energy policy. The successive laws on decentralisation (eg. FR, 1995, 1999, 2014c) have endowed territories (Regions, Community of communes, PNRs) with legal (non-energy related) competencies⁹. The growing NGO alternative energy network, including CLER /TEPOS, negaWatt, Amorce, Energy Cities and the Covenant of Mayors (CoM, at the EU level), supported an evolution in legal competences (with limited success), but also worked on a broader political and cultural change in energy practices through the use of existing legal (non-energy related) competences and ReN support mechanisms (such as feed-in tariffs or a Heat Fund). In fact, the TEPOS approach emphasises a 'political, strategic and systemic commitment to local development' and includes a 'reappropriation of energy issues by all citizens, elected officials and socio-economic actors'¹⁰. These changes have been partly relayed by certain regions, notably through calls for TEPOS in 2012 (Aquitaine, Bourgogne, Rhône Alpes¹¹). The networked dimension of these initiatives and of the case studies that we have analysed proves that these attempts have contributed to the structuration of a political and decentralizing capacity.

Beyond this activism, an array of factors – new energy technologies, liberalisation of the electricity sector¹², integration of ReN technologies as part of EU climate energy policy (EU, 2009 a and b) - is currently providing a favourable context for the increased legitimacy of territories as energy players.

It is within this context that, reflecting the UK debate, what could be called a French Policy 'localism' is emerging in recent energy policy drafts. Brandishing the Territoires à Energie Positive for Green Growth (TEPCV) as the new players in an innovative energy transition policy approach, French policy makers have chosen to surf on the ongoing political structuration. A TEPCV is defined as 'achieving a balance between consumption and production of energy at the local level [and promoting] energy efficiency and targeting the deployment of renewable energies in its energy supply' (FR, 2014b: 1). The idea copies and pastes that of TEPOS, except for its political vision. In so doing, it raises

⁹ Communes and EPCI have historically been endowed with a competence in the public distribution of energy on their territory. FR, 2014c, is the first draft law to propose the direct targeting of energy competences (for regions).

¹⁰ <http://www.territoires-energie-positive.fr/presentation/qu-est-ce-qu-un-territoire-a-energie-positive>, consulted 2014 10 15.

¹¹ In 2012, these regions launched calls for TEP [consulted 15.10.2014]:

<http://www.aquitaine.fr/actions/territoire-durable-et-solidaire/environnement-climat-energies/projet-tepos#.VEYzT1fp-il>

http://www.rhonealpes.fr/TPL_CODE/TPL_AIDE/PAR_TPL_IDENTIFIANT/416/PAG_TITLE/Appel+%C3%A0+Manifestation+d%E2%80%99int+%C3%A9r%C3%AAt+%C2%AB+Territoires+%C3%A0+Energie+Positive+%C2%BB/18-les-aides-de-la-region-rhone-alpes.htm

<http://www.region-bourgogne.fr/Les-territoires-a-energie-positive,5,8531>

¹² Though not necessarily increasing the power of local authorities in this domain; quite the contrary, as argued by Poupeau (Poupeau, 2000).

questions, such as ¹³ : What are the territories invoked? Why are they invoked? What are the means behind the words?¹⁴

While the careful avoidance of the term ‘decentralisation’ (cf. supra) betrays a persistent French centralism, this is the first time that local territories are mentioned in the initial article of a draft of an energy law (FR, 2014b). The source of inspiration is the activist CLER-TEPOS, though it is not acknowledged in the draft law and mentioned only in peripheral documents. A call for TEPCV is being launched in order to select 200 territories and endow them with tailor-made support (networking, grants, loans, repayable advances). CLER-TEPOS and regional calls for TEPOS are acknowledged in a joint FAQ document, which also announces that ‘a CLER expert may be part of the steering committee’ because of CLER’s experience in ‘experimenting with TEPOS with regions’ (FR, 2014e).

The current draft law mentions the intention to ease third party and participative funding, especially for ReN projects, and as a perspective for complementing (progressively replacing?) the current feed-in tariff with primes over price. In so doing, it attests to a will to bring climate-energy projects closer to market pricing and more socially embedded modes of financing.

