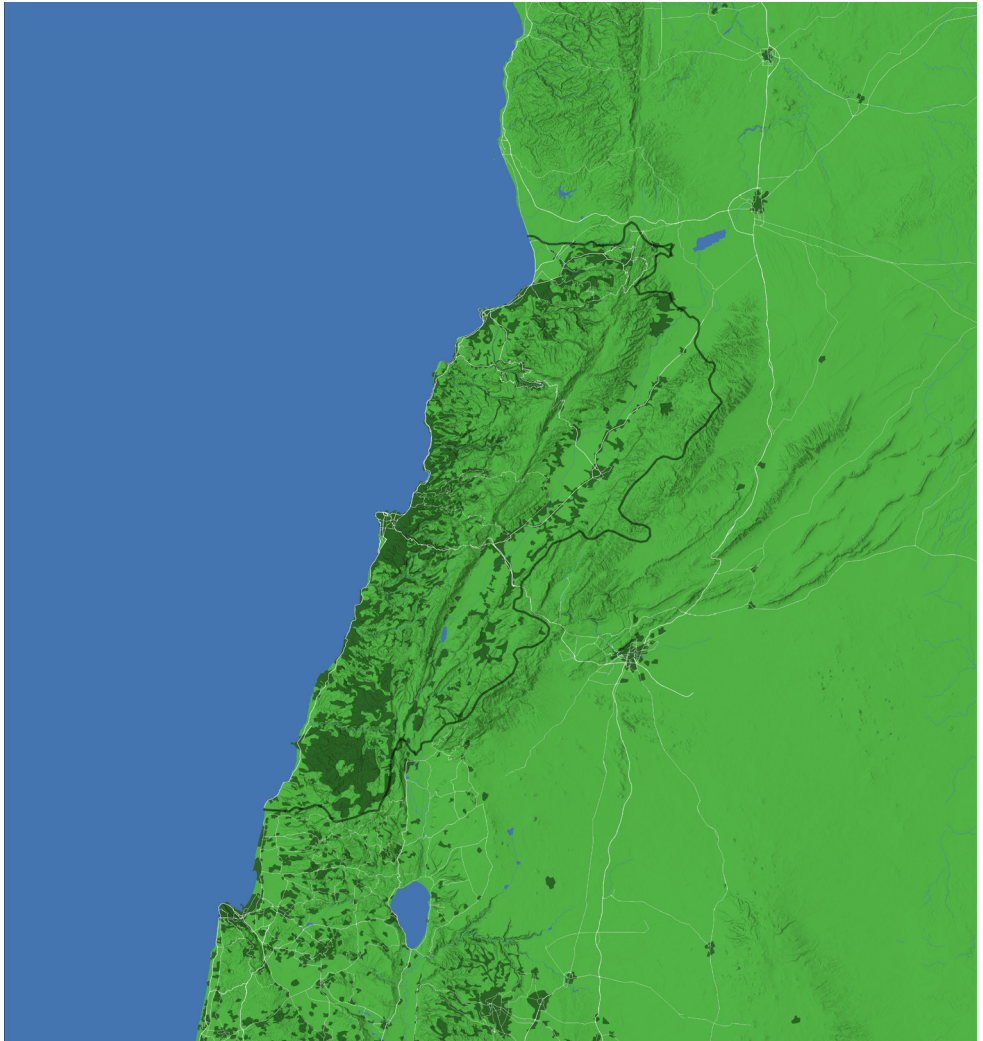

Radical Urban Lab
Volume 3 // Report 1
January 2025

An Analysis of Energy Politics
in Lebanon and the Effect on
Decentralised Community-
Owned Energy Movements
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The research for, and writing of this report were supported by the St Andrews Research Internship Scheme (StARIS).

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Cover: map of Lebanon - Chris Craig-Neil

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Foreword

Dr. Antonis Vradis

Beirut, January 2025

In Lebanon, everything is energy: the energy of the people buzzing around the street-veins of its restless capital city; the energy of its thriving communities, including Beirut's renowned Palestinian refugee camps, persevering and thriving against all odds, bustling with the determination of their inhabitants to endure despite the devastation of displacement, crises and wars – the latter carrying their own combustible and deadly energies. Seema Machaca (2024) has already provided an exceptional blueprint for how the country's vibrant energy can be harnessed and supported through a genuinely community-owned and controlled solar panel system. Here, Seema revisits Lebanon's energy crisis, this time broadening her political perspective and historical scope to help us understand the long-term, systemic failings that have led to the crisis in the first place. The ways in which Seema engages with the opportunities presented by the country's newly introduced Distributed Renewable Energy Law should inspire great optimism: here is a new generation of forward-thinking Lebanese scholars and practitioners who bring the enthusiasm, expertise, and determination to provide this remarkable country with the infrastructure it needs to match its unparalleled energy.

