



HAL
open science

The voluntary initiatives, “positive energy territory” and “positive energy territory for green growth”, first steps toward decentralization of the French energy system?

Blanche Lormeteau

► To cite this version:

Blanche Lormeteau. The voluntary initiatives, “positive energy territory” and “positive energy territory for green growth”, first steps toward decentralization of the French energy system?. Magali Dreyfus, Aki Suwa. Local Energy Governance. Opportunities and Challenges for Renewable and Decentralised Energy in France and Japan, Routledge, 2022., 2022. hal-03663034

HAL Id: hal-03663034

<https://enpc.hal.science/hal-03663034>

Submitted on 9 May 2022

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.

The voluntary initiatives, “positive energy territory” and “positive energy territory for green growth”, first steps toward decentralization of the French energy system?

Blanche Lormeteau

In order to overcome the various forms of energy dependence¹ (Debeir, Deléage and Hémery, 2013; CGDD, 2018) and the climate emergency, the resilience of territories (Walker et al., 2004; Mathevet and Bousquet, 2014), that is, their capacity to change while maintaining their identity (Mathevet and Bousquet, 2014), is essential. This ability to change, to absorb natural and anthropogenic disturbances, is based on a territory’s capacity to adapt and its ability to “make the transition”, that is, to transform itself. In this sense, a resilient territory is essentially based on two principles: systemic interactions (high level of modularity and diversity of its components – ecological, social, economic) and solidarity (within the territory and with neighboring territories) (Mathevet, 2012; Michelot, 2018).

The search for resilience is also based on the capacity of institutions to develop adaptive management coupled with collaborative management (Ostrom, 2010). In this sense, resilience is based on public control of institutional tools (Aykut and Evrard, 2017), public governance, understood as a “pluralist and interactive or negotiated approach to collective action” (Chevallier, 2003), and even, for the audacious theories, by citizen self-management of resources (Lagneau, 2013). Consequently, the resilience of territories deals with the management of all the resources (energy, economic, food, social, health, etc.) to foster adaptation to climate change.

From this initial questioning emerges a new methodology for apprehending local territories, that is, the ecological transition as a search for the most effective and efficient level of decision-making to fight and adapt to the climate emergency (Van Lang, 2018; Goujon and Magnan, 2018). Who knows best the resources and needs of the territory? Who can best influence the use of resources and the satisfaction of needs? At the very *least*, applied to energy, what underpins the ecological transition is the control, by local actors, of the energy flows and stocks of a territory, by means of planning and development documents, through local production and decentralized energy distribution and local energy governance.

French local initiatives such as “positive energy territories” (in French *Territoire à énergie positive*, TEPOS) and positive energy territories for green growth (*Territoire à énergie positive pour la croissance verte*, TEPCV) are part of this search for territorial resilience.

These two initiatives respond to parallel stories. The TEPOS were born in the 1990s from the will of a group of Breton farmers confronted with the phenomenon of green algae. They realized that this resource could be used for energy purposes, which would reduce the energy imports of their territory, thus reducing the energy and therefore economic vulnerability of these rural territories and managing one of the environmental consequences of pig farming. They started carrying out

methanation projects, which in the 1990s were only slightly developed or even unknown to local authorities (Riollet and Garabuau-Moussaoui, 2015).

Assessing the vulnerability of a territory is at the basis of the TEPOS approach and constitutes a first appropriation of the national energy objective at the local level, in this case, energy security.

As part of this search for energy security, the TEPOS approach is based first of all on the identification and integration of all the energy risks of a territory to guarantee its resilience. The approach is particularly new on this point and has a direct influence on the mode of governance of these territories. The following are thus identified as risks linked to the governance of energy, creating a vulnerability of the territory: industrial risks (accidents on production facilities – in particular, the nuclear industry and its waste, oil spills); climate risks (manifestations of climate disruption – extreme weather events, fires, loss of biodiversity, drop in agricultural production, etc.); health risks (air pollution and the consequences on health – premature death, chronic disease); and terrorist risks (cyber or physical attack) (TEPOS, institutional website; Nadaï et al., 2015).

Another general characteristic is that the TEPOS approach is neither regulatory nor standardized. It is a label, a brand, registered by CLER (Network for Energy Transition). No methodological tool is specifically associated with the TEPOS approach. Not being regulatory and corresponding to the delivery of a label, all types of territories can claim to obtain this label, such as intermunicipal groupings, *régions*, the Regional Natural Parks and so on, as long as they adhere to the main principles of governance of the label and that they carry ambitious energy objectives.

The TEPOS are gradually being integrated into the institutional landscape. This can be seen in the “TEPOS” earmarked funding, developed and supported by *régions* and public central institutions (Caisse des dépôts et consignation, ADEME, etc.). A minor legal recognition since the law on Energy Transition for Green Growth (Law ETGG) of 2015² is another sign of this recognition. It is therefore through funding that the TEPOS became visible at the national level, and this came with a certain recognition of their effectiveness.

Yet, wishing to rely on territories to meet the objectives of the national energy policy in the context of COP 21, the French legislator enshrined in law the concepts of “positive energy territory for green growth” (TEPCV). This new label corresponds to a program of actions labeled and financed by the state following a national call for events and is regularly confused with the TEPOS because they sound alike.

This interest in territories and the voluntarist aspect of these two initiatives are part of a national policy, which raises questions about the effectiveness and room for maneuver available to them to achieve the objectives of reducing energy needs as much as possible, through energy conservation

(or in French “*sobriété*”) and efficiency, and to cover them with local renewable energies (“100% renewable and more”).

