Collective experiences, energy and sustainability in North America? Between myths and reality: the case of Caroline Town

¿Experiencias colectivas, energía y sustentabilidad en Norteamérica?
Entre el mito y la realidad: el caso de la ciudad de Carolina

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Abstract

Current discourses on the exploitation of energy sources, sustainability, and the possibility to keep increasing production and growth in global advanced capitalism are embedded within the neoliberal geopolitics of the energy-military-industrial-complex and generate social conflicts around the dominant dynamics of capitalist exploitation of human and environmental energy resources.

Exploring this issue, in this article, I report the experience of 'Energy Independent Caroline Town' as the pilot case of a broader research project of 18 month between Calabria (Italy) and US. Trying to understand critical aspects, reasons and self-narrations for defining as a 'success' or a 'failure' a local energy transition initiative, I looked at this experiment, which is considered in literature and by most of the participants as a case of successful communitarian energy transition, bringing attention to the participation of inhabitants in energy sustainable local plans.

Thus, considering participation as the key dimension for successful initiatives of local energy transition, the main questions that organize the work are: 'who decides' in local energy policy, and can 'the local' decide its own energy independency'? What can enable the local to decide its own energy autonomy and so, like little David(s), try to fight, and even break free of, giant Goliath(s)?

Keywords: Collective Experience; Sustainability; Biopolitics; Energy.

Resumen

Los discursos actuales sobre la explotación de fuentes de energía, la sustentabilidad, y la posibilidad de continuar incrementando la producción y el crecimiento en el capitalismo global avanzado están en desacuerdo con la geopolítica neoliberal del complejo industrial-militar-energético y los conflictos sociales en torno a las dinámicas capitalistas dominantes de explotación del hombre y los recursos energéticos ambientales.

Explorando este tema, en este artículo, informo la experiencia de 'Energía Independiente de la Ciudad de Carolina' como el caso piloto de un proyecto de investigación más amplio de 18 meses entre Calabria (Italia) y Estados Unidos. Tratando de entender los aspectos críticos, las razones y auto-narraciones para definir como un "éxito" o un "fracaso" a una iniciativa local de transición energética, miré a este experimento, que se considera en la literatura y por la mayoría de los participantes como un caso de exitosa transición energética comunitaria, subrayando la participación de los habitantes en los planes locales de energía sustentable.

Por lo tanto, teniendo a la participación como la dimensión clave para iniciativas exitosas de transición energética local, las principales preguntas que organizan el trabajo son: ¿'quién decide' en la política energética local, y puede 'lo local' decidir su propia independencia energética'? ¿Qué puede permitir al local decidir su propia autonomía energética y por lo tanto, al igual que el pequeño David, tratar de luchar, e incluso liberarse del gigante Goliat?

Palabras clave: Experiencia Colectiva; Sustentatibilidad; Biopolítica; Energía.

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Introduction

Since the 1970s, the discourses on the exploitation of energy sources, sustainability, and the possibility to keep increasing production and growth in global advanced capitalism have become 'cult' themes, very often, without arriving at a compelling vision of what has been defined as energy transition. There are many competing interests on the global geopolitical chessboard; interests that fuel wars, thinking of what happens in the Middle East and the numerous devastations, as in the case of fracking from North to the southern American countries. To cope with the interests of powerful lobbies, multinationals and states we 'find' environmental and ecologist social movements that, like little David(s), armed just with slingshots, are trying to break free of giant Goliath(s).

Although limited to two very different geographical areas, Calabria, in the South of Italy, and the State of New York in North America, particularly to the region of Upstate New York, my research had the ambition to understand more about the big issue of energy and its rapport with life and production, in general. Here, I do not report the case of Calabria, a Southern region, with about two million inhabitants, very rich in resources – hydro, wind, sun – for energy electricity, which, however, despite the possibility of welfare, from it does not derive great benefits for Calabrese people.

On the other hand, the situation in North America is very different from Calabria, this, of course, in terms of territorial scale, culture, history, etc. Nevertheless, starting with where I come from, in this research the first questions I asked myself are: in what sense can we speak of energy sustainable independence and rural development at the local level? What cases can we look at and what information can we gather? And, moreover, how much of the question of 'energy sustainability' is the result of an instrumental rhetoric to ensure that '*If we want things to stay as they are, things will have to change'*, like in *The Leopard* novel (Tomasi di Lampedusa,1988)? If capitalism continues to march briskly, imposing lifestyles and consumption and the ways of production, how can such small communities fight against Goliath? How can people from Calabria to North and South America free themselves from the domination of capital?

In this framework, the other issue concerns academic 'territories' and knowledge-power institutions (Foucault 1993). In my research work I spent 8 months at Cornell University, which has, since its building in 1878, had a central role in the reproduction of models of 'rural development' in Upstate NY. Meantime, it receives millions in funding on the themes of research that I'm conducting, even from petrol and shale multinationals, who are 'happy' to finance (research on) social engineering experiments of energy sustainable transition at a local level. These structural contradictions, this experience has helped me to understand how, despite the often passionate interest in research of individuals, remains the fact that business, in the end, the interests of multinationals prevail and, currently, in the combination of a neoliberal knowledge regime and a phase of capitalist primitive accumulation, universities are territories to be freed too, from the adherence to a corporative approach.

