LEBANON

In the rush to stanch the bloodshed and rebuild Lebanon after a destructive 15-year civil war, the 1989 Taif Agreement maintained Lebanon's confessional system,

dividing political and economic power between the country's 18 recognized sects. The agreement had the effect of empowering warlords and transforming them into political leaders. When utilities were rebuilt in the post-war period, the country's sectarian parties

became shareholders in reconstruction, and transparency and accountability were deferred. Lebanese have been paying the costs ever since.

Early in the civil war, the government created the Council for Development and Reconstruction (CDR) to allocate aid for infrastructure reconstruction. In the years since, it has become one of the country's most powerful economic actors, spending billions of dollars in close collaboration with Lebanon's prime minister. The quality of service provision has often lagged, but the CDR has served its purpose as a political lubricant, rewarding politicians' families and sectarian parties that advanced their members' narrow interests.[52] Political peace was maintained at the cost of effective and efficient services.

While Lebanon's political and economic power is intentionally fragmented, at its core is a centralized system that distributes patronage. Localities depend on the central government for services and revenue, and they lack the resources to develop their own solutions to the central government's failings. Those failings are legion. The World Bank says Lebanon's electricity shortages are the fourth worst in the world, and the public hails as "electricity martyrs" those who die while illegally tapping into electrical supplies.[53] Only 48 percent of the population has access to safely managed water.[54] The seas off much of Lebanon's beautiful coastline have 100 times the bacterial concentration than authorities would cite to close a New York beach.[55] Lebanese pay one of the highest rates in the world for solid waste management, yet 77 percent of the country's waste is either openly dumped or tossed into a landfill.[56] In response, popular protest movements have arisen, and governments have fallen.

Today, the country is in crisis. Failures in basic service provision are at the epicenter, creating widespread economic, environmental, health, and political consequences. Lebanon's intentional-

When utilities were rebuilt in the post-war period, the country's sectarian parties became shareholders in reconstruction, and transparency and accountability were deferred. Lebanese have been paying the costs ever since.

ly fractured, heavily managed approach to public services produces poor results and starves stakeholders on the periphery from the resources that would allow them to provide those services more efficiently, effectively, or sustainably.

GOVERNANCE OF SERVICE DELIVERY

While much of Europe's nineteenth century history was about the homogenization of nation states, Lebanon was carved from Greater Syria in order to protect Christian minorities on Mount Lebanon. However, as a national identity formed in the twentieth century, it emerged in tandem with Lebanon's primordial identities—the country's 18 official sects. Lebanon's uneasy sectarian balance burst apart in a civil war that erupted in 1975 and lasted a decade and a half. When peace was made and the country patched together, former sectarian warlords became politicians and businessmen. The result was a set of often strained political relationships that had economic implications and economic relationships that had political implications.

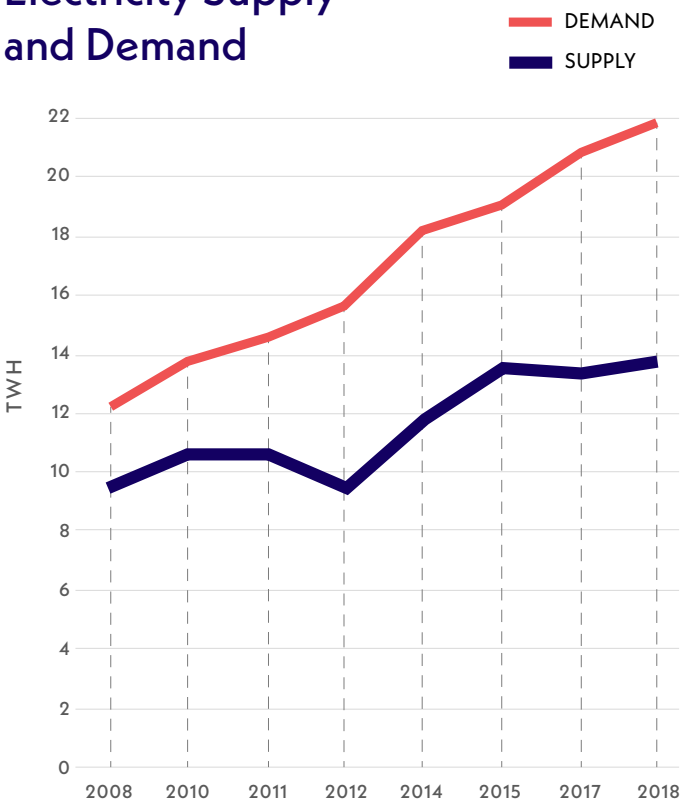
The country has few robust and genuinely national institutions. Instead, individual sects have captured many institutions in the country, leading both to the replication of efforts and the limited authority of national organizations. The Lebanese system sometimes seems better at checking political power than executing it, and this has proven a problem as the country has been forced to rebuild from warfare multiple times in the last half century. Volatile politics and the periodic eruption of war have discouraged long-term investments, and Lebanese coping strategies—often borne out of war—have tended to favor minimally adequate fixes rather than comprehensive reform.

