

Covid 19, vulnerabilities and crises of democracies**EDF RD – CERI / Sciences Po****2021-2022****Ferenc Fodor, François Bafail, Rachel Guyet****Synthesis prepared by Claire Lubineau, Sciences Po Student**

CERI and EDF R&D have a long cooperation on research projects and seminars since the first seminar was held in 2011.

During these years we – researchers from EDF and from Sciences Po - have worked together on different social aspects of energy, mainly the renewables and energy poverty.

In 2021 we have decided to consider what is our main concern at world-wide level: exploring the consequences of COVID-19 on different aspects of energy was then obvious.

Four seminars are going to be organized by November 2022 on the current challenges the energy sector is facing.

The first seminar is discussing Energy vulnerabilities and Covid-19 in a comparative international approach

The second seminar will explore how the pandemic impacted the energy companies themselves

The next one will consider what realities the EU Green and the EU discourse on just transition cover

The last seminar will examine how the local level of governance is adjusting to the energy transition in Europe.

1st seminar**Energy vulnerabilities and Covid-19: a comparative international approach**

This first seminar aimed to examine how Covid-19 created or worsened energy vulnerabilities and the Covid-19 in the world and how the different actors, public and private, responded. Three researchers addressed different dimensions of this topic. Marlies Hesselman, lecturer in international law at the faculty of law of the University of Groningen in the Netherlands, mapped energy vulnerability measures taken in the world since the first lockdown

to ensure access to energy to all, leading to question the notion of a “right to energy”. Tracy Ledger, Head of the Energy and Society Programme at the Public Affairs Research Institute (PARI), tackled the issue of energy poverty in South Africa in its complexities. Finally, Eric Verdeil, specialist in urban geography and Professor at Sciences Po Paris, dived into the long-lasting energy crisis in Lebanon.

Covid-19 and energy vulnerabilities: how to rethink energy as essential

Marlies Hesselman

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Marlies is lecturer in international law at the faculty of law of the University of Groningen in the Netherlands. Her main fields of expertise are public international law and socio-economic human rights laws with a special focus on access to modern energy services and energy poverty in the framework of the sustainable development goals (SDGs). She is a member of the European network of research on energy poverty, ENGAGER. Within ENGAGER last year she coordinated a mapping exercise on the emergency responses governments and utilities brought to keep the light on during the lockdown periods. These responses illustrated one key element that is going to be discussed today: energy is essential in our daily life.

The Right to Energy in the European Union *ENGAGER European Energy Poverty, Policy Brief No. 2 (June 2019)*

University of Groningen Faculty of Law Research Paper No. 49/2019

Hesselman M. et al., 2021, “Energy poverty in the COVID-19 era: Mapping global responses in light of momentum for the right to energy”, *Energy Research and Social Sciences* 81

Marlies Hesselman presented a map of the main measures taken all around the world to ensure access to energy during the COVID-19 lockdowns. These measures are very diversified such as disconnection bans, free reconnections, free energy access, subsidies, delay of payment... Most countries implemented some kind of support. However, there are differences between regions of the world. For instance, in the developing world, and especially in Africa, the main measures were access to free energy, but the support was quite short (between two and three months), whereas in Asia, the support put in place was rather long (some lasted until the end of 2020), perhaps because African countries do not have the means to guarantee longer free energy access. In Europe and in North America, the main measures were payment deferrals or disconnections bans.

The map illustrates also a rather diversified context. First, most of the measures were taken in Northern countries, such as the USA or Europe¹. This can be explained by the fact that those countries already had these kinds of measures implemented, whereas it was totally new for most of the Southern countries. Second, these measures were much more diversified in Europe, than in the USA. This is probably due to the federal laws that play a major role in the US policy implementation. And thirdly, we can notice the number of different actors that mitigate the impact of the crisis: governments, companies, regulators and municipalities in some cases...

All these measures implemented world-wide suggest that electricity and more generally energy is a vital need for people to live decently and that energy is a public interest. Then, appears the notion of a “right to energy”, whereby governments are responsible for ensuring that their

¹ You can find here the link to the map:

citizens have a sufficient access to energy, especially so in a pandemic. Besides, human rights laws strongly support disconnection bans and argue that affordability must be guaranteed. Many countries have recognized this right for energy, especially in Latin America. For instance, in Columbia, energy is defined as a right in the Constitution and a minimum amount of energy is free. Then, with this analysis, a new question emerges: what is the minimum of energy everyone needs? Unfortunately, this question has still no answer.