The call itself is open. It does not impose a specific format on the proposals to be submitted, but suggests that they be tailored to the specifics and dynamics of each territory. While the call targets ‘collectivités’, which may not account for certain grass roots initiatives, the policy emphasis falls on bringing territories into motion and placing them under regional steering consisting of the regional administration (DREAL, environment and planning), the Regional Council and the regional ADEME (French Energy Agency). The alleged openness of the process, though tinged with a market and green-growth dimension, could develop in different directions.

On the one hand, CLER and certain regional councils could relay the existing political structuration in the steering committee. In this case, the emerging policy framework could foster networking and sustain local initiatives in finding tailored financial support. Such a scenario could result in an upscaling of the TEPOS approach somewhat similar to what was achieved by Energy Cities with the CoM on the basis of Europe Intelligent Energy fundings.

On the other hand, one should not disregard the market inclination of the draft law and the ‘green growth’ dimension of the call. Collectivities are supposed to propose ‘participative approaches engaging economic actors, non-governmental organisations and citizens’ (FR, 2014d: 2). As emphasized by Geogeghan et al (2009: 440), in such an approach, which he calls corporatist, the partnership is ‘likely to be influenced by the relative power of stakeholders’. It may therefore result in very different settings, more or less inclusive on a local level, more or less committed to social justice and territorial development. These in turn may result in either empowering local collectives to devise and implement their energy future or in framing them as front-runners in and as vectors for energy strategies that are devised and decided by other actors and are on another political scale (particularly national or regional ones).

One candidate for such a framing is precisely ‘Green Growth’, which echoes the French green growth policy, including the ‘Green filieres policy’ (FR, 2009), the ‘Fonds démonstrateur’ (375€ billions) and the programme Investissements d’Avenir (FR, 2010)¹⁵. These policy programmes are paradigmatic of a neoliberal turn towards demonstration and demonstrators in research and technology development (RTD) policy. It has emerged in the wake of the 2000 Lisbon Summit and posits the

¹³ <http://www.territoires-energie-positive.fr/fre/opinions/100-renouvelables-c-est-possible-l-construisons-les-territoires-a-energie-positive-ensemble>, consulted 6 October 2014.

¹⁴ Since the text is currently in parliamentary process, all that can be said as to its content pends upon the course of this process. But a few issues can be indicated.

¹⁵ <http://investissement-avenir.gouvernement.fr/content/action-et-projets>, consulted 15 January 2014

private sector as being at the core of RTD policy (EU, 2013a and b). Demonstration has also been extended to a territorial approach - through EU framework programmes such as Concerto (Labussière, 2014) or within the French Programme d'Investissement d'Avenir (FR 2009), in which a 'new Colbertism' has been advocated. While proving to be a way of undertaking technology policy through a territorial approach, its results are dual. It may allow local actors to get on board of new financial or political support and pursue their experiences to their own ends. But demonstrators are increasingly supported by policy makers as a way of unifying experiments and quantifying and aligning experiences with policy goals (Bruno, 2009; Giordano et al., 2011). As a policy style, demonstration policies tend to see local territories as spatial containers for technological demonstration (O'Neill and Nadaï, 2012), or to cast experiences with a view to their potential replication and displacement. In such cases, the uncertain course of learning and the political momentum that underlies the collective and innovative dimension of local experiences may be rendered even more fragile (Labussière, 2014, on the eco-district De Bonne in Grenoble).

Conclusion

The rise of localism within the neoliberal reformulation of the Third Way in the UK has been discussed as a neoliberal framing of communities and challenged with respect to both its relevance and justice.

In France, an emerging policy localism (TEPCV) is surfing on the ongoing activist political structuration of innovative territories and invoking positive energy territories (TEPOS). A rough census of significant experiences in this domain indicates only a few local experiences. It pictures them as risky, trial-and-error transcultural processes that endow locally emergent energy issues with a political dimension. To this extent they amount to a different way of doing energy policy. The analysis also points out the importance of locally inherited socio-spatial configurations as a potential for the energy transition, suggesting that localism should be discussed in light of its capacity to account for and mobilise this potential in the energy transition.

The emergent French policy localism is open. It casts territorial collectivities as partnering actors supposed to build up enlarged energy governance that will contribute to both the energy transition and green growth. Strategic or not, this framing leaves open the balance of power and the status of territories in the partnership. It may pave the way for an upscaling of the ongoing TEPOS political structuration, or it may tend to make TEPOS into demonstration territories. In the latter case, it may not necessarily allow territories to take hold of inherited socio-spatial configurations with a view to negotiating the energy transition.