POWER

Lebanon has long faced electricity shortages. Today, the effective capacity of Lebanon's electric system is less than two-thirds of peak demand, leaving a gap of 1.5 gigawatts.[57] Some parts of the country get only four hours of power per day.[58] As a result, many of Lebanon's residents have fallen back on old wartime habits, relying on inefficient, smoke-belching diesel generators. State-subsidized electricity is almost comically cheap, with rates that have not changed since 1994, but the costs of supplementing intermittent supply with costly diesel generators busts the budgets of many Lebanese.

Power sector reforms would rebound through Lebanon's entire economy. The state-owned Électricité du Liban (EDL)

Electricity Supply and Demand



Source: "Lebanon's electricity supply and demand balance (Sources: data was obtained from EDL, Projections are based on team's analysis)," in Ali Ahmad, *Distributed Power Generation for Lebanon* (Washington, DC: IBRD/World Bank, May 2020), 12, http://documents1.worldbank.org/curated/en/353531589865018948/pdf/Distributed-Power-Generation-for-Lebanon-Market-Assessment-and-Policy-Pathways.pdf.

company holds a monopoly on power generation, transmission, and distribution in Lebanon; its losses account for 40 percent of Lebanon's national debt. In recent years, international donors and financial institutions have focused attention on reforming the power sector, to no avail. Specifically, the International Monetary Fund has repeatedly asked the government to (1) reduce technical and non-technical losses since only 57 percent of electricity produced is transmitted, billed, and collected; (2) increase capacity by building new power plants; and (3) increase electricity tariffs.[59]

The Lebanese parliament has tried, too. Almost 20 years ago, parliament passed Law 462/2002. The law envisioned that a new and independent electricity regulation authority would monitor the process and grant licenses for power generation, but the government has repeatedly postponed the creation of the authority.[60] Instead of implementing the law, parliament awarded the Lebanese cabinet sole authority to grant licenses and tenders for large-scale power generation, based on recommendations by the Ministry of Energy and Water (MEW) and the Ministry of Finance (MOF). What was to be a formal process with rules, transparency, and accountability became an informal one with no clear criteria for selecting bids.[61]

Despite its failure to implement the 2002 law, the government has continued to make myriad promises to supply 24 hours of power daily. It floats plans to build six new power plants, rehabilitate or close aging plants, switch to cleaner and more cost-efficient natural gas, invest in renewables, increase collections on payments, and increase electrical fees to reduce deficits. Yet, the improvements have been slow to come. Instead, starting in 2013, Turkish power barges running on diesel and fuel oil—rather than natural gas as was proposed—have anchored off the Lebanese coast.[62] There are now three, and they account for a quarter of the country's power generation capacity.[63] They are more expensive than generation on land, and the exhaust is a menace to the populations nearby.[64] Intended as a short-term fix until longer-term, more sustainable and affordable solutions could be implemented, they have become a durable feature of the Lebanese coastline.[65]