Finally, we can also wonder whether these measures were provisional or if they are still in place now. It seems that in the Netherlands, these policies are still relevant showing an improvement in policies tackling energy poverty.

Electricity in South Africa: a cost-recovery model or a tool of socio-economic transformation?

Tracy Ledger
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Tracy is Head of the Energy and Society Programme at the Public Affairs Research Institute (PARI). The main focus of her work is the delivery models for energy services for poor households, and the impact of these on household poverty and food security. Prior to setting up this programme, she was Head of the Local Government Programme at PARI, which focuses on better understanding of the reasons for institutional failure in local municipalities. She has also done extensive research around household food security and in 2016 published a book on this subject. She is currently working on a book detailing the linkages between energy poverty, poverty and food insecurity.

Among her different texts you can find those on our website there:

BROKEN PROMISES Electricity access for low-income households: good policy intentions, bad trade-offs and unintended consequences, published at the Public affairs research institute

A JUST DISTRIBUTION. The overlooked role of energy distribution policy and governance in achieving a just energy transition in South Africa, a research paper also, published at the Public affairs research institute

The second presentation dealt with electricity access in South Africa and the link between energy vulnerability and food poverty. This research was trying to understand energy poverty from households themselves. South Africa is one of the most inegalitarian country in the world: 55% of the households live below the poverty threshold, one fourth lives below the food poverty level. Due to the Covid-19 crisis, unemployment rate increased significantly, mostly affecting the informal sector. In parallel, in South Africa, 99% of the food is bought by the households, as there is almost no agriculture. Moreover, cooking is also one of the most important source of energy demand (refrigerate for instance). Then, if the income is impacted (by unemployment or energy prices rise), it has dramatic consequences on food security.

Whereas South Africa has a good level of electrification, compared to other developing countries (85% of the households are electrified, others mostly live in informal settlements), the price of electricity is unaffordable for most citizens. The lack of access to affordable energy has a dramatic impact on people's opportunities and contributes to increasing inequalities. Then, in theory, the State wants all citizens to have access to affordable energy and there are a lot of questions about the minimum amount people need. The main issue in South Africa is the

paradox between, granted affordable electricity for all and the funding needed by companies providing energy. According to this second part of the paradox, people must pay their bills, and this prevailed over access to affordable electricity. Then, South Africa has implemented prepaid electricity meters, forcing people to pay in advance their bills. Prepaid meters have allowed the general electrification in South Africa, but they have also increased poverty as there is a reduction of 48% of electricity consumption since the introduction of this payment model, affecting the most vulnerable households first.

Then, these kinds of policies have impacts on households' way of living. As we have seen above, poor households must make trade-offs between energy and food. In general, they will prioritise food, but some must sacrifice their own food to have enough of electricity, especially women. The poorest households spend 10% of their incomes on water and around 15% on electricity, which represents one fourth of their income. Besides, women have different needs than men, because they must provide electricity for cooking and for the children. Nevertheless, there isn't any policy that addresses the energy-gender gap, exacerbating gender inequalities.

Finally, even if the State say that people must pay their electricity, some just cannot. That is why, Tracy Ledger argues that energy should be seen as a public good, such as education, because that could create some opportunities and reduce inequalities. On the contrary, policies that have been implemented (prepaid meters) contribute to increase inequalities, and to make households poorer.

Lebanon, entanglement of crisis: electricity, devaluation, COVID, etc².

Eric Verdeil

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After graduating in Geography and in Urban Planning (Ecole normale supérieure, Paris, Institut français d'urbanisme, Université Paris 8), Eric earned a PhD in Geography (2002, Université Paris I-Sorbonne). He specializes in urban geography. Since September 2016, he is University Professor at Sciences Po Paris. Eric conducted most of his research in the Middle East and particularly in Lebanon,. His fieldworks recently expanded towards the South and the East of the Mediterranean, most notably Jordan and Tunisia.

