

Energy sovereignty: politicising an energy transition¹

Pere Ariza-Montobbio was trained in Environmental Sciences between universities and environmental organizations in Catalonia (ICTA-UAB, ODG) and India (Atree, IFP) and holds a MSc and a PhD in Ecological Economics and Political Ecology. He lives in Ecuador, and works on agroecology, permaculture and energy sovereignty and is associated lecturer in FLACSO-Ecuador on the Socio-Environmental Studies Master's program.

Facing an unsustainable and undemocratic energy system, many voices are advocating an energy transition towards renewable energy, energy efficiency and absolute energy savings. Calls for an energy transition can be heard in diverse phrases such as "Climate Justice", "Keep the oil in the soil" or "100% renewable energy now". "Energy sovereignty" has appeared as a concept from which to stand, act and think about an energy transition.

What is energy sovereignty?

Energy sovereignty can be considered as the *ability* of a political community to have the authority to control, regulate and manage their own energy. Energy sovereignty can also be seen as the *right* of conscious individuals, communities and peoples to make their own decisions on energy generation, distribution and consumption in a way that is appropriate within their ecological, social, economic and cultural circumstances, provided that these do not affect others negatively (based on the definition from the Catalan Network for

Energy Sovereignty (XSE in Catalan), inspired by the La Via Campesina definition of Food Sovereignty).

Among the different uses of energy sovereignty a unified view aims to politicise the various political and institutional aspects of energy systems. Similar to the case of food, "energy sovereignty" is in contrast to "energy security" which is focused on guaranteeing abundant energy for running an economy regardless where the energy comes from and who is in control.

However, among the promoters of "energy sovereignty" there are different understandings around the significance of the words "energy" and "sovereignty", and by whom and for what purpose they should be used or exercised. Some key differences include viewing energy as a strategic resource or a commodity, compared to energy as a fundamental right, a common good or a basic flow for life. Similarly, there are differences in focusing the question on the energy mix as the structure of a primary commercial energy source compared to viewing an energy system as a complex whole between social, political, economic and ecological relationships. Further, there

¹ The reflections presented here are particularly inspired by debates, interviews and document analyses within and along the development of the "Energy, territory and energy sovereignty" research project in FLACSO-Ecuador. I especially thank professors, lecturers, students and all persons who participated in the workshop and seminar held in FLACSO Ecuador, Quito, 2nd and 3rd March 2015. Particularly to Tatiana Roa, Pablo Bertinat, Gerardo Honty, Eduardo Gudynas, Tazio Muëller, Francisco Venes, Arturo Villavicencio, Teodoro Bustamante, Decio Machado, Gabriela Albuja, Patricia Gonzalez, Paul Lorca, Carolina Sinchiguano, Miriam Lang and Alberto Acosta.

2 We take this expression from the work of The Corner House, an organization that aims to support informed discussion and critical thinking on critical environmental social concerns, in their research on Energy security and Energy Alternatives generating useful information for democratic and community movements. "Energy security: For Whom? For What?", "Energy, Work and Finance", "Energy Alternatives. Surveying the territory" and "Energy as enclosure" are interesting and insightful reports. See here: <http://www.thecornerhouse.org.uk/resources/results/ENERGY>

3 In 2010, 50% of all renewable energy facilities in Germany were owned by citizens (Wirth, Harry. "Recent Facts about Photovoltaics in Germany". Fraunhofer ISE (2015). Available at: <http://tinyurl.com/k9uyy4y>). 74 regions have already achieved the goal of 100% renewable energy. See: <http://www.100-ee.de/> and <http://www.100-res-communities.eu/>. Hamburg is an example of successful remunicipalization of electrical grids (Fei, Charleen and Ian Rinehart. "Taking back the grid: Municipalization Efforts in Hamburg, Germany and Boulder, Colorado". Heinrich Böll Stiftung. Washington DC (2014). Available at: <http://tinyurl.com/o85lnr6>). After Fukushima's accident in 2011, the German Government took the decision to entirely shut down 17 nuclear power plants by 2022. Currently, eight have been permanently shut down and nine are still active. Although the feed-in tariff and the preferential buying combined with social mobilization has allowed a renewable boom, it is important to highlight that the sustainability and environmental justice of PV solar manufacturing has the limitation of being "subsidized" by cheap energy and labor costs in China, where much of the PV manufacturing has moved.