TAKING THE POWER BACK

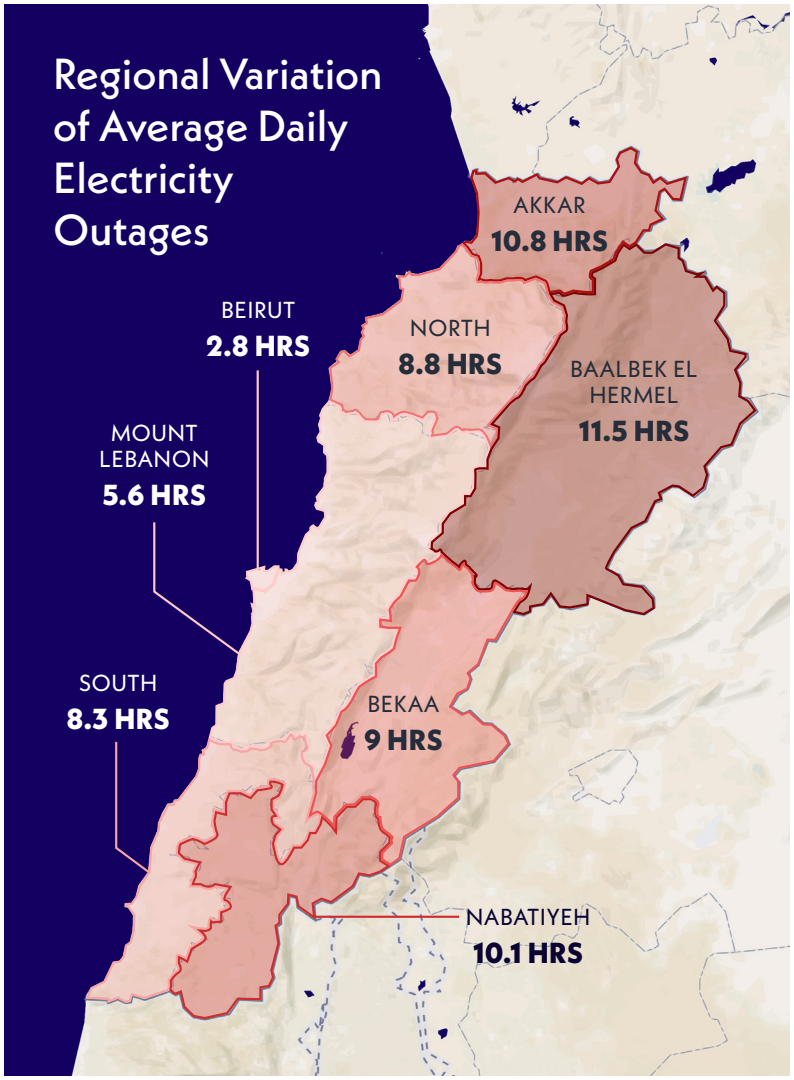
When residents in the small village of Qabrikha in southern Lebanon pay their electric bill, they pay twice—once for energy supplied by Lebanon's energy monopoly, Electricité du Liban (EDL), and once to fuel diesel generators during the EDL blackouts that are a daily occurrence in southern Lebanon. Recently, they started paying a third bill: for energy from a photovoltaic solar farm that the municipality built. With the third bill, overall costs have plummeted.

According to one resident, connecting to the solar system cut electricity costs by 30 percent and ended daytime blackouts. Villagers like the system so much that when it went down due to a technical glitch last February, villagers and the municipality implored the UN Development Program (UNDP)—which launched the Qabrikha project—to get it back online as soon as possible. The savings have allowed the village to invest in grid improvements and offer power to residents for longer periods for less cost.

Still, the project has had challenges. While UNDP and EDL reached an agreement more than two years ago for the solar farm to sell excess electricity to the utility, EDL has yet to sign the contract or attach the necessary bidirectional meter. For now, customers have to pay multiple electric bills.

Despite the challenges, Qabrikha demonstrates that there is a demand for sustainable electricity in areas of Lebanon that have been historically cut off from electrical resources, for both economic and environmental reasons. Renewables keep the lights on in Qabrikha, even if residents still have to pay twice.

It is difficult to explain Lebanon's failure to pursue more sustainable power production through natural gas and the construction of desperately needed new power plants. Some experts argue that vested interests in the shale and diesel industry are part of the calculus of failing to pursue the use of cleaner natural gas or renewables.[66] Sectarian politics have also come into play when the construction of a new power plant was halted when politicians insisted that the plant be built in their sect's area, disregarding the infeasibility of that location.[67]



Source: "Lebanon's electricity supply and demand balance (Sources: data was obtained from EDL, Projections are based on team's analysis)," in Ali Ahmad, *Distributed Power Generation for Lebanon* (Washington, DC: IBRD/World Bank, May 2020), 13, http://documents1.worldbank.org/curated/en/353531589865018948/pdf/Distributed-Power-Generation-for-Lebanon-Market-Assessment-and-Policy-Pathways.pdf.