Indeed, these two initiatives are born in a very particular context, that of a deconcentration, or even a functional decentralization,³ of energy and climate policies in France. Historically centralized and dominated by the sovereign power of the state, the French energy system has been organized around large production and distribution facilities⁴ (Debeir, Deléage, and Hémery, 2013; Poupeau, 2007; Lopez, 2019). The economic actors, few in number, were then subject to the structural choices of the state, which favored the forms and sources of energy allowing continuous production⁵ (Puisseux, 1978). However, the development of renewable energy sources, available in all areas (Petit, 2016), and the increasing introduction of issues relating to the fight against and adaptation to climate change are giving territories new challenges to take up (Marcou et al., 2015), which has resulted, under French law, in an increase in the competence of local players, with local authorities in the lead.⁶ Although a certain transfer of energy competences has been institutionalized, from the central state to local authorities, this contribution aims to answer the question of whether these local initiatives, the labeling of a territory, are also the marker of an even more effective decentralization of the French energy system?

The answer is positive. The TEPOSs are based on a radically innovative methodology, fully in line with the search for territorial resilience. Far from meeting strict specifications, this label corresponds to recovering local energy governance according to the needs, capacities and resources of the territory. Although this new type of governance is not welcomed by the state, the TEPOSs are at the heart of institutional and conceptual experiments that have been partially taken up by the legislature and the executive.

However, observation also shows the state’s refusal to allow the territories to completely take over energy issues, as the example of the methodology implemented within the framework of the TEPCV and the massive recourse to contractualization show.

Innovative rules of governance are not easily absorbed by the central level

The TEPOSs, in addition to the fact that they are mainly rural territories, are based on the will to create a virtuous local loop (TEPOS, institutional website), especially because the award of the label does not come with funding. So first they aim at a reduction in energy needs (energy conservation and efficiency), which makes it possible to generate savings. Second, thanks to the savings, they finance energy efficiency actions and the development of local renewable energy production plants so that all remaining needs are covered in the long term by local renewable energy sources (in production and import). In principle, it is through the reduction of needs that self-financing is created. However, of course, there is nothing to prevent the territories concerned

from seeking sources of funding to initiate virtuous approaches, creating the link with the funding promised by the TEPCV label.

From this virtuous loop, several guiding principles of the TEPOS governance are derived, which consist in the integration of the search for territorial resilience: energy neutrality; self-sufficiency; energy autonomy; “100% renewable energies” territory; territorial solidarity; and local energy democracy (TEPOS, institutional website).

While there is no single set of instructions for obtaining the TEPOS label, it is possible to identify four markers of recovery by the local level of energy governance: the notion of active subsidiarity; reasoning by flow; the strengthening of territorial engineering and the development of a network; and energy democracy.

The notion of “active subsidiarity” guarantees the territories freedom to choose the objectives to be achieved according to local potential and culture. These local objectives contribute to the satisfaction of national objectives, but local authorities determine them in line with national policies. From then on, the TEPOS takes over the existing tools and develops a real command of them. This way, the issues of home energy are integrated with those of food for people and livestock, and mobility, thus enabling them to work on all the factors of energy vulnerability. Therefore, legally defined planning tools such as PCAETs (Angot and Gabillet, 2015), and Agenda 21, whose normativity is weak (Lormeteau, 2020), become unavoidable instruments of the TEPOS approach by participating in the initial diagnosis and in the determination of objectives and actions very specific to the territory without being a mere variation of the national objectives. Moreover, TEPOS really questions the usually very technical approach of energy (production and distribution installations) to the benefit of a more flow-based methodology.

Flow reasoning is a particular methodology that allows the resilient management of a territory. TEPOSs do not develop an action program aimed at achieving, in an accounting way, an equal output between the production of renewable and local energy and consumption, which is more in line with national policy (SNBC, 2020). Rather, the TEPOS works on the energy flow of its territory, that is, it includes in its reasoning the exported productions and the imported consumptions. Thus, energy is not limited to the forms of energy produced and consumed, but also to the goods and services produced or imported on its territory. It is therefore an approach based on the territorial carbon footprint that can be developed dynamically.⁷ It includes: “Scope 1” emissions, generated by the production of goods and services (combustion sources, biomass); “Scope 2” emissions, necessary for this production (consumption of electricity or steam, heat and cold); and “Scope 3” emissions, related to activities upstream of production (purchase of products and services, upstream transport of goods, business travel).

This understanding of energy is gradually influencing national policies, taking into account the experimental role of the TEPOS and their progressive institutionalization. One example is the new obligations of companies with regard to their social responsibility, which implies an obligation to provide environmental information⁸ on the climate impact of the goods and services they produce (including abroad) (Mabile and de Cambiaire, 2019).

However, this institutionalization of the flow methodology remains very partial, as the integration of the experiments into ordinary law shows (*infra.*). There is an individualization of the energy issue rather than a synergy between all activities that can have an impact on the reduction of energy needs.

This is peculiar to French energy law, which remains a sectoral legal branch, piloted and determined at the central level (Terneyre and Boiteau, 2017; Sablière, 2016). It does not allow for a flow methodology. Thus, energy planning documents (SRADDET,⁹ SRCAE,¹⁰ PCAET, etc.) are still largely based on the satisfaction of national objectives that are not sufficiently broken down according to local characteristics and are still based on purely the accounting method, the effectiveness and efficiency of which is difficult to quantify¹¹ (Poupeau, 2013; CEREMA, 2018).

The reinforcement of territorial engineering and the development of a network is the third marker of the TEPOS methodology. The TEPOS governance is not only organized at the scale of the labeled territory but at the national level, through a network used as a basis for another pillar of these territories: training.