Acknowledgements

This work was carried out with the financial support of the French Agency for the Environment and the Energy (ADEME) (Programme: 'Mettre l'innovation sur la trajectoire du facteur 4', Convention 11 10 C 0079) and of the French National Research Agency (ANR, programme sociétés innovantes, convention 2011- SOIN-003-01, projet COLLENER).

Bibliography

Amin A., 2005. Local community on trial. *Economy and Society* 34(4), 612-633.

Barry A., 1999. Demonstrations: sites and sights of direct action. *Economy and Society* 28(1), 75-94.

- Bennett J., 2010. *Vibrant Matter: A Political Ecology of Things*. Durham, Duke University Press.
- Bertrand F., Rocher L. (dir.), 2013. *Les territoires face au changement climatique. Une première génération d'initiatives locales*, collection Ecopolis, vol. 18. Peter Lang, Bruxelles.
- Bouvier G., 2003. Enjeux géopolitiques autour de la distribution d'électricité en France, *Hérodote* 3(110), 71-87.
- Bruno I., 2009. The "Indefinite Discipline" of Competitiveness. Benchmarking as a Neoliberal Technology of Government. *Minerva* 47(3), 261-280.
- Burch, S., 2010. In pursuit of resilient, low carbon communities: An examination of barriers to action in three Canadian cities. *Energy Policy* 38, 7575–7585.
- Cameron, D., 2010. Big society speech, transcript of a speech by the Prime Minister on the big society [online], 19 July 2010, Liverpool. Available from (<https://www.gov.uk/government/speeches/big-society-speech>), consulted September 29, 2014.
- Catney P., MacGregor S., Dobson A., Hall S.M., Royston S., Robinson Z., Ormerod M., Ross S., 2013. Big society, little justice? Community renewable energy and the politics of localism. *Local Environment: The International Journal of Justice and Sustainability* 19(7), 715-730.
- Chanard C., De Sède-Marceau M.H., Robert M., 2011. Politique énergétique et facteur 4 : instruments et outils de régulation à disposition des collectivités . *Développement durable et territoires* [online journal] 2(1). Available from (<http://developpementdurable.revues.org/8776>).
- Cointe B., 2014. The emergence of photovoltaics in France in the light of feed-in tariffs: Exploring the markets and politics of a modular technology, PhD, CIRED, Nogent-sur-Marne, France.
- CoM, 2009. Covenant of Mayors. Available from (http://www.eumayors.eu/IMG/pdf/covenantofmayors_text_en.pdf), consulted April 1st, 2014.
- Dobigny L., 2012. Produire et échanger localement son énergie. Dynamiques et solidarités à l'œuvre dans les communes rurales, In : Papy F., Mathieu N. et Ferault C. (eds), *Nouveaux rapports à la nature dans les campagnes*. Quae, 139-152.
- EU, 2009a. Commission européenne, Directive 2009/28/CE du Parlement européen et du conseil du 23 avril 2009 relative à la promotion de l'utilisation de l'énergie produite à partir de sources renouvelables [modifiant et abrogeant les directives 2001/77/CE et 2003/30/CE], Bruxelles.
- EU, 2009b. Commission européenne, Décision de la commission du 30 juin 2009 établissant un modèle pour les plans d'action nationaux en matière d'énergies renouvelables conformément à la directive 2009/28/CE du Parlement européen et du Conseil, Bruxelles.
- EU, 2013a. Commission européenne, Communication to the European Parliament, the Council, The European Economic and Social Committee and the Committee of the Regions, Public-private partnerships in Horizon 2020: a powerful tool to deliver on innovation and growth in Europe, COM(2013) 494 final, July 10th, Brussels.
- EU, 2013b. Commission Européenne, Commission Staff Working Document, Strategy for European Technology Platforms: ETP 2020, SWD(2013) 272 final, July 12th, Brussels,
- FR, 1995. Loi no 95-115 du 4 février 1995 d'orientation pour l'aménagement et le développement du territoire, *Journal Officiel de la République Française* n°31 du 5 février 1995, p. 1973, Paris.