Many consumers have been looking to renewables to fill the gap. In collaboration with the Central Bank of Lebanon, and with the help of international donors, the Lebanese Center for Electricity Conservation, a branch of the MEW, began offering long-term, low-interest loans in 2012.[68] The loans were intended for individual consumption, but some larger-scale entrepreneurs saw an opportunity. Increasingly inexpensive solar panels, when combined with subsidized loans, could provide economical and sustainable solutions for small towns. The town of Jabboule, in the Bekaa valley, developed a project that combined PV panels with battery storage to supply 200 homes, a factory, and a school.[69] Other towns developed renewables as well, using hybrid systems incorporating generators and solar.[70]

While the benefits of incorporating renewables in the energy mix are clear, there are numerous challenges due to a dearth of human resources at EDL and electricity capacity. While EDL provided a simple online application for customers that both generated and consumed electricity to acquire a bidirectional meter, they did not have the capacity to respond to applications in a timely way.[71] And since EDL does not provide 24/7 electricity, solar producers were also forced to negotiate with numerous diesel generator operators to develop a hybrid

system, creating another hurdle.[72] Still, some municipalities and individual consumers needed the alternative and were willing to work around the obstacles. But by 2018, Lebanon's growing financial crisis dried up most of the bank financing used to provide long-term, low-interest loans.[73]

Developing larger-scale renewables is even more difficult. Prior to the current crisis, there was a MEW initiative to award a limited number of large-scale contracts for solar and wind-generated power.[74] However, since these PPAs do not require any capital investment by the government, the investor takes on all the financial and technical risks of working in Lebanon; risks which translate to higher wind energy and solar PV costs in in the PPA.[75] For example, a wind farm in Akkar is charging 10.75 cents per KwH for wind power, when the levelized cost of electricity is 7.8 cents.[76] The margin of profit will allow the company to recover its initial investment. Even with this additional cost, it is still cheaper than EDL's average cost of production at 17.14 cents per KwH.[77]

Renewables seem like an obvious solution for Lebanon's persistent power problems. With over 300 days of sun per year and a potential of 6.1 gigawatts of wind energy, Lebanon is well-suited for renewables.[78] Given the current grid capacity, investments may have to start small or be disconnected from the grid. Entrepreneurs in the renewables sector are ready, and the assessments for capacity have been done. What is missing is capital and an appropriate regulatory framework.

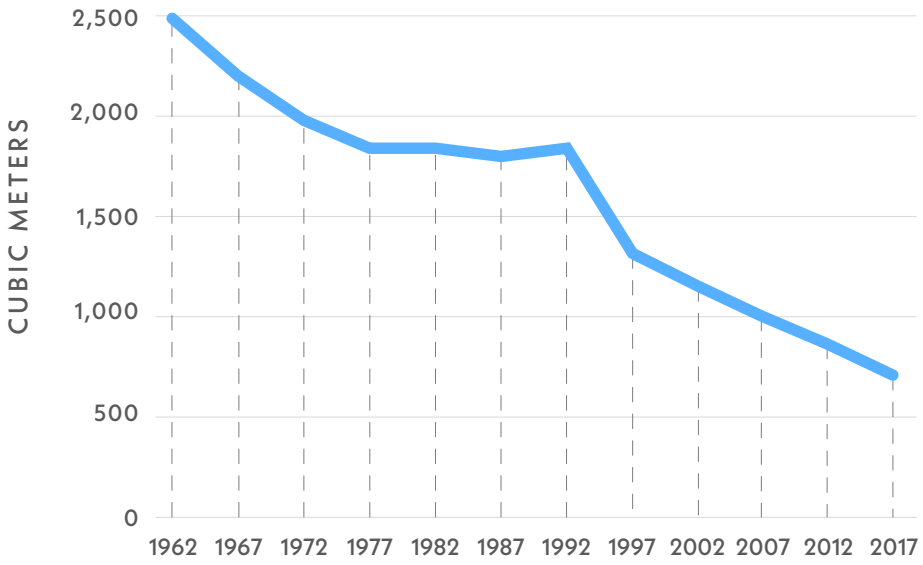
WATER AND SANITATION

Thirty years after the end of the civil war, getting access to clean running water remains a challenge in many parts of Lebanon. Water providers have become indispensable; key to Hezbollah's rise in the 1980s was the provision of free water in underserved neighborhoods.[79] Lebanon, once water-rich compared to its neighbors, now suffers from water scarcity. Its sea fronts, lakes, and rivers are dangerously polluted with raw sewage, often visible as grey blotches on satellite imagery.