In fact, in order to take over all energy issues, particular attention is paid to the skill development of elected representatives and territorial agents by the constitution of real territorial engineering. Several modalities are promoted, such as the creation of a position of mission manager and the regular training of elected representatives and agents in energy issues (Nadaï et al., 2015). For example, the call for projects “TEPOS” of the Nouvelle Aquitaine region in 2017 included a proposal for project management assistance (AMO). It focused on the structuring of local energy governance to support the training of elected officials and the systematic introduction of energy-climate issues during the vote on budgets. It also provided for a technical AMO on the technical and legal training of elected officials on the conduct of renewable energy projects.

This training is combined with the pooling of tools for modeling energy choices and the provision of technical and technological support through a national and European network. The TEPOSs are members of the “100% RES community” network,¹² which federates the different initiatives carried out by territories throughout Europe in terms of energy transition. It aims at sharing experience through exchanges and study trips and contributes to developing a methodology through the

definition of common indicators. It also undertakes lobbying within the framework of the Covenant of Mayors.

The fourth and final key marker is that of “energy citizenship” (Calandri, 2015), that is, involving citizens in determining energy choices and participatory financing, understood in a broad sense. This mode of citizen participation was a major innovation of the TEPOS and has since been widely taken up by the legislator, acting on the state vision of the TEPOS as a field of experimentation.

TEPOS: fruitful experimentation grounds for a hesitant state

Local authorities and their groupings in France have a right to experimentation. This is allowed in specific situations (Stahl, 2010). The first arises from Article 37-1 of the Constitution, which provides that “laws and regulations may contain provisions of an experimental nature for a limited purpose and duration”; the second arises from the application of paragraph 4 of Article 72 of the Constitution (Fialaire, 2004; Conseil d'état, 2019), which allows local authorities to depart from the limitation of their powers by means of express legislative and regulatory provisions;¹³ the third results from more factual situations, when authorities with normative power make experiments within their jurisdiction, but without specific legislative or regulatory powers.¹⁴

In the field of energy, as previously presented,¹⁵ the territories have few direct responsibilities. They, therefore, develop experiments in other sectors, related to a block of local climate-air-energy policies, for which they are responsible since the adoption of the Grenelle laws in 2009 and 2010 (regional planning, development of local food and energy production sectors, energy performance of housing, mobility, etc.). At a later stage, the legislator and the executive power can validate their initiatives.

The first innovation is the very conceptualization, as of 2011, of the concept of “positive energy territory”, subsequently institutionalized in 2015 by the Law ETGG. Its first article states that:

A positive energy territory is a territory that commits itself to a process that makes it possible to achieve a balance between energy consumption and production at the local level by reducing energy needs as much as possible and respecting the balance of national energy systems. A positive energy territory must promote energy efficiency, the reduction of greenhouse gas emissions and the reduction of the consumption of fossil fuels and aim at the deployment of renewable energies in its supply.¹⁶

Focused on energy in the strict sense of the term (production and consumption), this definition has the merit of integrating in law the concept of a “positive energy territory” but it omits a key feature: the methodology of designing local public policies through flow. In this sense, the definition only partially takes up the methodology of resilience that drives the TEPOS, that is, the integration of all ecosystem resources. However, it is on the basis of this definition that policies related to TEPCVs

will be developed. Consequently, the legislator takes over a label created by local and regional authorities to specify a methodology of action, modifies its substance and makes it the reason for a new contractualization – between the state and the authorities – of public action. The territory is no longer the driving force, it is the state.

Another conceptual experimentation carried out by the TEPOS and then institutionalized by the legislator is the integration of the objective of carbon neutrality as a basis for local policies.

Adopted in 2007 by one of the pioneering TEPOS territories¹⁷ (CLER, 2010), carbon neutrality is now one of the guiding objectives of French energy law since the adoption of the 2019 Energy and Climate Law.¹⁸ If the international context also contributes to this legislative recognition,¹⁹ it is however interesting to note that the TEPOS territories had already used this concept to build their energy policy. It has been the basis of local clean energy and climate objectives, but also of the new tools, such as local climate currencies. Thus, the local policy of the La Rochelle conurbation community, on the basis of a local consortium,²⁰ developed “La Rochelle Territoire Zéro Carbone” at the end of April 2019. Drawing on its experience with TEPOS to carry out an innovative project redefining the land/ocean relationship, a policy of carbon offsetting has emerged as the preferred way to measure and then limit man's impact on the environment and preserve the quality of life. Offsetting is part of a local approach, with each emission from the territory having to be offset on the territory and is similar to a local currency.²¹ The consortium from La Rochelle thus aims to reduce the territory's carbon footprint by 30% by 2030 and to achieve complete carbon offsetting by 2040 in order to propose a virtuous model that can be replicated in other territories.

Another experiment that is now integrated, or even promoted in law, is the participatory financing and cooperative governance of projects for the production, and now consumption, of local renewable energy. Thus, from 2011, some TEPOSs include citizens (consumers or not) and a public body (consumer or not) in the capital of heat production installations²² (Lormeteau, 2014), then in the capital of wind and solar projects (Allemand and Dreyfus, 2017). Since the Law ETGG, the legislator has constantly opened up the possibilities for citizens and local authorities to enter into the capital of private companies producing renewable and local energy or to create their own public company (Fontenelle de, 2019). It has also created a dedicated label²³ and, above all, has accepted the notions of collective self-consumption²⁴ and a renewable energy community,²⁵ which implies local production and consumption of the energy produced (Lormeteau and Molinéro, 2018).