Introduction

24-hour electricity has not been accessible to Lebanese citizens since the end of the civil war in 1990 (Saghir et al., 2022). Lebanon's energy crisis, rooted in political mismanagement and corruption has only worsened since the 2019 economic downturn, which as described by the World Bank, is one of the worst economic crises since the 1850s (World Bank, 2021). Lebanese citizens have taken the energy crisis into their own hands and supplement Electricité du Liban (EDL) or government-provided energy through diesel power generators and renewable energy. The citizens themselves have initiated a green energy transition, not for the desire to live more sustainably, but out of pure necessity. As a result, domestic solar energy production in Lebanon has increased tenfold over the last decade (Haytayan, 2023).

I think it is clear here that communities across Lebanon are more than capable of taking action regardless of the several political, social, and environmental crises happening around them. This understanding inspired my last piece of work on the energy crisis in Lebanon where I outlined a decentralised micro-grid community-owned solar panel system as my suggested solution (Machaca, 2024). Essentially, the paper looked at designing a solution an urban community could use to address a problem they were facing. This piece of work made a point of empowering the community without political involvement. However, political actors will always play an important role, whether that is a positive, or in this case a negative role. After finishing that paper, I was left eager to understand the past and present energy politics in Lebanon in order to analyse how political action will affect community-led initiatives like the one I had developed. Thus, this paper looks to summarise the past, present, and future of energy policy in Lebanon, to develop a more informed understanding of how this affects community-owned renewable energy systems.

History of the Energy Sector in Lebanon

Let us first look back at the history of how the government has tried to handle the energy situation as this will provide context to the state of current energy politics.

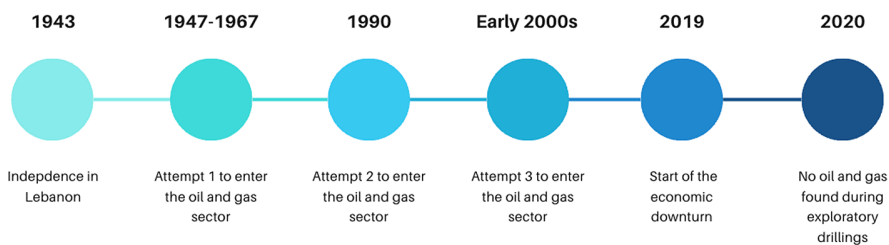


Figure 1, Historical timeline of energy politics in Lebanon. This will be used alongside the further description below.

In 1943, Lebanon gained independence and began the journey to try and establish itself as a state. Part of this included deciding what industry Lebanon would be dominant in to provide for the economy. This led to the first oil and gas exploration between 1947-1967 which came up empty. So instead, Lebanon transitioned its economic vision to a ‘service-based’ economy with a focus on “banking, healthcare, education, and tourism for the Arab region” (Haytayan, 2023). However, there was still a determination to dominate the energy sector. So, after the civil war ended in 1990, oil exploration resurfaced under Prime Minister Rafic Hariri’s first government. In this 2nd attempt, the search for oil and gas was stopped for a different reason: what Haytayan (2023) described as “Syrian intervention in Lebanon’s economic affairs”. So, once again the focus shifted back to the service-based economy vision.

In the early 2000s however, ambition to enter the energy sector was reignited when the US Geological Survey’s predicted significant oil and gas reserves surrounding Lebanon. In 2007, Lebanese authorities began collaborating with the Norwegian government and international oil giants like Noble, BP and Shell to develop a policy framework. By 2010, an Offshore Petroleum Resource Law (No.132) was ratified which led to the inception of the Lebanese Petroleum Administration in 2012. With prospects looking more promising, blueprints and partnerships were further developed through model contracts, an inaugural bidding round, and sector tax regulations between 2013-2017. In 2018, Lebanon had developed contracts with three energy companies: Total Energies, Eni, and Novatek. And in 2020, with a hope for success, the corporations began exploratory drilling. However... no gas or oil reserves were found.

Between 1990 all the way up to 2020, there were several promises of continuous energy supply over the years. But when 2019 rolled around, the economic downturn intensified the continuous blackouts and the energy crisis became even more severe. Haytayan (2023) argues the root of the problem is that there has never been a holistic energy strategy as displayed above and unfortunately as displayed by the more recent energy policy scene. The Lebanese government continues to make agreements with international organisations and other governments that attempt to provide short-term solutions to the lack of energy in the country. However, this leads to more debt, while the crux of the matter remains unresolved. The next section will outline the current energy plans in Lebanon and will support Haytayan's (2023) argument outlining a lack of a long-term energy strategy. Regarding the development of a decentralised community-owned energy system, a holistic understanding of the political situation will be valuable for informed decision-making.