FR, 1999. Loi no 99-533 du 25 juin 1999 d'orientation pour l'aménagement et le développement durable du territoire et portant modification de la loi no 95-115 du 4 février 1995 d'orientation pour l'aménagement et le développement du territoire, JORF n°148 du 29 juin 1999, page 9515.

FR, 2009. Investir pour l'avenir: priorités stratégiques d'investissement et emprunt national, rapport écrit par Alain Juppé et Michel Rocard, 128p, July 6th, Paris.

FR, 2010. « Rapport sur l'Agence de l'Environnement et de la Maîtrise de l'Énergie (Communication à la Commission des Finances du Sénat) ». 2010. Paris: Cour des Comptes, p. 12

FR, 2014a. La stratégie nationale de transition écologique vers un développement durable (SNTEDD), 2014-2020 : Avant-projet, Ministère de l'Écologie du Développement Durable et de l'Énergie, document de travail, 20 mars, Paris.

FR, 2014b. Projet de Loi relatif à la transition énergétique pour la croissance verte, NOR : DEVX1413992L/Bleue-1, Ministère de l'écologie, du développement durable et de l'énergie, 68 pp, Juillet, Paris, France.

FR, 2014c. Projet de Loi portant nouvelle organisation territoriale de la République, Ministère de la décentralisation et de la fonction publique, 138pp, Juin, Paris, France.

FR, 2014d. Appel à projets Territoire à énergie positive pour la croissance verte, Ministère de l'écologie, du développement durable et de l'énergie, 68 pp, Juillet, Paris, France.

FR, 2014e. Questions / Réponses - Appel à initiatives ,200 territoires à énergies positive pour la croissance verte', 3pp, Juillet, Paris, France.

Geoghan M., Powell F., 2009. Community development and the contested politics of the late modern agora: of, alongside or against neoliberalism? *Community Development Journal* 44(4), 430–447.

Giddens A., 1998. *The Third Way: The Renewal of Social Democracy*. Cambridge, Polity.

Giordano, V., Flavia G., Gianluca F., Manuel Sánchez J., Ijeoma O., Alexandru C., Ioulia P., Mengolini A., Alecu C., et Tauno O., 2011. Smart Grid projects in Europe: lessons learned and current developments ». Joint Research Centre Reference Reports 8. Available from (http://www.fvu-center.dk/sites/default/files/smart_grid_projects_in_europe.pdf) Gomart, E., Hennion, A., 1999. A sociology of attachment: music amateurs, drug users. In: Law, J. and Hassard, J. (eds.) *Actor Network Theory and After*. Oxford/Malden, MA: Blackwell Publishers.

Julian C., Dobson J., 2012. Re-energising our communities: transforming the energy market through local energy production. Lincoln, Respublica.

Labussière O., 2014 – under review. La performance énergétiques des bâtiments à l'ère des politiques européennes de démonstration. Le cas du programme Concerto et de la ZAC De Bonne (Grenoble, France). *Vertigo*.

Labussière O., Nadaï A., 2014. Unexpected Wind Power 'Potentials': The Art of Planning with Inherited Socio-Geographical Configurations (France), *Scottish Geographical Journal* 130(3), 152-167.

Latour, B., 2000. Fracture/Fracture. De la notion de réseau à celle d'attachement. In: Micoud, A., Peroni, M. (eds.) *Ce qui nous relie*. La Tour d'Aigues, Editions de l'Aube, 189-208.

Marres, N., 2007. The Issues Deserve More Credit: Pragmatist Contributions to the Study of Public Involvement in Controversy. *Social Studies of Science* 37(5), 811-820.

Marvin S., Guy S., 1997. Creating myths rather than sustainability: The transition fallacies of the new localism, *Local Environment: The International Journal of Justice and Sustainability*, 2(3), 311-318.

Middlemis, L., Parrish, Bradley D., 2010. Building capacity for low-carbon communities: The role of grass roots initiatives. *Energy Policy*, 38, 7559–7566.

Nadaï A., 2012. Planning with the missing masses: innovative wind power planning in France. In Szarka J., Cowell R., Ellis G., Strachan P. and Warren C. *Learning from Wind Power: Governance, Societal and Policy Perspectives on Sustainable Energy*. Palgrave.