Thus, following these trajectories, in this paper, I report a summary of the research work about '*local energy independency, sustainability and rural development'*, carried out from November 2013 to April 2015.

Reconstructing the broad debate on *a)* efficiency of local energy production, consumption and conservation, the interconnected discourses and narratives on *b)* the current 'alternative' models of (rural) development, and their focus on *c)* environmental protection and community

sustainability, the use, production and conservation of energy through renewable sources seems to absorb most of the imaginative horizons of social change, in this phase of crisis. This is noticeable on the local and global dimension, agenda and plans of energy and environmental *governance*, but it seems to be particularly evident within territorial communities. Previsions and horizons of (financial, energy, economic, state, labor, environmental, social, political, etc.) 'crisis' and sustainable development nurture each other and grow in direct proportion: the second as a mirror of the first. Schizophrenically, on the one hand, we hear talk, in several media demonstrations of governments, of arenas and decision tables of international organizations, as well as in plans for regional and local development, about reducing global consumptions, strategies of energy efficiency, and invoking, in some cases, approaches and terminology associated with the concept of *degrowth* (Latouche, 2008); and, on the other hand, neoliberal biopolitics continuously claims to be engaged in policies able to boost economic recovery, through consumptions, in various sectors, from cars, with national and private incentive systems, to technological products, etc.

Exploring the relation between *Energy and equity*, Ivan Illich took into account the normative notion of crisis in capitalist societies and, particularly, the question of energy crisis. The book was published in 1974, in the middle of the 1970s problems.

> It has recently become fashionable to insist on an impending energy crisis. (...) it is urgent to clarify the reality that the language of crisis obscures: high quanta of energy degrade social relations just as inevitably as they destroy physical milieu. The proponents of an energy crisis confirm and continue to propagate a peculiar vision of man. According to this notion, man is born into prolonged dependence on slaves which he must painfully learn to master. If he does not employ prisoners, then he needs motors to do most of his work. According to this doctrine, the well-being of a society can be measured by the number of years its members have gone to school and by the number of energy slaves they have thereby learned to command. This belief is common to the conflicting economic ideologies now in vogue. It is threatened by the obvious inequality, harriedness and impotence that appear everywhere once the voracious hordes of energy slaves outnumber people by a certain proportion. The energy crisis focuses concern on the scarcity of fodder for these slaves. I prefer to ask whether free men need them (Ilich 1974:3-4).

Bringing attention to Illich's rhetoric of crisis allows highlighting as the "policy of scarcity" represents the strongest alibi for reproducing (the increasing) inequity in western countries and within the current global neoliberal regime. The author, through the example-paradigm of our system of transport, has underlined how not everyone can afford to consume such high amounts of energy which our societies instead insist on producing.

In fact, in the last two years, stressing this obscurant rhetoric of scarcity, this has been more visibly reversed: while, for decades, the sustainable development idiom is invoked in world politics showcases, however, on the one hand, in 2014-2015, global oil consumption - as well as the consumption of natural gas and other fossil fuels - has reached a new record level of 92.7 million barrels of oil a day. At the same time,

> (...) the 2014 hydrocarbon oversupply. 2015 probably as well, and both and a few years to come as years of competition between producers to maintain or increase market share. The paradigm of scarcity (as competition among consumers for access to the resource) is reversed; and 'markets' became largely synonymous with 'Asia' (Nicolazzi in Verda, 2014:3).

While, in 2014, the richest 1% of the world's population owned 48% of global wealth, leaving just 52% to be shared between the remaining 99% of individuals, where almost all of that 52% is held by people within the richest 20%, leaving only 5.5% to the remaining 80% of people.

At these chafing intersections, territorial and environmental conflicts, struggling processes of social change and attempts by municipalities and communities to overcome the current model of development based on the dependence on fossil fuels appear as a prominent scenario, in several contexts globally. This scenario is the background to this research, where the general goal has been to document experiments of sustainable energy transitions, reporting, in this paper, particularly, the

experience of Independent Caroline Town (Tompkins County, NY) as pilot case of a broader research of 18 months in 'southern and north-western countries'.

Looking at the ways in which residents, citizens and, more generally, inhabitants are involved in decisions of energy independence relating to a different use of the land, starting from a change in their energy strategies, the main general questions which organize this work are: who decides local energy policy? Through what kinds of social conflicts? How much, effectively, do the local population and municipalities participate in the processes of energy transition we consider?

1. Who decides? *Municipal* and *Corporative* approaches between energy independency pathways and local conflicts in Upstate NY

It is impossible, here, to give a comprehensive reconstruction of the neoliberal geopolitics of the energy-military-industrial-complex and the social conflicts around the dominant dynamics of capitalist exploitation of human and environmental energy resources. Nevertheless, I try to report the main aspects emerging in this research regarding the question of 'who decides' in a local context in the matter of energy plans – and inside this, 'can the 'local' decide its own energy independency?'

In the specific literature on the regional agricultural and energy development of the area of Upstate NY (Lindabury, Schmit, Howe, and Tania Schusler, 2007; Morris, George, 2011; Kay, 2012; Blair, 2011, 2012), most of the analyses find that *municipalism* and *corporative* approaches are mixed together within the definition and realization of projects and the implementation of energy transitions, in dynamics of fracking bans and, thus, in the formation of alternative proposals to the domain of shale and petrol.