The TEPOSs also carry out more technological experiments. For example, based on their skills in land use and urban planning, many TEPOSs have experimented with the implementation of a solar cadastre.²⁶ This tool provides information on the solar potential of buildings, and the energy potential, and therefore the economic profitability of a solar thermal or photovoltaic system. They

are now one of the irrefutable conditions for obtaining the “Solar City” and “Solar Department” labels created as part of the government’s “Place Au Soleil” plan launched in June 2018; 100 territories should be labeled by 2020.²⁷

However, the real experimentation carried out is that of the governance of the TEPOS, which is only very partially acknowledged by the state, proof that the experiments carried out by the TEPOS do not lead to a real acceleration of the energy transition.

This governance by the flow, the increase in competence of elected representatives and territorial agents, as well as the integration of citizens in the decision-making process of the TEPOS, show that local authorities aspire to take over in the long term the issue of energy transition and the transformation of their territory into a resilient territory. The attempts of the state to capture the territorial dynamics through TEPCVs, and now energy transition contracts, are moving away from this innovative methodology, revealing the refusal of the state to proceed to an effective decentralization of energy governance and favoring a top-down energy territorialization alongside territory projects (Durand, Pecqueur, and Senil, 2015; Bailleul, 2019).

The state’s mistrust and the failure of the TEPCVs

The introduction by the Law ETGG of the concept of “positive energy territory” is coupled with a first attempt to institutionalize the TEPOS by creating a national and regulatory label: the TEPCV.

TEPCVs are defined as an action program focusing on reducing the energy needs of its inhabitants, buildings, economic activities, transport and leisure activities. Although their scope is similar to that covered by the TEPOS, except that TEPCVs focus on energy issues, their implementation method is fundamentally different. Indeed, in that case, the central government keeps under scrutiny local initiatives through a regulatory and contractual framework. In fact, the contractual technique is traditionally used to integrate, if not impose, national energy objectives at the subnational level.

To this end, the TEPCVs identify six priority areas for action: reducing energy consumption; reducing pollution and developing clean transport; developing renewable energies; preserving biodiversity; preventing and reducing waste; and environmental education.

All of these priority actions *ultimately* correspond to the application of existing law, in terms of its principles, tools and methods, and objectives. Consequently, the future contractualization is indeed a *top-down* approach and not a *bottom-up* one as in the case of the TEPOS. Through the funding granted by the TEPCV label, the state imposes and funds the effectiveness of national provisions and objectives at the local level; it decides which ones will be favored according to dedicated and time-limited calls for projects. As C. Guettier points out, contractualization makes it possible

to obtain the active collaboration of peripheral units in the implementation of priorities set by the central level, without the latter having to resort to coercion: in order to obtain financial

assistance from the State, peripheral units are led to adhere to its rationality, to internalise its standards and to take over its objectives on their own account. (Guettier, 2005)

Another characteristic of this top-down approach, to respond to the six priority areas of action, is that territories are labeled following a national call for projects, the criteria of which are not determined to respond to a local need, but in a general manner, with a view to adding up the results obtained in order to meet the objectives of the national energy policy. Thus, contrary to the TEPOS, which focus on the implementation of a new methodology in energy governance, TEPCVs are built around actions to be carried out in order to participate in “green growth”, which seems antinomic with respect to the principle of energy conservation (“*sobriété*”) defended by the TEPOS (Audrain-Demey, 2018).

Similarly, prerequisites were required: the existence of local engineering, a co-built territory project and as options: direct or delegated operational skills in terms of local ecological transition (transport, energy distribution, etc.). The prerequisite of the existence of local engineering capacity highlights the fundamental difference between TEPCV and TEPOS: consisting in financing actions to be carried out to satisfy long-term objectives, the accounting logic prevails in TEPCV rather than a long-term construction of local energy governance allowing the territory to deploy a resilient and adaptive policy to the evolution of its specific needs.²⁸

The proposals received for the first call for projects, covering the 2014–2016 period, unveil the state’s determination not to support territories in a genuine decentralization of energy governance, confining itself to financing “exemplary” and experimental actions. The call thus aimed to “Mitigate the effects of climate change and present ‘exemplary’ territories at COP 21”; “Encourage the reduction of energy needs and the development of local renewable energies”; “Facilitate the establishment of green industries to create 100,000 jobs over 3 years”; “Reclaim biodiversity and enhance the value of natural heritage”; “Show the leading role of territories in the energy transition”; “Create territorial dynamics”.²⁹ From a factual point of view, the call for initiatives was launched on 4 September 2014, 355 territories were TEPCV winners by 15 September 2016 in mainland France and overseas territories. The aid varied from €500,000 to €2,000,000 per winner (it comes from the €1.5 billion [over three years] energy transition financing fund). The labeled territories mainly develop targeted actions that are not necessarily correlated by a transversal vision of the energy issue. Thus, there is no global vision through the energy flow but on the objectives to be reached, and this is reflected in the actions proposed and financed. The majority correspond to actions of energy renovation and exemplary construction on the public heritage, followed by action on clean mobility, modernization of public lighting and the production of renewable energy. On the other hand, no participatory financing or civic service projects on energy transition have been

carried out, and very few on the fight against waste, industrial ecology or nature in cities (B&L évolution, 2017).

However, it should be noted that this call for projects for TEPCVs has enabled many TEPOS to obtain funding for the actions undertaken, without this funding necessarily influencing the governance and methodology adopted by the TEPOS label, as the two labels are not exclusive (CLER, 2017). Thus, and this is a short-term limitation of the TEPOS, the virtuous loop that should allow self-financing is not necessarily feasible in all territories. If it seems possible in small rural territories, however, it is more difficult to be effective in peripheral or urban territories, corresponding to a certain level of population density. Therefore, if territorialization is taking place, the state continues to support the approach through the financial support of TEPCV to TEPOS.