Many neighborhoods have experienced hours of daily water cuts since the civil war. Much like electricity, poorer neighborhoods in the Greater Beirut area and southern and northern Lebanon suffer the most. Trucked water can fill much of the gap, but it can cut deeply into lower- and middle-class families' incomes. Bottled water can supplement, as well, but it is even more costly and adds to the country's solid waste crisis.

There are many factors contributing to the steep decline in water availability. Underinvestment, conflict, informal property development, and planning splintered by regional and sectarian tensions have hurt water and sanitation utilities. The influx of 1.5 million Syrian refugees has increased the demand on water services by almost 30 percent.[80] Today, Lebanon claims less than 1,000 cubic meters per capita of annual renewable water resources, the definition of water scarcity. Along with naturally increasing demand, climate change could further reduce Lebanon's water availability by as much as 16 percent.

Renewable Water Sources per Capita



Source: The World Bank, "Renewable internal freshwater resources per capita (cubic meters) – Lebanon," Database, https://data.worldbank.org/indicator/ER.H2O.INTR.PC?end=2017&locations=LB&start=1962&view=chart.

The problems of Lebanon's water sector are, in some ways, even more challenging than the challenges of the electricity sector. Water is a shared resource, but it is not one that is shared equally. Today, an estimated 20,000 boreholes in Greater Beirut and Mount Lebanon—many of which are illegal—provide water to households across the income spectrum, exacerbating water scarcity and corrupting the data necessary to inform planning decisions.[81] As in the electricity sector, propositions have been robust, but execution has been paltry. Of 18 dams proposed as part of the National Water Sector Strategy for 2000 to 2010, only a single one was built.[82]

While there has been significant investment in wastewater infrastructure, the benefits have not matched the spending. In the decade after the civil war, the CDR awarded 122 contracts in the wastewater sector; 42 small treatment plants were built between 2001 and 2004.[83] Many of the wastewater treatment plants were built without the energy to function, the workers to operate and maintain them, or connection to sewage networks. By 2007, the country had only one operational wastewater treatment plant, which did not adequately remove contaminants, and only 66 percent of the population was connected to an improved sewer network—mostly along the coast and in major cities.[84] Today, only 3 to 7 percent of wastewater is treated. Most of Lebanon's sewage, industrial, and agricultural waste is still habitually dumped into the sea or the country's water ways.[85] The seepage into groundwater and use of polluted water for agriculture is endemic, damaging public health.

Like the electricity sector, parliament sought to reorganize the water sector about two decades ago. Parliament designated the MEW as the lead policy actor in the water sector, and it consolidated numerous water establishments into just four regional ones under the ministry to build and operate drinking, irrigation, and wastewater treatment. Yet, the regional water establishments never got the necessary resources to fulfill their mandate, and overlapping responsibilities of different government institutions and local stakeholders impeded progress. At least 48 percent of supply is still lost to leakage and theft.[86] Many Lebanese simply do not

IT TAKES A VILLAGE TO PROTECT A RIVER

In 2018, the Lebanese Transparency Association released a dramatic video taking viewers on an aerial journey of the Litani River. The Litani is Lebanon's longest river, and its basin covers a fifth of the country. But this was no tourism video. It showed a waterway choked with waste from municipalities, farms, and industry, along with proof that farms use the contaminated water for irrigation. The video and subsequent reports cite rising cancer rates as evidence for the health consequences of the pollution.

For decades, Lebanese governments have lacked either the will or capacity to combat pollution of the Litani. But in 2018, Sami Alawieh became the head of the Litani River Authority (LRA), the governmental institution responsible for the Litani River. A lawyer by training, Alawieh rallied strong political backing to wage a war against pollution. Lacking a mandate either to manage sanitation infrastructure or shut down violators, Alawieh had to think creatively.

The LRA began recruiting a wide range of partners. Experts at the Lebanese University helped to measure pollution levels, and teams from the Faculty of Agricultural and Food Sciences at the American University of Beirut assisted in documenting violations. The LRA website asked citizens to submit evidence of pollution and polluters through LRA social media channels, and Alawieh posted videos of polluters dumping into the river on social media, engaging the community. The Lebanese Bar Association signed a cooperation agreement with the LRA to provide legal support on environmental matters, and after just one year, the LRA had issued more than 200 violation notices over the discharge of waste into the river. Activists then launched campaigns to boycott the companies and factories while enforcement was pending. Alawieh was labeled a hero for his campaign to save the Litani.

The LRA's campaign has caused its share of disturbance. The campaign displaced hundreds of refugees, and it sued 17 local and international NGOs assisting them for failing to properly manage the latrines servicing the settlements. Litigation also shut down more than 70 unlicensed factories, putting people out of work in an already strained economy.