About this first point, municipalism and corporative approaches, in the materiality of the processes of conflicts between inhabitants' needs and private interests, in local energy independency pathways, are revealed to be mixed. However, at the same time, the tendency towards a model of municipal energy approach, rather than a prevalence of corporative subjects and characteristics, are taken as variables on which reporting local cases of success or mere private colonization of the renewable energy regional market. This suggests that the categories

of '*municipalism*' and '*corporatization*' are taken into account in order to schematize how local participation is considered, treated and approached in the sustainable energy independence initiatives proposed in this work. Moreover, in the tangled social relationships and communitarian textures of these territories, these pathways of sustainable development and the current spreading of renewable energy local adventures and models are, very often, both the product of a corporative approach to the territory, in the expansion of new and growing enterprises, and municipal efforts to pursue and achieve sustainable communities, and energy efficiency.

It is worth noting that most wind power projects are not planned, operated, and owned by communities. A common model in the U.S. is the corporate owned wind farm, where large energy corporations approach landowners and municipal governments to enter into contracts to build wind turbines on private land. In Lewis County, 195 wind turbines have been built as part of the Maple Ridge Wind Farm. PPM Energy and Horizon Wind Energy make payments of $6,000-$10,000 per turbine per year to landowners in exchange for the right to construct the turbines. Municipalities also receive significant payments from the project, in some cases more than twice the total annual town budget. The advantage of the corporate owned model is that outside corporations do all of the predevelopment work. The disadvantage is that the municipality loses some control over the siting of the turbines and much of the profits go outside the community to the corporations (Lindabury, Schmit, Howe, and Tania Schusler, 2007:2).

Following this schematization, a *corporative* model is so defined because of the dominance of private subjects and enterprises in the realization of energy transitions, and most or all the economic advantages of the energy transition initiative goes to the corporation; while municipalism occurs in those places where inhabitants' participation and the engagement of municipalities shift toward sustainable energy organization of local communities.

1.1. Social conflicts and territorial resistances: relationships between anti-fracking movements and local energy independence initiatives

In the area of this investigation, the relationship between anti-fracking mobilizations and territorial conflicts around issues of energy and climate change and the reproduction of these pathways of sustainable energy independency has proved to be strong, and this has been underlined by all the participants and inhabitants of, for example, Caroline Town, Dryden, Fabius, Ithaca. Most of the people I met have described the place where they are living (mainly in the area of Tompkins and Lewis County) as *community*. Very often, they describe feeling like living in a 'bubble' – as if in a special dimension, away from the 'real American world' – and, in this sense, most of the people interviewed as privileged witnesses of the processes of local energy independency kept saying to me "this is not America, this is like California of the East", referring both to the vibrant opposition to fracking technology and the high participation in projects and initiatives of local sustainable energy transition.

Naomi Klein in one of her last books, *This changes everything* (2015), writing about the several current ways through which people in collectivity can change and are changing the contemporary scenarios of environmental, economic, social and democratic crises, takes the example of those cases, in US, but not only, that she calls '*Blockadia: the new climate warriors*'. In a talk she gave in Ithaca in April 2015, Klein said Ithaca, Dryden and other communities around this area can be considered, from the perspective of her book, as places of this *blockadia*.

What is blockadia? This is a definition of cases like that of the town of Dryden (Tompkins County, NY), and its network and involvement in reaching a local ban on hydraulic fracking in its territory. "Blockadia is not a specific location on a map but rather a roving transnational conflict zone that is cropping up with increasing frequency and intensity wherever extractive projects are attempting to dig and drill, whether for open-pit mines, or gas fracking, or tar sands oil pipelines." East of Ithaca, in Tompkins County, Dryden is a town of about 14,000 inhabitants, composed of two villages, Dryden and Freeville. It was sitting on top of some of the best shale gas prospects in the country, and Denver-based Anschutz had bought a substantial number of leases giving it the right to drill there. US EarthJustice, in an article on its internet webpage, on June 20, 2014,

defined it in its title: "*Dryden: the town that changed the fracking game*". In addition, in Dryden and around this area, anti-fracking movements, in strong connection to the social movement's network around the mobilization for climate change, is influential in pursuing sustainable energy municipal plans.

In the case of Dryden, the ban has been adopted, defining a map of the 'risk' zones of the town, identifying 31 "critical environmental areas." The story started when, in 2007, a resident was approached by a representative of the oil and gas industry (called *landman*) who wanted to lease her land to drill for gas. She refused and over the next year, the landman tried to persuade Mrs. McRae, approaching her six more times. The resident involved in this story started a battle against fracking in these lands which found the support of most of Dryden community, and local public institutions, as well as the ban against fracking has been announced in 2014 also in all the State of NY. Through the involvement and participation of voluntaries in carrying on campaigns, mobilizations and protests against this act of violence, Dryden has been able to 'win' its struggle. "While it applies to local governments across the state, the court's decision in favor of 'home rule' by towns and counties will reverberate nationally as many other local governments fight to slow what has become a massive national shift toward natural gas production. "*This is simply a victory for local control*" said Dryden Town Board member Linda Lavine, a retired psychology professor. "It is a victory for liberals and conservatives of all sorts. It is what *democracy is all about*" (EarhJustice June 2014).