Yet, the TEPCVs are deemed to have failed, and the program is not renewed. During the debate on the 2019 Public Finance Law (PF Law), the government refused to open a new call for proposals for the TEPCVs. The content of the exchanges reveals a certain mistrust of the central state toward the territories, and more generally its willingness to change the method of financing local energy initiatives.

In this sense, via an amendment to PF Law,³⁰ “sustainable development and mobility” mission credits, some members of parliament (MP) wished to maintain the TEPCV mechanism by allocating part of the budget for this budgetary mission to the financing of “new generation” TEPCVs, and to that end, a “special fund for the ecological transition of the territories” would be created. C. Bouillon, MP, defended the amendment, emphasizing the role of local authorities:

Trust the municipalities, support them, give them the opportunity to revitalize positive energy territories [...] You will agree with me, Mr. Minister of State, that the success of the energy transition depends on the territories, i.e. on the mobilization of citizens and the emergence of projects in the fields of renewable energies, biodiversity and environmental education.³¹

As recommended by the principles of resilience and adaptability, which places territories at the heart of the success of the energy transition, the government did not seem to support this approach. Moreover, the response of the Minister of Ecology, Mr. de Rugy, reveals the central government’s reluctance toward local’s responsibility of energy policy:

Many local authorities are obviously taking initiatives in favor of the ecological transition, whether in the field of energy, transport or water. There is a simple reason for this: it is at the heart of their responsibilities as far as municipalities or inter-municipalities are concerned. [...] You know local authorities and territories well, and you know that we can always ask ourselves: was there a leverage effect – which allowed actions that would not have taken place otherwise – or a windfall effect – the financing of actions that would have taken place

anyway? This is why the government favors policies that support actions that are sure to have a leverage effect.

While the competences of local authorities are highlighted, it is the management of the financing of the actions that is criticized. This was taken over by the central state, even though, as the Court of Auditors pointed out, the difficulty does not come from the winners, but comes in particular from legal risks created by the state due to the combination of several state financial arrangements and the lack of dedicated funding provided for them (Court of Auditors, 2017).

The creation of ETCs: the end of a territorial approach to energy?

Based on a highly sector-based definition of the concept of “positive energy territory”, the TEPCV label developed by the state failed. It was replaced by a more usual contractual logic for public energy action, the energy transition contracts (ETC). This new tool puts aside the idea of energy decentralization in favor of the state control of energy territorialization, which goes against the spirit of the resilience methodology.

The ETC mechanism is not intended to respond to a local energy governance issue and is an act of a reinforcement of the contractualization of the national energy policy combined with a certain withdrawal of the central state to the benefit of private actors and operators. However, this disengagement is only financial; the balance of local energy policy always responds to the same “recipe [...]: that of a dish whose content and flavor is determined solely by the State, in the name of its unitary character” (Kada, 2019).

The ETCs, like the TEPCVs, are the result of a national call for projects (in 2018 and 2019). They have two characteristics: they rally around all the stakeholders in the ecological transition, particularly associations and businesses – thus, perpetuating an actor-driven approach; they are built on local solutions, supported by stakeholders in the field. The Minister of State for Ecology, E. Wargon, stated that “The ecological transition contract illustrates the method desired by the government to support the territories: a co-construction with elected representatives, businesses and citizens who are betting on an ecological transition that will generate economic activities and social opportunities”.

The objectives assigned to them are as follows:

- 1) Demonstrate through action that ecology is a driving force of the economy, and develop local employment through ecological transition (structuring of sectors, creation of training courses);
- 2) Act with all the actors in the area, both public and private, to give concrete expression to ecological transition;
- 3) Provide operational support in situations of industrial conversion of an area (vocational training, site conversion).³²

The stated objectives seem to discover the role of the territory. The state again promotes an operational and not institutional approach. It does not commit itself financially. The contractualization allows, for him, on the one hand, to promote the emergence of public/private financing, and on the other hand, to allow the realization of “concrete” actions in an accounting logic opposed to the governance by the flows of TEPOS. In this sense, the contracts are evolutionary: they can integrate new actions as the initial actions are carried out. Consequently, the “vector of interventionist policy” in terms of ecological transition remains a tripartite contract, under the control of the state (Kalflèche, 2018).

Territorialization therefore no longer involves public actors but private funding, the “local” character of which is neither required nor encouraged. With regard to the first contracts concluded, it is observed that the large private, national or international companies are the first partners, far from favoring the emergence of a local sector in this sense.

In the same way, if some of the contracts concluded include training actions,³³ in conformity with one of the key features of the TEPOS methodology, it should be underlined that they are not part of an interactional dynamic of the resilient management of a territory. In this sense, they remain embedded in their sector by intervention themes: agriculture, industry, energy production, demand management and so on, and the actions currently presented in the contracts are more akin to the financing of specific projects than to a real local governance of energy flows.

Conclusion

The two territorial initiatives, the TEPOS and the TEPCV, and in the future the CTE, are linked together but are not part of the same approach.

Although the two respond to different governance logics, each shows the importance given to the territory to meet the objectives of the national energy policy. The invocation of such a territorial force is indicative of a profound movement toward decentralization of energy management.

However, on the issue of decentralization of governance, the conclusion is different. Thus, the TEPOS network claims a territorialized, social and solidarity approach to energy issues, whereas the TEPCV is organized around issues of promoting exemplary actions and supporting “green” public procurement.