There will be limits to punishing violators without viable options for cost-effective wastewater treatment in the country. However, the LRA's campaign is an example of civil society, academia, and the judiciary joining together to do what the government alone cannot.

pay their water bills, and even metering remains an innovation in many parts of the country. Starved for cash, handcuffed by a public sector hiring freeze, unable to afford regular maintenance, and facing an unreliable electricity supply to operate its pumping operations, the regional water establishments struggle to deliver services.[87] To this day, only the Beirut and Mount Lebanon Water Establishment (BMLWE) covers its own maintenance and operations costs.[88]

Local stakeholders have emerged to fill in gaps. Despite the MEW's consolidation of authority 20 years ago, more than 200 local water committees continue to operate independently of the ministry and the system it established.[89] The municipalities also have long records of involvement in local water matters, but their principal governmental contact is the Ministry of the Interior and Municipalities (MOIM), which has a weak record of cooperation with the MEW.[90] In addition, some of the municipalities have their own records of tensions, which can complicate disputes over water. In the words of one water expert in Lebanon, "the government pretended that they were operating on a blank page, but the social dimensions were very complex, involving many communities with different ways of functioning together. Tensions between some communities were not taken into account."[91]

HASSAN AMMAR/AFP via Getty Images

A Lebanese boy fills his palms with water to drink from a mineral water tanker that says "Hezbollah" on it in the southern Lebanese village of Frun on November 2, 2006.

Overlapping authorities impede effective service delivery and accountability at the center as well. Lebanese complain that the CDR and the MEW share responsibility to plan, fund, and implement large-scale water infrastructure, but they do not coordinate.[92] In light of these ongoing governance issues, cheating has become widespread because regulations are rarely enforced.

With this lack of accountability, the Lebanese public has grown especially skeptical of large infrastructure projects, which are susceptible to corruption. The recent campaign to stop the construction of the Bisri Dam to augment water supply is emblematic of this mistrust.[93]

However, there have been exceptional individuals that have made positive change in this complex environment. In Ablah, about 20 miles southwest of Baalbek, the mayor played a major role in ensuring that a small wastewater treatment plant continued to function by collecting yearly fees from residents and hiring a competent engineer to manage the project.[94] In spite of some challenges, the project was able to better treat the wastewater and irrigate farms, limiting the usage of groundwater.[95] Further south in Saida, the South Lebanon Water Establishment (SLWE) hired 45 new engineers and fired more than 60 inefficient contract employees to allow the institution to function.[96] The SLWE was not the only governmental institution shaking things up. In 2018, the new director of the Litani River Authority (LRA), the government institution established in 1954 to manage Lebanon's rivers and irrigation and hydropower projects along Lebanon's longest river, began cracking down on polluters—taking big industries, municipalities, and even NGOs to court.[97] However, many of these examples were successful in spite of the system, rather than because of it. They also required some level of political backing or, at least, acquiescence, which is not always forthcoming.

The checkered record of incomplete or failed water projects has also damaged the reputation of international development agencies, NGOs, and international financial institutions working in Lebanon. However, some implementers are learning how to work in the Lebanese context. In order to ensure that water and sanitation services are more equitably distributed, some implementers have shifted from unsuitable infrastructure to focusing on realistic inputs, communication, and coordination. Low-cost and low-energy wastewater treatment projects have been proposed and developed, such as constructing wetlands to naturally filter toxins.

Decentralized wastewater treatment companies could be a promising alternative to large plants that require energy and resources that Lebanon does not possess. A creative initiative by the AFD linked French municipalities with Lebanese ones and used the framework to build relations between the regional water establishments, municipalities, and sometimes the CDR.[98] USAID began working directly with local NGOs, agricultural cooperatives, and municipalities to install drip irrigation, cutting water demand considerably.[99] Now, donors are working with the government to improve its recovery costs; this is vital for continued maintenance and operations.