From this connection and interrelation between pathways of sustainable energy independence and anti-fracking local movements, with the involvement of several social actors, like foundations, nongovernmental organizations, local farmers, cooperatives, some local politicians, knowledge industries, activists, and so on, in 2015, more than a hundred towns in New York have enacted local bans or moratoriums on gas drilling and fracking. Thus, through the actions and the high presence of mobilizations and social movements in these initiatives, currently, fracking is not permitted in all the State of NY since December 2014.

On the other hand, among local resistances and mobilizations, from the North America, in the last decades, to the South, the hydraulic fracturing technology has increased the production and marketing levels of gas and petrol within an already

very volatile and precarious global energy market. The decreasing level is notable, in the last years, for US and Canada of import energy dependency; indeed, North America leads the worldwide production of shale gas. After these, shale gas is so also produced at a commercial scale in Argentina and China.

Despite its rapid development, shale gas production has been blocked in many states in the US and South America and globally, largely because of the environmental risks involved in compromising groundwater and, at the same time, considering the huge amount of water that is necessary in order to practice this (petro-) and hydro-capitalist fracturing. The 'thirsty' petro-hydro-imperialism (Pritchard 2012; Watts 2004, 2015) of fossil fuels lobbies is expanding its domain in several areas in the world and particularly in some area of South America, Africa, India, China, Ukraine, etc. Thus, while fracking bans are increasing in some places, the multinationals' colonization, devastation and exploitation of 'foreign' territories is the 'normal' capitalist practice for primitive accumulation and also to keep feeding the financialization of energy markets.

As several recent studies underline (Sweeney and Skinner, 2014; Control Risks' offices, 2014; U.S. E.I.A., 2012; Guzmán, 2015; Frayssinet, 2014; Scandizzo, 2015; Ochandio, 2014), some of the most prospective basins for unconventional gas development worldwide remain in very early stages of assessment and exploration. However, in this deadly game, 'assessment' and 'exploration' already mean aggression to the territory and forced transformations of the environment where the capitalist hydro-petro-*explorations* are predisposed, in addition to the expenditure of public and private funds. Moreover, 'assessment' and 'exploration' are 'controlled' under the umbrella of techno-scientific authority, which represents, for centuries, the dominant way of legitimating economic and political power acts and decisions. In the face of these giants, some local populations, movements and collective organizations, from Argentina, to Mexico and to NY State, are expressing their anti-fracking position. For example, in Argentina, the opposition to water usage and contamination, with the protests and fights of indigenous Mapuche, on one of the biggest fracking sites, in the area of Vaca Muerta, and in the province of Neuquén, in the city of Zapala, in the northwestern part of the Argentine Patagonia, in the domain of Chevron and Repsol multinationals; in Mexico, which started its first shale gas well in 2011; India, in North

America and in Europe, very often, it is possible to find a strong connection between anti-fracking movements, mobilizations for nuclear bans and also actions against Genetically Modified farming. This suggests how these environmental, ecologist, social and political movements are, in many cases, trying to reunify the fields of battles against multinationals of energy, water, petrol, shale, food. And, at the same time, these *destituente* practices of blocking, sabotage and refusals, on several fronts, are looked to for their capability of being time and space of constituent alternatives to the predominant orientation to the relations and rules of energy capitalist market: through forms of life and social organizations based more on the idea of the creation of the commons, instead of private exploitation and widespread inequality.

In this regard, it can be useful to recall the category of 'postcapitalism' (Gibson-Graham 2006). Asking the question, 'alternative to what' (in energy local politics)?, the conceptualization of postcapitalism puts the emphasis on the dominant capitalist mode of production, and the ways in which economic, political and social orders are maintained. The horizon proposed through the concept of postcapitalism, and also non-capitalism, is an attempt to construct a new political imaginary able to encase the diverse and very often common contemporary experiences of creation of 'alternative' ways of life to capitalism. Thus, 'alternative to what?' in the postcapitalism conceptualization can mean to be not disposed under a set of social relationships – and instead in collective counteractions against – which can be included in the universe of (economic) capitalist relations. Counterstories, experiences of collective life that go beyond the regime of production and accumulation of capitalism are taken into account by the authors, first of all investigating the alternative reproduction of times and spaces of commons, conviviality, and fighting for their own territory. The authors speak about the reconstruction of a politics of local economy and the rebuilding of commons-based communitarian economy.

> This conceptual interpretation is radically altering the established spatiotemporal frame of progressive politics, reconfiguring the position and role of the subject, as well as shifting the grounds for assessing the efficiency of political movement and initiatives (Gibson-Graham 2006: xix-xxxvi).

The authors take into account several examples of alternatives to capitalism and forms of non/post-capitalist politics of local economies. Above all, they take as an example the experience of the Zapatista movement in Mexico, as "a postcapitalist indigenous communalism" (Neil 1997 in Gibson-Graham 2006). Moreover, and still through the example of Zapatista, the authors underline how post-capitalism means "not to wrest control, but to create autonomous zones of counterpower" (Klein 2002:220 in Gibson-Graham 2006:21).