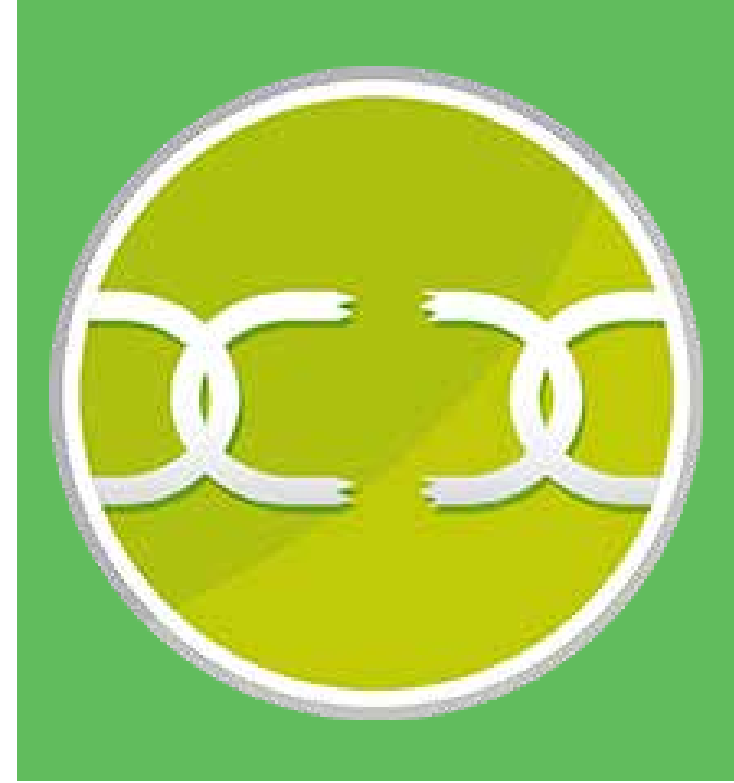


is a difference between Energy with a capital "E" as the abstract massive and uniform commercial generation of energy, as a function of capital accumulation, and looking at incommensurable and contextually diverse uses of energy, with a small "e".²

Around the various concepts of "sovereignty", there are also different approaches regarding participation and articulation between actors and scales. This discussion relates to fundamental political questions on the subjects of holds authority and the legitimacy of institutional agreements. In this way, there are contrasting views, such as the "energy sovereignty" understandings of progressive Latin American governments that interpret sovereignty to be in the hands of the state, or more concretely, the government. This view assumes that current nation-state structures and the associated liberal democracies are capable enough to make sound and fair decisions

about complex socio-environmental problems in multicultural societies, such as the provision and consumption of energy. In this view, the state structures sufficiently represent the will of society at large. This view tends to assume, as well, that a definition of energy as a "strategic resource" for development at a national level is agreed on by all plurinational communities in those countries.

Social movements, organisations, and governments have used the concept with different intentions, and contexts. For example, "*Energiesouveränität*" is one of the mottos of the "*Energiewende*" (energy transition) in Germany. A combination of a renewable energy law and historical social mobilisation around the anti-nuclear movement, and 100% renewable energy regions and communities have built a popular citizen-owned, renewable energy generation, energy municipalisation, with plans to abandon nuclear power.³



In Spain, the Platform for a New Energy Model, the Catalan Network for Energy Sovereignty and the Proposals for Energy Sovereignty in Navarra and Euskal Herria, are calling for energy democratization, campaigning against the utility oligopoly and energy poverty.⁴ *Som Energia*, as the first renewable energy cooperative in Catalonia and Spain, is promoting direct citizen participation in energy generation, distribution and consumption.⁵

Latin American countries have included “energy sovereignty” in their constitutions, laws and policies. Ecuador’s constitution refers several times to “energy sovereignty”, stating that it should be assured through economic and commercial policy (art 284, 304) guaranteeing the equitable distribution of resources (art. 334) and not at the expense of food sovereignty or the right to water (art. 15). These constitutional guarantees have been translated into national planning

objectives for *Buen Vivir*, including changing the country’s productive structure and the energy mix through hydroelectric projects, or building and improving its oil refineries. All with the aim to increase self-sufficiency in the energy supply.