Thus, if they promote a long-term vision on energy in the territories: “more sober and more economical” for TEPCV, “100% renewable and more” for TEPOS; only the TEPOS can really territorialize the energy issue, thanks to a governance based on the control of local engineering. The TEPCVs are more exemplary *one-shot* actions.

In the same way, TEPOS and TEPCV are both promoting dialogue between local authorities and other actors. However, only the TEPOS is based on a network of territories working together,

whereas TEPCVs are managed by the ministry, which created a “club” and managed a platform of presentation of the actions – a methodology moreover taken up for the CTEs.

Similarly, both initiatives take energy out of its usual analytical framework, the environment, to place it in a systemic dimension and promote the economic and social benefits of the energy and ecological transition. But where the TEPOSs develop a “local development” approach, the TEPCVs call for “green growth”. However, green growth is based more on an accounting and market logic, and not on a flow analysis based more broadly on the incorporation of all internalities and externalities – including social ones – likely to develop a real resilience of territories to the challenges of fighting and adapting to the climate emergency.

Therefore, the TEPOSs are formidable vectors of innovation and technical and institutional experimentation and are in this sense true markers of the decentralization of energy management. However, because the objectives of energy policy are governed by law and because the funding provided by the state only covers sectoral actions, and not considering the transformation and ecological transition of territories by integrating resilience as a guiding principle of local policies, the decentralization of energy governance remains partial. However, any transition, particularly in the energy sector, means a readjustment of the democratic fabric, which has both material and cultural implications (Rumpala, 2015). While the former seems to find an echo in centrally led systems, the cultural transformation required for resilience through decentralization of the energy transition has not yet been achieved.

References

1. Allemand, R. and Dreyfus, M. (2017) ‘Les collectivités territoriales et l’énergie à la lumière de la loi transition énergétique pour la croissance verte’, *Mélanges en l’honneur du professeur Gérard Marcou*, IRJS Éditions, Paris: pp.55-67.
2. Angot, S. and Gabillet, P. (2015) ‘Pour une sociologie de la gouvernance politico-administrative interne des questions d’énergie-climat’, in Zélem, M.-C. and Beslay, C. (eds) *Sociologie de l’énergie. Gouvernance et pratiques sociales*. Paris: CNRS ed. 2015, pp. 117–124.
3. Audrain-Demey, G. (2018) ‘Une méthode contemporaine pour un concept vieillissant : transition écologique et développement durable’, in Van Lang, A. (ed.) *Penser et mettre en oeuvre les transitions écologiques*. Paris: Mare et Martin, pp. 63–75.
4. Aykut, S. and Evrard, A. (2017) ‘Transitions énergétiques et changements politiques’, *International Journal of Comparative Politics*, 24(1–2), [online].
5. B&L évolution (2017) *TEPCV: Effet de levier ou rendez-vous manqué?* Paris: [online]. This study, carried out by a private firm, is to our knowledge the only freely accessible assessment of the TEPCV experimentation.
6. Bailleul, E. (2019) ‘Le territoire et ses acteurs, fragile pilier de la transition énergétique française’, *Revue internationale et stratégique*, 113(1), pp. 107–117.
7. Calandri, L. (2015) ‘Les citoyens dans la gouvernance énergétique: “libre choix”, “débat public”’, in Marcou, G., Eiller, A.-C., Poupeau, F.-M. and Staropoli, C. (eds) *Governance and innovations in the energy system. New challenges for local and regional authorities?* Paris: L’Harmattan, pp. 151–170.
8. CEREMA (2018) *Bilan national des SRCAE - rapport pour la DGEC*, Paris: [online].
9. CGDD (2018) *Bilan énergétique de la France pour 2018*, Paris: [online].