Thus, local energy independency from this perspective, tends to be read as one dimension of the more articulated process of autonomy of places and communities, with this as a common and general goal:

(…) asserting and creating multiple other ways of being in the world, these movements rob capital (or the state) of its monopoly and singular definition of time, space and value, thereby destroying its hegemony, while at the same time furnishing new tool to address the complex set of problematic power relations it confronts us with from particular and embedded locations (Osterweil 2004 in Gibson-Graham 2006:112).

1.2. Local energy independency and development: decolonizing the fields of knowledge-power and learning from the past?

In trying to explore these 'particular and embedded locations' and with the aim of reconstructing what and how the main 'model of development' was, in the past, I tried to read the contemporary local energy independency attempts and initiatives of transitions in the light of the practices and use of the land of Pre-Columbian populations. Thus, asking what was the agricultural system and the use of land for energy (food) production in native settlements, the agronomist Janet MT Pleasant (Cornell University) argues how:

(…) archeologists, historians and anthropologists have characterized indigenous agriculture in North America as a shifting cultivation, which is slashing and burning, they have been characterized as basically low yield, and unstable yield. And the agricultural practices by native or indigenous farmers were fundamentally damaging to

the environment. My argument is that this is wrong in any account. And they are wrong for two reasons: one is that the people who are writing this history and characterizations have no knowledge of soil and crops and agriculture. They do not understand at all, and second, they are absolutely biased in terms of Eurocentric perspective. And those two things are deadly in terms of their ability to accurately describe and evaluate indigenous agriculture. (…) I think that there is a tremendous amount that academics have invested in terms of why this story fixes their politics: and it is one in which to see that Native Americans are 'lessened', even if they would say that is not what they want to say, but that's really how to fit the storyline of western development, western Europe being the pinnacle of civilization, and if it does not come from the west, it cannot be the best. And they are absolutely embedded in that, and they can't see the way out (Mt. Pleasant, Interview 2015; Mt. Pleasant, 2015).

To explain this cultural bias, in terms of 'Western-centric' perspectives, in the understanding and interventions on agricultural lands and environmental resources, Jane Mt. Pleasant (2015) used the example of the plow to deconstruct the paradigm of supremacy of European agriculture on those forms of energy (food) production in native Pre-Columbian settlements.

For years and years and years, certainly back to the 1800s and certainly all the 1900s, agricultural historians have held up the plow as the kind of pinnacle of civilized agriculture and they have said you cannot have a productive extensive meaning of ranching agriculture without the plow. Well, all you have to do is to look at the western hemisphere…and they say the plow allows the development of civilization, allows people to prepare large tracts of lands to increase yield and with that comes the formation of cities, and all of the things we associate with more advanced and civilized groups of people. But all you have to do is to look at the western hemisphere, there were 20,000,000 people living in central America before colonization, they lived in large cities very sophisticated,

very complex, and there was not any plow to see anywhere. The plow was not here, there were no domesticated animals. So, right there you have an anomaly, a contradiction that says: how do this people manage to grow all of that food and feed 20,000,000 people without the plow, if a plow is essential to an 'advanced agriculture'. They clearly had an advanced agriculture that supported twenty million people, more than a lot of places in Europe, at that time. The cities in central America in many cases were larger, they were more complex, more developed than European cities, and yet historians insist that it was European to have advanced agriculture. It cannot be. All you have to do is to look at that and say that you have to conclude plows are not essential for advanced agriculture. They are not. And yet we have an hundred years of agricultural historians who are telling each other, students, to the public, that the plow is what it is ...

This interview highlights both the dimensions of material colonization of native lands, for implementing dominant forms of rural development, and that simultaneous form of intellectual and cultural colonization of imposing western scientified paradigms.

So, to me, these (...) things are just fundamental, that historians, geographers, archeologists ignore information that contradicts their world view, and that it has a devastating fact that indigenous people who then bear the brunt of these and being called poor farmers, people who destroyed fields, we are marginal, we have marginal yield. I wrote a paper (...) that compared Iroquois, indigenous maize fields in 1600-1700s in NY State with maize fields in Europe, in that same time period. Iroquois farmers probably produced three times the amount of grain per area of land as the Europeans at the same time. So this idea of Europeans being at the pinnacle of agriculture and they know everything that native people lack... destroying living beings, is not true. Iroquois farmers had a much better understanding of living, because their agriculture was sustainable, productive, and they had an incredibly good crop, maize,

corn, compared to the Europeans, where they were engaged in a plow agriculture that was environmental destructive and they had a cereal breadth that was only wheat that was not nearly productive. So, this turns the table and getting people to see that is really hard, they don't want it. They are really resistant to this idea that indigenous people in the western hemisphere could have not been doing things better than Western Europeans. I think it is because people are so embedded in their world view, in their perspective, that they cannot see out (Interview MT. Pleasant 2015; MT. Pleasant 2015).

Extending this perspective to the current approaches of eco-villages and initiatives of local energy sustainable independency in Upstate NY, the obscuration of this historical dimension of past forms of rural sustainable development, destroyed by the transition to forms of ever more advanced capitalism, appears in the repeated evocation of the word 'pioneers' in discourses and local narratives of energy-sustainable transition.