Lebanon's waterways are in crisis, but the country has the technical experts and entrepreneurs to develop solutions to the

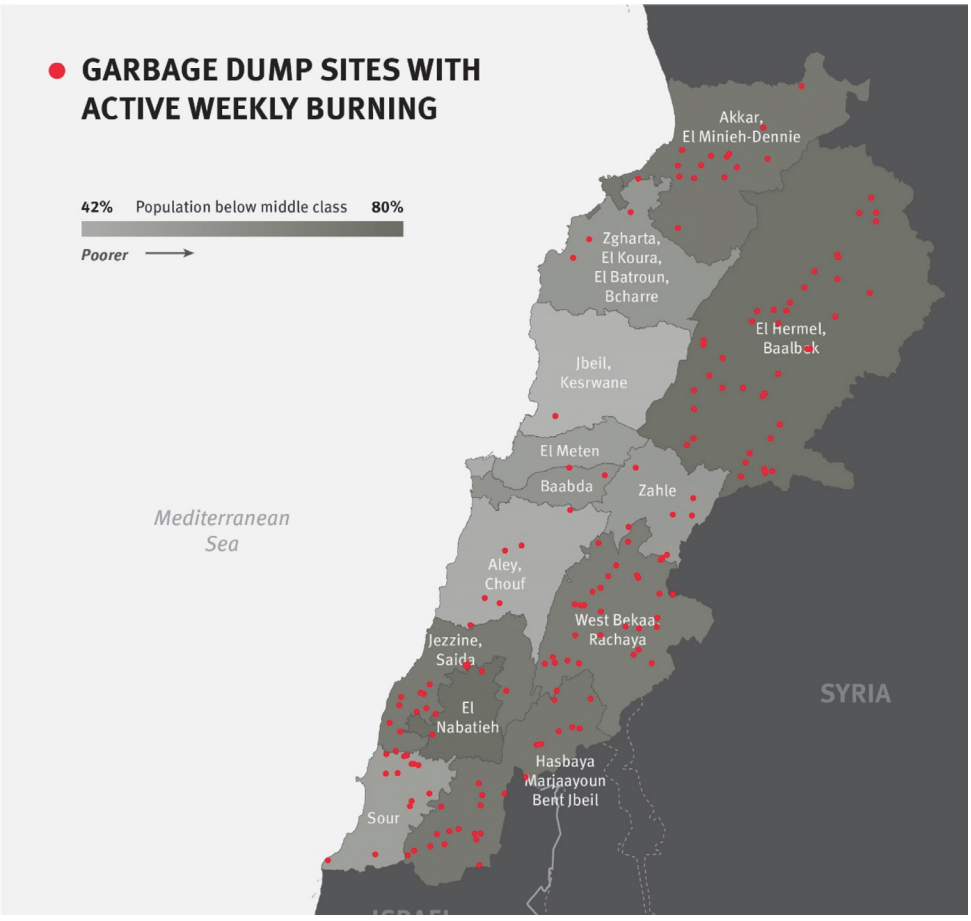
country's water supply and sanitation issues. Adopting these cost and energy efficient solutions, coordinating with local stakeholders, and equitably enforcing regulations will not radically fix Lebanon's problems overnight, but it will help reinstate the trust needed to ensure water is a public good for all.

WASTE

When refuse began spilling into the streets of Beirut after the closure of the Naameh landfill in July 2015, it ignited waves of protests. Citizens' discontent at the central government's failure to provide waste collection and treatment birthed dozens of civil society movements including Beirut Madinati (Beirut, My City) many of whom rallied under the slogan, tal 'it rihatkum, or "You Stink." But 2015 was not the start of Lebanon's garbage crisis, it was only the year that the crisis reached the richer parts of the country. Lebanese have burned waste and used open landfills for years, harming their health and the environment.[100]

These problems emerged in spite of the country paying some of the highest rates for solid waste collection in the world. The company with a monopoly on waste collection and street cleaning in Beirut reportedly receives $140 per ton of waste.[101] By comparison, Algeria spends around $7.22 and Jordan $22.80.[102] Only 6 percent of solid waste is recycled, and most is merely disposed of in unsanitary landfills. Entrepreneurs have been eager to gain entry to the waste sector but have found it difficult to break the monopolies dominating waste collection.

At the national level, the Waste Management Board oversees developing waste



Source: Human Rights, Watch, *"As If You're Inhaling Your Death": The Health Risks of Burning Waste in Lebanon* (Human Rights Watch, November 2017), 46, https://www.hrw.org/sites/default/files/report_pdf/lebanon1117_web_1.pdf.

GOLD FROM GARBAGE

When the mayor of Manara, Hassan Ayoub, does his daily lap through the streets of his small municipality in Lebanon's Bekaa, he looks for one thing: small bins outside of residents' homes that indicate they are sorting their waste.