Bolivia has included energy sovereignty in its constitution, in article 360, chapter III dedicated to hydrocarbons, focusing energy sovereignty in oil and gas nationalisation. Similarly, the government of Venezuela has understood energy sovereignty as the public property and control over fossil fuels, as part of the main principles of economic sovereignty of its constitution (articles 299 and 303, among others). Argentina has also argued for energy sovereignty when recovering public control over fossil fuel companies. Countries with few or no fossil fuel reserves, such as Uruguay give meaning to energy sovereignty by promoting a rapid growth in renewable energy supply.⁶

4 See these websites: <http://www.nuevomodeloenergetico.org/>, <http://xse.cat/>, <http://tinyurl.com/nxqwxdg> and <http://tinyurl.com/lnnaavo>

5 See the website: <https://www.somenergia.coop/es/>

6 Since 2010, Uruguay has received the largest investment in renewable energies in Latin America, US\$7 billion, 3% of its gross domestic product, a figure five times the average of the region. More than 80% of its electricity is generated today with renewables and the government is planning to reach 50% of renewables in the whole primary energy mix by 2016, through the promotion of public-private partnerships with private enterprises (many from Spain) without subsidies and with the aim to reduce the cost of energy. Wind energy is one of the most illustrative examples: from zero installed capacity in 2007, reaching 1300 MW in 2015.

7 Postnormal science situations arise when facts are uncertain, values are at stake, risks are high and decisions are urgent. In such a context an extended peer review community is needed to understand and assess the complex problems at stake and preserve science quality. Postnormal Science originated in the work of Silvio Funtowicz and Jerome Ravetz. The following reference is one of the first texts on the matter: Funtowicz, Silvio O. and Jerome R. Ravetz. "Science for the postnormal age" *Futures* 25.7 (1993): 739-755.

8 Progressive Latin American governments have issued plans and programs to transform the productive structure and their energy mixes with the aim to industrialize the countries with equity and wealth redistribution inspired by CEPAL's work in the 1990s. The evaluation of its success goes far beyond this short article.

9 Both the HidrolIntag proposal and the author of this article understand reforestation as a process of ecological restoration based on planting native species of different structural forest levels allowing ecological succession to establish a forest ecosystem, not a plantation.

Views on energy sovereignty from social movements, focus on decentralisation and direct citizen participation rather than delegate the management of energy infrastructure to the state. These movements aim to unveil the inequalities in access, decision-making, property and control. Thus, they connect the claim for an ecologically sustainable energy system with the claim for real democracy, understood as people's direct involvement on the generation, distribution and consumption of energy.

Similarly, questioning the control over energy opens the debate on the knowledge about energy use. Again there is a range of views, from technocratic central planning to the new approaches inspired by Postnormal science where energy discussions pass from a restricted technical, sectoral and specialist knowledge towards interdisciplinary and generalist knowledges.⁷ Instead of thinking that engineers should promote "energy literacy", the idea of an extended peer review community promotes the use of traditional and local knowledges to understand both energy accounting and needs, and their potential solutions.

In terms of uneven geographical development or unequal global exchange, there tends to be an agreement that energy sovereignty confronts neoliberal globalisation. Nevertheless, there are different consequences in prioritising nationalisation of extractive industries than to propose distributed energy generation to decentralise energy systems. Thus, the articulation between scales is another field of discussion. Social

movements tend to propose bottom-up strategies which try to reconcile scales and consider the diversity of distinct territories. Initiatives on energy sovereignty from governments are inclined to promote universal access to energy for all citizens regardless of the socio-ecological consequences of constructing large-scale infrastructure projects such as big dams, centralised grids and/or pipelines.

Energy sovereignty is conceived differently depending from which side of the global resource flow we are looking at. Energy sovereignty in the North is mainly proposed by social movements that are part of a wave of citizen concerns. They are movements against energy utilities making profit at the expense of energy poverty and the dismantling of renewable energy policies, as is the case in Spain. They are also part of a historical fight against nuclear energy. Energy sovereignty in the South originally rose out of strong grassroots movements in Latin America, but has largely been co-opted by governments with neostructuralist agendas.⁸

Although social movements continue to fight for a more grounded definition of energy sovereignty, governments are increasingly approaching it as a way to promote "energy security" ensuring national benefits. In this view, increasing royalties or renegotiating oil extraction contracts as service provisioning – as has been done for instance in Ecuador – contributes to energy sovereignty. Big dams built by Chinese companies with Chinese credits promote energy sovereignty if the dams are eventually owned by the

state. However, these policies are criticised by social movements for keeping and deepening extractivism and not overcoming rent-sharing development and increased external debt. For example, Intag communities in northwest Ecuador are confronting mega-mining activities and have proposed decentralised mini hydro-electric combined with agroecological projects, biodigestors and reforestation at the watershed level.⁹ Although not directly using energy sovereignty as a motto, this Hidro-Intag project holds a different view on energy policies than the one of the Ecuadorian government, and is part of the resistance to large scale copper mining.