As in the case of the motto of Ithaca Eco-village, 'pioneering sustainable communities', and as it emerged in some interviews, 'pioneering' is very often used as a term to indicate how the primacy of reaching a level of 100% sustainable energy has represented a strong motivation for people in these communities, to lead in these paths of development. However, from an historical perspective:

This was not a blank land...there were people who lived here before New Yorkers, before Cornell, before what makes up our contemporary regular day. The knowledge of this and so (...) it is so interfuse that again this idea of people's world view and the story which is that US, settlers, and citizens came into a vacant land and tended and produced all these wonderful things, and the Indians are just as if they moved out, they were just overloaded by the greatness of civilization. (Nevertheless) the land was taken illegally, that people were killed, that languages and cultures are just institutions to tell the story run over... I think that ... Two things. I think, for a lot of people around Ithaca and central NY: one that people have a strong sense that the story that they told is wrong. It just sounds

too good to be true. I remember thinking this when I was in grad school and why was it that we were always the best. And we at that time – I consider myself, I knew my father was native, but I considered myself mostly a US person. And so why were we always the best? Why did we win everything? Why did we always come out on the top? Why do we have this idea? Why do we always come up to the top… And I had the sense even then that I was right… That I was not getting all the story (Interview Mt Pleasant, April 2015).

2. *The experience of energy independent Caroline Town*

Caroline is a small town in Tompkins County, of about 3,282 residents, South of Ithaca and about 8 miles from the main 'factory' of the area, Cornell University, built – after the destruction of Pre-Columbian settlements – around 1794. Several reports and studies (Lindabury, Schmit, Howe, Schusler 2007; Blair 2011; Lamb, 2008, et alt.) have told the story of how Caroline town has become, in the last decade, the 8th municipality in NY State to purchase wind power to provide part of the municipal electrical needs and, in 2005, the second municipality to buy wind power for 100% of its electricity use.

During my fieldwork, the first time I went to Caroline Town, in November 2014, I had the sensation that the socio-economic dynamicity of the (territorial) space and time of this place was strongly *dependent* on that of other close centers, like Ithaca and its main 'center', Cornell, which drive the economy of this area. I immediately thought that the recent settlement of this town could be seen as a sort of socio-economic prolongation toward the Southeast made up around the economic growth of Ithaca and Cornell, and, with it, of its models of local development. An *extension* from some northern centers of Tompkins County to Caroline, as a visible pathway traced by a common process of local and county growth on this rural land.

As several demographic and economic documents report, the level of residents' turnover and mobility, in general, in all this area, is high and even if strongly dependent on the time and growth of Cornell, it seems to not follow its growing rhythm. Placed on a hill (501 m.), the territory of Caroline town has an extension of 142.5 km^2 of rural land, with economic activities working in large areas of farmland, woodland, with a minimal regulations, and widely dispersed housing and public services.

The wind energy independency initiative in Caroline, starting in 2004, was made possible – following the interpretation given by the subjects interviewed and from the documents on this case – when the Town Board decided to differentiate its energy consumption and buy a portion of the Town's electricity needs from wind power.

At some point one of the Town Board's members said, 'how about if we purchase 100% of renewable energy for the Town of Caroline? (for municipal use)… And everybody said 'that's a pretty good idea, because we can buy wind power, then'. There was wind energy made, probably, in Pennsylvania, but a local electric company, an important company, maybe a third of NY State is under this electric utility. So they offered this program, where you could buy wind power. So people – just two or three – word of mouth – it was really before emails – people started saying, I will donate money, so the Town can buy at least five years of wind energy. So, at that point we realized some interest in the town not just to buy renewable energy, but also to produce it (Interview Caroline Town residents, February 2015).

In fact, the project of energy independency for Caroline Town started through an initiative of (with a *donation of money* by) members of the Town Board, and with the institutionalization of a specific committee dedicated to the implementation of this project, called to identify what kind of organization and renewable resources would have been the best for the energy alimentation of the Town.

This is a very common way in US to start up, through private money, 'public' initiatives and functions: donations. At the same time, in the US context, the world of no-profit associations, Foundations, and charities is a very important component of most of the networks of economic and social sustainable development, not only at the level of community.

With the 'money donation' in the case of Caroline Energy Independent, the initiative came from local politicians and, from the first, all the Town Board decided to buy enough wind power to cover approximately 25% of the town's electricity needs. Town Board members gave the extra cost of $500 to buy wind power "*from their own pockets rather than*

add to the burden of the taxpayers". The dynamics of this intervention is reported by most of the people interviewed, as directly involved, as an initiative that was immediately supported by all five council members in the Town of Caroline, which donated all or a portion of their incomes to provide 27% of the municipality's energy needs with wind power. This initial donation strongly contributed to an environment of trust, confidence and sharing the idea supported by the 'own pockets' of administrators. Indeed, following the people interviewed, this act worked as a sort of communitarian exposition to the real possibility of making Caroline energy independent starting from the individual and collective effort of any residents – firstly the administrators (Interviews with Frongillo, Blair, Burner, Nickolson, February-March-April, 2015).