Nadaï A., Debourdeau A., 2013. Actions, séquences, épreuves de transition dans les Crêtes Pré-Ardenaises (CCPA). In: Beslay C, Zélem, M.C. (eds), *La sociologie de l'énergie - Tome 1 « Gouvernance et concepts »*. Ed CNRS, Paris, 63-72.

Nadaï A., Labussière O., 2013. Playing with the line, channelling multiplicity – Wind power planning in the Narbonnaise (Aude, France). *Environment and Planning D* 31(1), 116-139.

Nadaï A., Labussière O., 2014. Communs paysagers et devenirs éoliens opposés, *Projets de paysage*. Available from http://www.projetsdepaysage.fr/fr/communs_paysagers_et_devenirs_eoliens_opposes) North P., 2011. Geographies and utopias of Cameron's Big Society. *Social and Cultural Geography* 12(8), 817-827.

O'Neill R., Nadaï A., 2012. Risque et démonstration, la politique de capture et de stockage du Dioxyde de Carbone (CCS) dans l'Union Européenne. *Vertigo* 12(1). Available from (<http://vertigo.revues.org/12172>).

Park Jung J., 2012. Fostering community energy and equal opportunities between communities, *Local Environment: The International Journal of Justice and Sustainability* 17(4), 387-408.

Poupeau F.M., 2000. Un néo-libéralisme centralisateur. Les collectivités locales dans la libéralisation du système électrique français. *Politiques et Management public* 18(2), 1-24.

Poupeau, F.-M., 2007. La fabrique d'une solidarité territoriale. Etat et élus ruraux dans l'adoption d'une péréquation des tarifs de l'électricité en France. *Revue française de science politique* 57(5), 599-628.

Purcell M., Brown J.C., 2005. Against the local trap: scale and the study of environment and development. *Progress in Development Studies* 5(4), 279–297.

Seyfang, G., 2010. Community action for sustainable housing: Building a low-carbon future. *Energy Policy* 38(12), 7624–7633.

Seyfang, G., Park, J. J., Smith, A., 2013. A thousand flowers blooming? An examination of community energy in the UK. *Energy Policy* 61(13), 977-989.

Seyfang, G., Smith, A., 2007. Grassroots innovations for sustainable development: Towards a new research and policy agenda. *Environmental Politics* 16(4), 584-603.

Walker, G., Devine-Wright, P., 2008. Community renewable energy: What should it mean? *Energy Policy* 36(2), 497–500.

Walker, G., Devine-Wright, P., Hunter, S., High, H., Evans, B., 2010. Trust and community: Exploring the meanings, contexts and dynamics of community renewable energy. *Energy Policy* 38(6), 2655–2663.

Yalçın-Riollet M., Garabuau-Moussaoui I., Szuba M., 2014. Energy autonomy in Le Mené: A French case of grassroots innovation, *Energy Policy*, In Press, <http://dx.doi.org/10.1016/j.enpol.2014.02.016>.

Figure 1: 2012 census, summary description of ten significant experiences in the field of climate-energy in rural France

Kayersberg (Alsace)	<p>Key words: citizen participation, wood energy, citizen-owned ReN capacities (PV power plant, wind farm).</p> <p>Key aspects:</p> <ul style="list-style-type: none"> • Remarkable wood energy achievements: 7 wood and gas boiler units, wood processing platform, heating network (871 kW) • Citizen engagement in the development of ReN capacities: individual PV and thermal solar panels; co-operative PV farm (first in France, 8kWc) and 5-turbine wind farm • Energy-savings: public lighting, communal buildings.
Tramayes (Bourgogne)	<p>Key words: wood boiler room, heating network, energy planning, public lighting, positive energy territory.</p> <p>Key aspects:</p> <ul style="list-style-type: none"> • Publicly owned and managed wood boiler unit and heating network: the municipality sells more heat from renewable energy sources than it consumes for its own buildings. • Reduction of the ‘energy bill’ (energy savings, energy efficiency, renewables). Demonstration based on the concrete case of public lighting. • Front-runner and leader on a local and regional scale, ‘Positive energy Territories’ meeting and regional call for projects.
Le Mené (Brittany)	<p>Key words: agriculture, agro-industry, cooperative, local development, energy self-sufficiency, 100% ReN.</p> <p>Key aspects:</p> <ul style="list-style-type: none"> • Variety of ReN developments: colza oil-mill, wood boiler unit and municipal heating network, methanization plant, co-operative wind farm, etc. • Ambition: 100% ReN and energy self-sufficient by 2030. • Innovative financial plans for energy projects including various actors (inhabitants, farmers, co-operatives, industrialists, etc.) • Singular context of Brittany: energy insularity; agro-industry, pig manure and nitrate pollution.
Val d’Ille (Brittany)	<p>Key words: transverse management /sustainable development; organic farming; short circuits/short food supply chain; wood energy/heating network; solar photovoltaic; ‘soft’ transportation; Covenant of Mayors; climate plan (GHG).</p> <p>Key aspects:</p> <ul style="list-style-type: none"> • Transversal governance, articulation between climate-energy issues and local development, articulation between local initiatives and institutional frameworks, • Installed ReN capacities, innovative (business) models.
Crêtes Pré-ardennaises (Champagne-Ardenne)	<p>Key words: participative democracy; territorial development; co-operative ReN</p>