Current Policy and Public Sector Plans for Energy in Lebanon

So, what are the Lebanese government's current plans to provide electricity to its citizens? Let us look at an overview of the more prominent 'plans' including the Iraqi fuel deal, Egyptian gas via the Arab Gas Pipeline, Jordanian electricity via Syria, and the release of the Distributed Renewable Energy Law.

Jordanian electricity via Syria

On 26 January 2022, Jordan signed a US-backed deal to provide Lebanon with about 2 hours of electricity per day. (Reuters, 2022). The deal, with a projected cost of \$200 million is once again financed by the World Bank. With the EDL on the verge of collapse, Chehayeb (2022) highlighted energy experts' concern with the lack of energy sector reform, and instead, this seems to be more of a band-aid on an infected wound.

Distributed Renewable Energy Law

In the background of this political scramble, the private sector has taken it into their own hands. Excluding photo voltaic (PV) systems financed by international

organisations, the private sector invested more than USD 500 million into solar panel installations (Boukather, 2023). The Lebanese citizens alone have initiated an energy transition. The policy is only now catching up to support this with the new Distributed Renewable Energy Law which allows consumers to “exchange the electricity they produce from renewable energy sources with EDL’s or store it in the grid for 12-month cycles, at the end of which they are compensated for a percentage of the remaining surplus” (Taha & Akel, 2024). Authorised producers can now use the public grid to distribute their energy generated and can also sell nationwide without EDL’s infrastructure.

Unfortunately, this law is nowhere near fullproof and presents two major challenges. (1) the ERA (electricity regulatory authority) has still not appointed members even though the success of this law depends on their involvement. (2) The government is still unable to finance loans that would encourage growth within the sector. This pressure is now being alleviated by funding from international donors. In March of 2023, the US Agency for International Development (USAID) created a Solar and Renewable Energy fund for USD 20 million (Taha & Akel, 2024). The government should be eager to address these challenges as this is the main demand from international funders like the World Bank.

Forward-Looking: A Commentary on How Decentralised Community-Owned Energy can Fit In

The current ‘solutions’ the government has in place would only provide 10 hours’ worth of energy for Lebanese citizens per day. What about the remaining 14 hours of the day? This is where community-owned energy systems can play a significant role. Lebanese citizens have already begun to find alternate forms of energy (renewable or power generators) out of necessity. As argued in my original paper, there could be increased benefits if renewable energy systems (specifically on-site solar panels) were developed at a community level (Machaca, 2024). As outlined in further detail throughout my previous report, there are several actors needed for such a system to be successfully implemented. This includes

an NGO, the community themselves, and an academic/research team. What is not mentioned in detail is the role of political actors. Even though decentralised systems aim to move away from their involvement, a lack of policy can restrict the capabilities of community-run initiatives. The new Distributed Renewable Energy Law now allows decentralised, community-owned energy to be implemented because the leftover energy can be stored on the grid. If the government aims to achieve the goal, it needs to implement several political roles as explained by Taha & Akel (2024). To see the success of decentralised renewable energy systems, the government must create regulatory measures to “manage grid stability issues, and ensure quality and efficiency” (Simet, 2023). Beyond a community-owned system, there are several positives to putting pressure towards achieving a renewable energy transition. The Lebanese Foundation for Renewable Energy (LFRE) (n.d.) conducted a study which concluded that renewable energy fared the strongest on cost, social and economic impact (like job opportunities), energy security and reliability, as well as respect for the environment. Working with organisations like the LFRE can help support these smaller, micro-grid energy solutions.

Beyond just these laws, it is unlikely that further reforms are coming soon, even with international pressure from organisations like the World Bank. Especially with the compounding crises and the unstable conditions in the region. As I write this, the Lebanese citizens sit anxiously waiting to see what will happen with the Israel-Hamas war and the interconnected Hezbollah-Israel tensions.

Conclusion

The research conducted over these two papers is important to developing a full understanding of what a community-owned renewable energy system should and could look like. However, at some point, I am under the belief that this research must be implemented to fully understand all the possible flaws. It is easier for me to read the literature and understand the patterns displayed by Lebanese residents with this bird’s eye view. But this looks very different when you are on the ground implementing a system with so many moving stakeholders and parts.

Although the main aim of the paper, is to comment on the Lebanese system, in order to develop a tailored approach to the energy crisis, this piece of work is also more relevant on a wider level. It shows the requirement for multi-stakeholder approaches to achieve long-lasting sustainable solutions. Although we do need interdisciplinary approaches, it is becoming increasingly clear that success is more largely dependent and impacted by the political actors involved, compared to other relevant stakeholders. Unfortunately, the case of Lebanon illustrates this at a severe level.

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