Connected to that, the main reasons that have been expressed since the beginning by institutional local governmental and political subjects in proposing and supporting this initiative of energy independence were: economically advantaged for all the community, saving money, at least, in energy consumption and implementing sustainable local growth. The main idea that was circulated in that period around the town was, also, originally, that the community could actively produce its own wind energy and keep the money inside its territory.

From a legal viewpoint, this possibility of local sustainable energy independency is described, especially by local governmental institutions, as the expression and terrain of municipalities' autonomy, in the competition/distribution of powers, responsibilities and levels of decision-making with the state and federal level.

New York State is really unique in its government setup. It gives a lot of power to the local municipalities. So, the Town of Caroline really has control of a lot of things. (...)...So the model of this local Town Hall where the citizens come together really... A good example is this fracking ban that this town has passed. It was appealed to the Court, that shows you how much power (local municipalities) have. So because of this model, I think it is easier for the community to get together and tell their politicians what they want. We do not have to go to Albany or you do not need a state law to buy renewable energy, you can just decide to buy it (Interview Caroline Town residents, February 2015).

As the interviews and the reports on this case show, the community of Caroline Town has been involved in this initiative through argumentations mainly focused on the economic advantages and the attempt to contribute to a more sustainable form of energy investment for its present and even more for the future of this land. This has been carried out through a fertile campaign of information made up by several subjects coming from 'different connected communities' around this area: people – students, academics, technicians, etc. – from Cornell and Cooperative Extension, acting directly in this initiative and this attempt to create a 'wind primacy' around Caroline Town. The construction of this variegated and strong network of social actors has been territorially and institutionally reinforced by the creation of the group and Committee of *Energy Independent Caroline* (EIC).

One of the first goals of Energy Independent Caroline was that we wanted to see how it was on a windy day! And we looked at the possibility of putting wind towers on the hills, here, because we have some suitable hills, and so we spent several years and we did a survey, on the attitude of residents on this issue. And the vast majority said 'we think it is a great idea'. We also knew about a few people who were already investing in renewable. (...) 90% of people answered yes to the question to make 3 wind turbines (then we decided 2, but in the end we did not put any) in Caroline (Caroline Town resident Interview, February 2015).

Following this reconstruction, the decision of not building ultimately any wind turbine on Caroline territory was built up, considering, instead, the high level of consensus around this idea of the population of this town, for economic reasons: it was too expensive to have just two wind turbines. The story of this decision seems to be produced within several private economic interests to manage and accord locally, which did not converge toward the energy choice of producing wind energy directly pursued on the hilly territory of Caroline Town.

One of the greater motivations of this project was actually to keep money home, in our community and saving something each one. So, when it turned out that to produce on

our lands wind energy was so expensive of course most of those people were strongly discouraged by the small-scale market price. (…) Make the electricity right here on own our hills was what really people wanted to do, in terms to be totally feasible. We have not given up on that. It is taken so long for this larger wind farm to get built. We decided to wait until they were built and so people see them and then… (Interview Caroline Town residents, February 2015).

Furthermore, in this result, this decision of not directly producing its own wind energy came about around the twin relationships with several social actors of civil societies, other neighbor communities, universities and centers of research. In this phase of construction of this local energy sustainable policy, the EIC worked sponsoring several public meetings events about energy efficiency.

Thus a couple of people created this group called Energy Independent Caroline, and starting meeting regularly. We chose the name very carefully, because we did not want to be divisive. We wanted instead to be all-inclusive. And we wanted to include the most rural farmers to be interested versus the people who live in Brooktondale[1], there are really two demographic realities about this town (…). There were people who liked the energy part and others who liked the Independent part. We were able to keep together both these parts, and for most of the people this attempt was successful. We were very busy in doing this. We started, effectively, in 2004 and we meet pretty regularly for the last ten years. (…) We also always tried to keep in the commission the different concerns about climate change, and we tried to do everything we can, we thought. But we do not want to alienate people, and so our methodology was: you can use renewable energy without worrying about climate change if you do not want to. We tried to stay… not neutral, but the message is more do this first, if you do not want to do this for climate change, you can do it for energy efficiency or you can do it for helping your electric bill (Interview Caroline Town residents, February 2015).

Putting together all these aspects, the main point, instead, which for some people interviewed has represented a failure, in this generally successful case of Caroline, is the fact that they "*never get to the point of producing it, even because some people were thinking that they were noisy and dangerous!*" (Informal Colloquium Caroline Town's residents, February 2015).

Generally, the oppositions to the transition initiative are represented as marginal in the narrations of the several people interviewed. And, all those conflicting reasons of opposition to this initiative do not appear as a fundamental part of the narrative of this story. Instead, the focus is commonly on communitarian economic goals as the "*greater motivation of this project*".

One of the main focuses has been not stressing the end result, but to stress doing things, so we always try to do little projects. And in this spirit the solar project came out from this. So, in a way, it was a lot in response to the fracking ban, but it was also something different, we were not going to have any natural gas, we do not want to use natural gas. But this was more, 'what can we use?'', Solar and wind energy, for people, were really a good idea. They were really popular (Resident of Caroline Town, Interview February 2015).