	<p>Key aspects:</p> <ul style="list-style-type: none"> • Pioneer territory in the development of local wind power planning and charter. • ReN innovation model based on citizen participation / funding, supporting the gradual emergence of a co-operative ReN model in France. • Core role of participative democracy in the emergence of a local climate-energy agenda.
Pays de Figeac (Midi-Pyrénées)	<p>Key words: mutualisation, territorial development, bond agriculture-energy, collective park solar, agricultural cooperative.</p> <p>Key aspects:</p> <ul style="list-style-type: none"> • Projects of renewable energies like vector of a renewal of activity and a fixing of value on the territory; new trades to be adapted • Implication of the inhabitants and in particular of the agricultural sector: entry of the farmers into a new trade, start of a transformation of the role of the farmer, who from now on can see himself as an energy supplier • Mutualisation-like tool of mobilization and implication of the actors in the territory; facilitates the initial implication in the projects, limits the risk, increases the force of negotiation, and redistributes the profits.
Loos-en-Gohelle (Nord-Pas-de-Calais)	<p>Key words: eco-construction / eco-renovation, innovation cluster, RandD, 'pilot city towards sustainable development', citizen participation.</p> <p>Key aspects:</p> <ul style="list-style-type: none"> • coal industry legacy: unemployment, low-incomes, mining housing, massive environmental degradation, industrial infrastructures • 'pilot city', territorial reconversion towards sustainable innovation and RandD: network of actors and RandD clusters (CERDD, Cd2e, Ekvation cluster, life cycle analysis platform, national pole of competitiveness named 'TEAM'², a RandD test platform for solar energy 'Luminawatt', a training centre for eco-construction. • citizen participation.
Montdidier (Picardy)	<p>Key words: 'pilot city', energy efficiency, ReN projects, municipally owned and managed power grid and utility, 100% municipal wind farm</p> <p>Key aspects:</p> <ul style="list-style-type: none"> • Municipal control over local power supply and distribution grid, part of a local energy public utility • 'Pilot city' for energy efficiency, • ReN production revenues recycled into energy savings • Municipality aiming at energy autonomy and thereafter at becoming a positive energy territory. • Exemplary experience, yet having little coordination with departmental and regional climate-energy public policy devices

Pays Thouarsais (Poitou-Charentes)	<p>Key words: Climate-Energy Plan; agriculture; energy savings; renewable energies (PV, methanisation, wood-energy)</p> <p>Key aspects:</p> <ul style="list-style-type: none"> • Strategy articulated around a Climate-Energy Plan • Agriculture and the reduction of GHG emissions • Variety of public fundings (national, regional, EU) and variety of financial models
Biovallée (Rhône-Alpes)	<p>Key words: branding, European reference, sustainable development, regional support, Low Energy Building retrofitting (50KWh/m²/y).</p> <p>Key aspects:</p> <ul style="list-style-type: none"> • Regional integration and support (Rhône-Alpes Region), emblematic territory, sustainable development, 'rural Freiburg'. • Low Energy Building retrofitting, craftsmen collectives, experiments, standardisation / massification • Small wind power experiments, support to co-operative PV solar projects.

Figure 2: Dating of the apparent start of the ten significant experiences in the field of climate-energy in rural France