10. Chevallier, J. (2003) 'La gouvernance, un nouveau paradigme étatique?', *RFAP*, 1, p. 203.
11. CLER (2010) 'Vers des territoires à énergie positive', *Synthèse de l'Assemblée Générale*, Lyon, 6–28 May 2010.
12. CLER (2017) *Pratiques méthodologiques des territoires à énergie positive*, Paris: [online].
13. Conseil d'état (2019) *Les expérimentations: comment innover dans la conduite des politiques publiques?*, Paris: Les études du Conseil d'état, [online].
14. Court of Auditors (2017) *Note d'analyse de l'exécution budgétaire*, Paris: [online]: "Funding for territories with positive energy for green growth (TEPCV) for the benefit of local and regional authorities represents 87% of cumulative commitments and 62% of cumulative payments. It also represents 95% of the outstanding balance".
15. Debeir, J.-C., Deléage, J.-P. and Hémerly, D. (2013) *Une histoire de l'énergie: les servitudes de la puissance*, Flammarion, coll. Paris: Nouvelle bibliothèque scientifique.
16. Durand, L., Pecqueur, B. and Senil, N. (2015) 'La transition énergétique par la territorialisation, l'énergie comme ressource territoriale', in Scarwell, H.-J., Groux, A. and Leducq, D. (eds) *Transitions énergétiques: quelles dynamiques de changement?* Paris: L'Harmattan, Colloques et rencontres, pp. 211–222.
17. Fialaire, J. (2004) 'Le droit à l'expérimentation des collectivités territoriales et la subsidiarité: les apparences et les 'faux-semblants' d'une prétendue territorialisation des normes', in Fialaire, J. (ed.) *Subsidiarité infranationale et territorialisation des normes*. Rennes: PUR, p. 11.
18. Fontenelle de, L. (2019) 'Les communautés énergétiques', *EEI*, 8–9, p. 29.
20. Goujon, M. and Magnan, A. (2018) 'Apprehender la vulnérabilité au changement climatique, du local au global. Regards croisés', Paris: Ferdi-Iddri working paper, P215.
19. Guettier, C. (2005) 'Quel avenir pour les contrats de plan Etat-régions?', *RLCT*, 4, p. 30.
21. Kada, N. (2019) 'Etat et collectivités territoriales: (petite) cuisine et (grandes) dépendances', *AJDA*, pp. 2423-2429.
22. Kalfèche, G. (2018) 'Contractualisation et interventionnisme économique', *RFDA*, 2, p. 214.
23. Lagneau, A. (2013) 'Ecologie sociale et transition. Interview avec Vincent Gerber', *Mouvements*, 3, p. 77.
24. Lopez, F. (2019) *L'ordre électrique, Infrastructures énergétiques et territoires*. Genève: METISPRESSES.
25. Lormeteau, B. (2014) *L'énergie thermique et son droit*, thesis, University of Nantes.
27. Lormeteau, B. (2020) 'Contentieux nationaux de la planification climatique', in Torre-Schaub, M. (ed.) Lormeteau B. (coll.), *Les contentieux climatiques. Dynamiques en France et dans le monde*. Paris: Mare et Martin, pp. 381-398.
26. Lormeteau, B. and Molinéro, L. (2018) *Autoconsommation collective et stockage de l'électricité. Etude juridique*, Research report, Paris: ADEME.
28. Mabile, S. and de Cambiaire, F. (2019) 'L'affirmation d'un devoir de vigilance des entreprises en matière de changement climatique', *EEI*, 5, p. 21.
31. Marcou, G., Eiller, A.-C., Poupeau, F.-M. and Staropoli, C. (eds) (2015) *Governance and innovations in the energy system. New challenges for local and regional authorities?* Paris: L'Harmattan.
29. Mathevet, R. (2012) *La solidarité écologique. Ce lien qui nous oblige*. Arles: Actes Sud.
30. Mathevet, R. and Bousquet, F. (2014) *Résilience et environnement. Penser les changements socio-écologiques*. Paris: Buchet/Castel.
32. Michelot, A. (2018) 'La solidarité écologique ou l'avenir du droit de l'environnement', in Misonne, D. (ed.) *À quoi sert le droit de l'environnement? Réalité et spécificité de son apport au droit et à la société*. Brussels: Bruylant, pp. 27-45.
33. Nadaï, A., Debourdeau, A., Labussière, O., Régnier, Y., Cointe, B. and Dobigny, L. (2015) 'Les territoires face à la transition énergétique, les politiques face à la transition par les territoires?', in Laville, B., Thiébault, S. and Euzen, A. (eds) *Quelles solutions face au changement climatique?* Paris: CNRS éd., pp. 19-36
34. Ostrom, E. (2010) *La Gouvernance des biens communs*, 1st edn. Paris: De Boeck.

35. Petit, Y. (2016) 'Le droit international de l'environnement à la croisée des chemins: globalisation versus souveraineté nationale', *RJE*, 1, pp. 31–55.
36. Poupeau, F.-M. (2007) 'La fabrique d'une solidarité nationale. Etat et élus ruraux dans l'adoption d'une péréquation des tarifs de l'électricité en France', *RFSP*, 57, pp. 599–628.
37. Poupeau, F.-M. (2013) 'Quand l'État territorialise la politique énergétique. L'expérience des schémas régionaux du climat, de l'air et de l'énergie', *Politiques et Management Public*, 30(4), pp. 443–472.
38. Puiseux, L. (1978) 'EDF et la politique énergétique', *Après-demain*, 202–203, p. 19.
39. Riollet, M.Y. and Garabuau-Moussaoui, I. (2015) 'L'énergie fait-elle communauté en France? Le cas de la démarche d'autonomie énergétique du Mené', in Zélem, M.-C. and Beslay, C. (eds) *Sociologie de l'énergie. Gouvernance et pratiques sociales*. Paris: CNRS ed., p. 175.
40. Rumpala, Y. (2015) 'Formes alternatives de production énergétique et reconfigurations politiques. La sociologie des énergies alternative comme étude des potentialités de réorganisation du collectif', in Zélem, M.-C. and Beslay, C. (eds) *Sociologie de l'énergie. Gouvernance et pratiques sociales*. Paris: CNRS ed., p. 41 et seq.
41. Sablière, P. (2016) 'La transition énergétique dans les territoires', *JCP A*, n°42, [online].
42. SNBC (2020) *La transition écologique et solidaire vers la neutralité carbone*, Paris: [online].
43. Stahl, J.H. (2010) 'L'expérimentation en droit français: une curiosité en mal d'acclimatation', *RJEP*, n° 681, Décembre 2010, étude 11
44. TEPOS, <http://www.territoires-energie-positive.fr/>
45. Terneyre, P. and Boiteau, C. (2017) 'Existe-t-il un droit de l'énergie?', *RFDA*, 3, p. 517.
46. Van Lang, A. (eds) (2018) *Penser et mettre en oeuvre les transitions écologiques*. Paris: Mare et Martin.
47. Walker, B., Holling, C.S., Carpenter, S.R. and Kinzig, A. (2004) 'Resilience, adaptability and transformability in social-ecological systems', *Ecology and Society*, 9(2), p. 5.