Ultimately, the narrations of people of the experience of Energy Independent Caroline Town refer most to an example of full municipal involvement and strong interest and participation of residents in this initiative of energy transition. The approach of municipal construction of this local enterprise of renewable energy independence, is described by people interviewed, particularly those more involved in the organization and maintenance of EIC, as the major effort to make effective the transition and reach a deeper process of communitarian energy independence and exit from the fossil fuel model: this, however, is defined, for now, both in terms of local economic advantages, energy effectively transitions and costs, as a 'good investment for the future'.

(…) there was certainly one model if the Town of Caroline had its own wind turbines, and it was: generating income through that, everybody's taxes would be reduced. There

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1 This is a small hamlet near the west town.

would be a financial incentive if that was the case. But, in any case, even if energy power was, in general, cheaper than other source, here it did not start from this. Instead, it started that Caroline Town's residents have to pay more on their local tax for this. And they were agreed. And, in this phase, even for the other communities, buying wind power costs a little bit more, and it is a kind of the same with solar power. Even here on the roofs of the Town, we paid for the half of the system, but it is still more expensive than just buying electricity. Now. But… We will be able to be successful to convince everybody that we do not know what is going on in the next twenty years. And it is a good investment (Interview Caroline Town residents, February 2015).

3. Conclusions

Although the current phase of neoliberal capitalism seems to be all-encompassing, re-working 'crisis' (financial and energy) to further restructure social relations in ways evermore dependent on the market as a regulatory tool for everything, my research has looked at alternative ways of generating renewable energy, and thus moving to a more sustainable mode of living in the 21st century. A new political imaginary able to encase the diverse and very often common contemporary experiences of creation of 'alternative' ways of life to capitalism might be developed, with and extending the work done by environmental and ecologist social movements, utilizing decolonized fields of knowledge-power which draw on subaltern expertise and a reframing of narratives to generate an all-inclusive consensus within a community, to suggest that this might enable the 'local' to decide its own energy independency: a communitarian renewable energy independence, and thus – perhaps – an exit from the fossil fuel model.

Through this perspective, three points to conclude but not close this work, rather, in order to retrace the main issues brought into play in this paper.

The first is about municipalism and corporativism in the case of Caroline Town Energy Independency. Summarizing an answer about 'Who decides' in a local context in the matter of energy plans – and inside this, 'can the 'local' decide its own energy independency?', through the experience of Caroline Town, we can argue that in the specific literature on this case that the participants in the development of the initiative have considered this

experiment a success in terms of participation of local community and people, from Cornell University, from other municipalities, activists, and so. Nevertheless, the 'failure' is perceived by inhabitants of Caroline Town for the fact that they missed the opportunity to produce autonomously wind energy on their hilly territories, because of the bigger multinational interests won over the place's need of a small-scale infrastructure of only two turbines. It would be worth analyzing more deeply the schematization of municipalist and corporative approaches in these experiences of local energy independence, nevertheless, the interpretation that these ways are currently mixed, even in a case, like that of Caroline Town, which is generally considered as a success for municipal energy local planning, well summarizes this power coproduction: corporative features and paths of capitalist development are strongly embedded in the territories of transitions.

Going to the second point, wich is about the relationships between socio-environmental conflicts and movements and local energy sustainable development. Looking at the case of Caroline Town, we find a conflicting ambivalence in 'managing' this relation. On the one hand, fracking and climate change movements, non-governmental organizations, activists and voluntaries, represent the common social background for most people who were directly involved in the realization of the project of Energy Independent Caroline Town. At the same time, fracking bans, in different parts of NY State, and climate change mobilizations were put at the center of many narrations of several actors involved in Caroline's experience. On the other hand, as came out from some interviews with inhabitants and members of the EIC commission, the attempt was made to keep apart and politically neutralize the socio-political background and dimensions of these territorial conflicts from the organization of energy community transition. This was to keep together, in this initiative, 'progressive' and 'conservative' people, to depoliticize the place of local 'municipal' energy organization, and overcome any political divergences among participants. Is this, however, a manner to disempowering local communities' political sphere of energy 'municipalist' transitions?

The third point regards knowledge-power institutions and the various dimensions of corporatization of pathways of local sustainable energy independency and development. In these relational territories: *a*) historically, Cornell University

and the Cooperative extension system has been built for and has played a fundamental *political* role in the dynamics of local social change, rural development, pathways of energy – in food production, transportations – transitions, legitimizing, most of the time, this form of political power and intervention, on the basis of being a source of neutral scientific knowledge and technological innovation; *b*) the corporatization of higher education is defined as the embedded capitalist mode of production of entire crucial economic sectors, such as, military industry, high-technology industry, business and financial services, media and cultural industries, in general, within the infrastructures of centers of knowledge and information production which are dealt by private market interests, investments and rules; *c*) in the scope of this research, taking the example of a public funded but private university like Cornell, in exploring the idea of model of assessment of the management of local energy policy, the partnership with Cornell University, both for private companies and municipal initiatives, economically and in terms of prestige for the collaboration, becomes, then, an essential factor of '*success*', especially, as in our case, for those public and private enterprises who operate in the *market* of energy.

Thus, all these territories in transition have to face a coalition of giants of corporatization: at stake are alternative collective actions against, ultimately, the contemporary "vital subsumption" (Fumagalli, 2015) which underlie these initiatives of energy independency within the domain and rules of the market. Can David still find a way to overcome Goliath?

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