His publications include *Beyrouth et ses urbanistes : une ville en plans* (2010, IFPO), *Atlas du Liban. Territoires et société* (codirection avec Ghaleb Faour et Sébastien Velut, 2007, rtranslated in english and last year in 2020 Atlas des mondes urbains at Sciences Po

You will find on our website two papers from Eric

Verdeil, Éric. 2017. 'Infrastructure Crises in Beirut and the Struggle to (Not) Reform the Lebanese State'. *Arab Studies Journal* XVI (1): 84–112. (online: <https://halshs.archives-ouvertes.fr/halshs-01854027>)

Verdeil, Éric. 2016. 'Beirut, Metropolis of Darkness and the Politics of Urban Electricity Grids'. In *Geographies of the Electric City*, edited by Andrés Luque-Ayala and Jonathan Silver, 155–75. London: Routledge. <https://halshs.archives-ouvertes.fr/halshs-00858126>.

The third presentation was a case study of the Lebanese crisis. Most of the research on this subject used a political lens (lockdowns and the control of the population), but nothing was

² Here is the link to the article of E. Verdeil on the subject:

<https://www.beiruturbanlab.com/en/Details/614/the-territories-of-the-covid-19-response-in-lebanon>

done about energy vulnerability. This is what motivated Eric Verdeil to address this issue in connection to COVID-19.

Unlike South Africa, energy access in Lebanon has worsened over time because of a series of crises (refugees, energy, Covid19...). Indeed, Lebanon faces two colliding crises amid financial, political, and social meltdown. On the one hand, the pandemic: the first wave of Covid-19 was high because Lebanon receives a lot of travellers from its own diaspora in addition to the migrants coming in the country. On the other hand, the energy crisis: in October 2021, Lebanon faced a total electric blackout, because of the worsening situation over the last ten years. So far, generators were used as a back-up to energy shortage, but since 2021, EDL and generators experienced massive power cuts. This crisis hit the entire Lebanese population, without distinction between rural and urban areas.

This situation has several roots. First, the political instability since 2019, with a lot of mobilisations against the corruption of the ruling classes, and the Beirut blast in August 2020, increased the energy crisis. Second, the devaluation of the national currency at a rate of 95%, which resulted in a decrease of 40% of the GDP. This inflation has multiplied per four the level of poverty (80% of Lebanese are below the poverty threshold), generating a brain drain (young graduates, physicians, health specialists left the country).

Crises can be analysed through several approaches. First, from the financial angle, the financial crisis is largely the result of the debt of the national electricity utility (on average more than 1.5 billion dollar per year), which represents more than 40% of the total public debt. Then, this crisis is due to the mismanagement of electricity. In 2021, the electricity utility was not able to import power fuel because it was too expensive, then the state stopped subsidizing fuel. This contributed to increasing social inequalities, for instance, before the end of the subsidy on essential drugs, there was scarcity, then increased prices made essential drugs out of reach for most. Then, with this crisis the main infrastructures have been under a financial threat. For instance, hospitals which depended on State debts have taken much of the burden despite the lack of funds. There has been discussion with the World Bank, but the safety measures have not been implemented because of the Lebanese government. Second, the energy crisis had important consequences on households but also on the existing infrastructure system. The energy shortages and the power cuts triggered a series of breakdowns of other infrastructures (food, internet, water, health...) all touched by the massive collapse of the electricity and diesel generator sectors, for instance, the hospitals have to refrigerate vaccines, or use artificial respirators that run on electricity. This is not just a financial crisis, but also a material and infrastructure crisis.

Third, Eric Verdeil analysed the crises through the political consequences. Indeed, the infrastructure crisis is triggering protests and mobilisations. For instance, after the crisis related to the waste management, there have been mobilisations. However, Covid 19 was pretence to disband the protests and evacuate activists who occupied city centres. The government used the crisis to eliminate the political threat.

In the last part, Eric Verdeil analysed the responses of the government to the crisis. On the one hand, the government took several measures such as vaccination. However, refugees were massively discriminated with few health facilities targeted to them. Despite the World Bank policy to design a fair policy of vaccine distribution, cases of abuse involving ruling class members being vaccinated in priority were reported. Moreover, the government responses were sectorial and depended on the territory. On the other hand, civil organisations also developed responses to the crisis in changing the system in the long term. Those initiatives were cross-

sectarian. They represented 1/3 of the initiatives but were fragile financially speaking. Those initiatives were participative projects.

Finally, this crisis in Lebanon is not an opportunity to think the notion of a “right to energy”. Proposals to reform an efficient electric system barely include social considerations. The solar energy could be a solution and renewable energies will help increase the energy supply but at a cost that is out of reach for many. In this context, the social issue of the access to energy is not on political agenda.