- 1 Understood as an extreme dependency that affects the autonomy of a community. The first form of dependence is ecological, i.e., a dependence on exhaustible fossil sources whose production, transformation and distribution methods generate GHGs. It can also be observed through the destruction of ecosystems, the search for fossil energy sources compromises their capacity to ensure all ecological functions and ecosystem services. The second form of dependence is geopolitical. The energy system is highly dependent on the stability of the places where fossil fuels are captured and distributed. The third form is economic, revealed by the energy intensity rate corresponding to the energy dependency ratio, i.e., the ratio between the country's energy consumption and its gross domestic product. Energy dependence is also recognizable by the lack of diversity of the preferred forms of energy, creating technical and technological dependence; France's energy intensity was 46.4% in 2018.
- 2 Art. 1, Law No. 2015-992 of 17 August 2015 on energy transition for green growth.
- 3 "Deconcentration" is a French technique for administering territory, allowing the state to exercise its authority from the center to the local constituencies within which the decentralized services responsible for representing it are located; "functional decentralization" means a transfer of powers from the state to a public authority with specialized competence.
- 4 In France, the electricity, gas and oil sectors are organized around transport routes developed uniformly thanks to the unification of the regions toward a central state.
- 5 The 1974 Messmer Plan in the French nuclear sector.
- 6 See Chapters 1 and 3.
- 7 As recommended in a very innovative way by ADEME:
<https://www.bilans-ges.ademe.fr/fr/accueil/contenu/index/page/Bilan%2BGES%2BTerritoires/siGras/0>
- 8 Art. L. 225-102-1 of the Commercial Code.
- 9 Art. L. 4251-2 of the CGCT.
- 10 Art. L. 222-1 of the Environmental Code.
- 11 The SRADDET takes into account the National Low Carbon Strategy, it is true that the SRADDET, because of this simple report, seems to be a document that intensifies the decentralization of energy-climate policies; the SRCAE is an orientation and objective document, so it has no direct effect on individuals. In particular, the scheme sets out the regional guidelines at the level of the regional territory and by 2020 and 2050 for mitigating and adapting to the effects of climate change, in accordance with the national objectives set out in the Energy Code. The objectives of the PCAETs are compatible with the guidelines of the SRCAE, and therefore, compatible with the national objectives.
It should be noted, however, that ADEME has taken over and made available more comprehensive calculation tools and methodology, see, in particular, the single climate, air and energy reference system resulting from the merger of the Cit'ergie and Climat Pratic tools, combining ambitious levels of local objectives and actions determined according to a thematic, cross-cutting and progressive methodology (<https://www.territoires-climat.ademe.fr/>).
- 12 <http://www.100-res-communities.eu/>
- 13 Art. L.O. 1113-2 of the CGCT.
- 14 CE, 15 June 2007, *Centre d'éducation routière Gargan gare et autres*, n° 284773.
- 15 See Chapters 1 and 3.
- 16 Art. L. 100-2 of the Energy Code.
- 17 Thouarsais Community of Communes, within the framework of the Local Climate Initiative Contract concluded between the territory, ADEME and the region.
- 18 Art. 1, Law No. 2019-1147 of 8 November 2019 on energy and climate; Art. L. 100-4 of the Energy Code.
- 19 Art. 4 of the Paris Agreement; IPCC, *Global Warming of 1.5°C*, 2018; European Commission, *A Clean Planet for All: A Strategic Long-Term European Vision for a prosperous, modern, competitive and climate-neutral economy*, COM/2018/773 final.
- 20 The Urban Community, the City of La Rochelle, the University, Altantech, Port Atlantique and 130 other private partners (<https://www.agglo-larochelle.fr/>).
- 21 See also the Community of Thouarsais Municipalities, see <https://www.thouars-communaute.fr/compte-CO2>.
- 22 As thermal energy is not transported over long distances, its management by a heating network is traditionally a local competence, thus demonstrating the willingness of territories to make full use of the competences allocated by law.
- 23 <https://www.ecologique-solidaire.gouv.fr/label-financement-participatif>.
- 24 Art. L. 315-2 of the Energy Code.
- 25 Art. L. 211-3-2 of the Energy Code.
- 26 v. the proceedings of the 7th national meeting on *Energy and rural territories, towards positive energy territories*, Grand Figeac, 28 September 2017 (<http://www.territoires-energie-positive.fr/echanger/rencontres-nationales/rencontres-nationales-2017/deploiement-du-solaire-generaliser-le-developpement-du-solaire-sur-un-territoire-identifier-et-equiper-les-surfaces-propices>); for an example, see the solar cadastre of the communities of communes and the Terres de Lorraine country (<https://www.terresdelorraine.org/fr/cadastre-solaire.html>).
- 27 At the time of writing, no progress report on the implementation of this Plan has been provided by the government.
- 28 Note that the instruction of 26 May 2015 on the implementation of special agreements for positive energy territories for green growth, NOR: DEVK1511837J, BO min. Envir. n°2015/10, 10 June 2015 simply provides for the commitment of the winner "a) to designate a referent elected representative who will be the guarantor of the

approach; b) to set up a project team led by a project manager at the territory level”.

29 *Call for projects for positive energy territories for green growth*, 4 September 2014.

30 Amendment n°II-243, FDP for 2019 (n° 1255).

31 AN, XVth Legislature, Ordinary Session of 2018–2019, Full Report, First sitting of Monday 5 November 2018, discussion of the second part of the draft budget bill for 2019 (Nos 1255, 1302).

32 <https://cte.ecologique-solidaire.gouv.fr/>

33 See the contract concluded by the territory of the Haute Côte-d’Or (<https://www.actu-environnement.com/ae/news/quatrieme-contrat-transition-ecologique-agriculture-32591.php4>).