There are diverse understandings of energy sovereignty in different dimensions and scales, so that facing such complexity and developing an integral perspective on energy sovereignty needs to confront several debates beyond a simplistic division between two paradigms: bottom-up and top-down. We know that climate justice requires simultaneous actions at different scales and by diverse actors. Radical changes in energy use require deep transformations in social institutions, reopening the debate about the role of the state and breaking the dichotomy of “public vs. private” in the commons. However, we should acknowledge the need for a broader political strategy that allows us to build new institutions that deeply embrace socio-ecological complexity instead of pragmatically resort to binary thinking and lineal and homogenised solutions as many public energy policies end up doing: reducing the problem to technology, efficiency and expert knowledge.



SOBERANÍA ENERGÉTICA

10 Even within the “status quo” and within a statist position, the articulation between internal (the effectiveness and fairness of national institutions) and external dimensions of sovereignty (international recognition, transboundary issues, and *Westfalian* external impositions) is not an easy task in the context of globalization (Lahoud, Gustavo O. “Una aproximación teórica a la Soberanía

Energética e Integración Regional Sudamericana”. CLICeT. Buenos Aires (2008)).

11 The maturation of agroecology, organic agriculture and permaculture principles is deriving in multiple biotechnologies available to design, implement and evaluate local and regional projects that regenerate and restore soil, water and plant communities and increase

socio-ecological resilience, solar energy harvest and carbon dioxide sequestration. Search for the work of Mark Shepard, Darren Doherty, Geoff Lawton, Sepp Holzer, Ben Falk, Eugenio Gras, Jairo Restrepo, Ignacio Simón, Sebastiao Pinheiro, Germán Vargas, Francisco Gangotena, Miguel Altieri y Clara Nichols.

12 A bioregional approach that conceives the management of energy at ecosystem scales, such as watersheds, can provide the basis for integrated management of resources and ecological processes. Healthy forests and agroforestry systems would regulate the water cycle providing the resource for mini-hydro and at the same time generate wood and biogas for cooking purposes. Such systems would function at local or regional level but their integration could provide space for researching about potential surplus and emergent properties. To try it, we will likely need, at least, both people's local government political control and a massive reclaiming of the enclosed common land.

13 We recall here The Corner House work: Hildyard, Nicholas, Larry Lohmann y Sarah Sexton. "Energy Security For What? For Whom?" The Corner House. February (2012) Disponible en: <http://www.thecornerhouse.org.uk/sites/thecornerhouse.org.uk/files/Energy%20Security%20For%20Whom%20For%20What.pdf>

We need to acknowledge that within promoters of energy sovereignty either from social movements or from governments there are no pure and essential positions, and there are different views regarding the compatibility and (im)possible coexistence of bottom-up and top-down proposals. Distributed energy with smart grids can be used either for decentralisation or for building totalitarian and centralised control of citizens' energy use. So, there are different perspectives about the feasibility of transforming current institutions or the need for radical changes. Beyond the old "reform vs. revolution" debate, our challenges revolve around transitional strategies. *How are we going to make major change happen?*¹⁰ Beyond diversifying energy sources or increasing energy efficiency the problem lies on feasible (but not cooptable) strategies for a systemic change towards a new civilisation.

Socio-structural changes in the way that mobility, housing and food provisions are organised can generate important energy savings, larger than those achieved by improving and using new industrial technology-fixes. Bioarchitecture, agroecology, permaculture, restoration and regenerative agriculture

and microbotics are some examples of appropriate and appropriable technologies available to citizens.¹¹ These are technologies which challenge capitalist social relations and the ownership of the means of production. The use of these tools into a broader energy and land use planning framework can offer new opportunities which could play a bigger role in the future. Energy and food sovereignty should be part of an integral energy management (exosomatic and endosomatic) under decentralisation and municipalisation strategies. Simultaneous biodiversity conservation and food production (through agroforestry and silvo-pastoral systems) integrated to the provision of ecosystem services for renewable energies maintenance could provide a renewed paradigm in ecological urban and land use planning.¹²

Until now, discourse and concrete actions around energy sovereignty have been successfully based around opening space to bring energy out of the technical and bureaucratic realm towards the social, cultural and broadly understood political arena. The concept of energy sovereignty raises fundamental questions about the purpose and use of energy: Energy for whom? Energy for what?¹³