Manara is one of a few Lebanese municipalities that have teamed up with Compost Baladi, a startup promoting low-tech, low-cost composting solutions for municipalities, individuals, and the private sector. The company's founder recognized an opportunity to significantly decrease the amount of organic waste dumped or landfilled—over 50 percent of the total amount of waste produced—through composting. Through the partnership, and the mayor's watchful eye, over 80 percent of Manara households regularly sort their waste. Compost Baladi works with the municipality to gather, dispose, and transform organic material into compost that can be sold to consumers and recover costs.

It was a long road to the Manara model. Past experiences had made municipalities wary of private sector initiatives on waste. To demonstrate that their model worked, Compost Baladi began small, working with groceries and then residences on domestic sorting and composting. After demonstrating their proof-of-concept—and demonstrating that they were not just creating another problem—they were able to scale up.

Local as it is, Compost Baladi's municipal interventions were only made possible because international donors, such as the Dutch VNG International in Manara's case, made significant investments covering the cost of infrastructure.

The economic crisis has limited imported products and opened new opportunities for the locally made compost. But since most of the machinery and equipment used in a composting facility are paid for in dollars and the compost it produces is paid for in Lebanese liras, the sharp drop in the value of the lira has created problems for investors. While Compost Baladi is committed to working in Lebanon, its next expansion may be elsewhere.

strategies and authorizing a solid waste management plan. Like in the water field, authority is shared between the CDR and different ministries such as the Ministry of the Environment and the Ministry of Interior and Municipalities.[103]

While municipalities are responsible for solid waste management, legislation in 2001 effectively allowed the central government to siphon the Independent Municipalities Fund—money designated for all municipalities—to fund waste management contracts in the Greater Beirut area. The effect was not only to force all Lebanese to subsidize waste collection in Beirut, but also to starve local governments of the resources they needed for solid waste management.[104]

The 2015 crisis forced the government to respond. The government expanded landfill capacity and delegated increased authority to local governments for waste management. However, the central government continued to prioritize its own projects, and municipalities continued to lack the resources necessary to properly assess waste management projects, making them vulnerable to the destabilizing role of politically connected private companies managing municipal solid waste. Ambitious but ultimately failing projects included highly complex inputs not suitable to the current environment.

The effects of these failures went beyond the individual projects by making it difficult for entrepreneurs interested in promoting environmentally and financially sustainable alternatives to win the trust of residents and municipalities. Given the lack of regulation and resources, municipalities may also prefer the cheapest immediate option, rather than the sustainable one.

Before the economic crisis, there were many challenges, but motivated entrepreneurs were gaining ground—adapting their business model for recycling and composting organic material to the Lebanese context. To build trust, some had to start small, working with grocery stores and convincing municipalities that their solution would not backfire or cost them anything at the outset.[105] Ziad Abichaker, who developed the first zero-waste landfill in Beit Miri, switched from a build and transfer model to a build and operate model when it became clear that some municipalities did not have the capacity to manage the waste. Since few residents would sort their waste for recycling at home, he asked waste collectors to pick up the trash without compacting it so it could be properly sorted later on. These success stories spoke for themselves; municipalities began inviting these entrepreneurs to work with them, but then the government went bankrupt.

Today, entrepreneurs say that donors can provide the upfront costs and, in time, when they are ready, municipalities can assume management. In the meantime, creation of an enforced and detailed regulatory framework for participation in the sector, along with a realistic recovery cost mechanism, is needed.[106] What is clear is that if nothing is done in the short term outside of the central government structure, the waste crisis will reach unprecedented levels.

JOSEPH EID/AFP via Getty Images

Garbage lie at Dbayeh's seaside shore north of Beirut on November 28, 2017, after it was washed away by the sea from the nearby seaside garbage dump of Karanatina.

ANALYSIS

Lebanon's current troubles should not surprise those who have been paying attention to basic service provision. However, in crisis lies opportunity. The country has the chance to rebuild in a way that it never did after the civil war. By leading with environmental sustainability, transparency, and cooperation, Lebanon can finally have inclusive reconstruction and renewed pride in their public goods.

Companies, NGOs, and development agencies are learning that working within the existing landscape to build trust and cooperation with stakeholders is more challenging but ultimately more rewarding than simply building infrastructure unsuitable to the context. Lebanon has the talented entrepreneurs, technical experts, and motivated civil society to do this work, but they need to be empowered to work constructively with their government and communities or they will eventually look elsewhere like so many millions of their compatriots during the war.