

# Beirut Biomimics Impossible Lebanon Challenge

## Lebanon: a Garbage Paradise

**By: Caline Egho**

“The garbage is literally outside my front door”, said Wael Saleh, a Lebanese expressing his helplessness in the never ending garbage crisis.<sup>i</sup>

It is no secret that garbage has been blocking roads and streets in Lebanon, trash has been devouring Lebanese lands, and debris has been intoxicating the Lebanese population for too long. Naturally, many questions may pop up in our minds nowadays: How did the Lebanese government try and solve this dilemma? Will the Covid-19 Pandemic worsen the situation? Is there any hope left to solve this waste inferno?

Major dumpsites such as the Aadoueh dumpsite, the Bourj-Hammoud landfill, or the Costa Brava Landfill are threatening the lives of many. In response to the government’s negligence and as a mode of defense against the garbage’s domination, Lebanese citizens are referring to the burning of trash as an alternative solution. However, little do they know that this burning is causing chronic obstructive pulmonary diseases, coughing, throat irritation, skin conditions, and asthma<sup>ii</sup>. A resident in Kfar Zabad named Othman described this intolerable way of living by stating: “We are coughing all the time, unable to breathe, sometimes we wake up and see ash in our spit.”

As a response to the garbage crisis, in 2012, the Lebanese government approved a draft law which would create a single Solid Waste Management Board. This plan, directed by the Environment Ministry, would take care of managing

national waste treatment while garbage collection would be taken care of by local authorities. However, this law did not pass. Also, in 2015, the Lebanese government adopted short-term solution to try and ease the garbage pile up in the country. This temporary plan involved expanding the Bourj-Hammoud as well as the Jdeideh landfills.

Amidst the Covid-19 pandemic, Mother Nature is surely forgotten. With the ongoing lockdowns, people are spending the majority of their time at home and less time driving vehicles that emit unlimited amounts of toxic gases which pollute the air. While this occurrence poses as a major plus environmentally, nature is still a prime victim in the middle of this pandemic. To clarify this statement, it can be deduced that more time spent at home means more materialistic consumptions which leads to an increase in garbage and waste thrown out. In addition, single-use facemasks, the stars of the Covid-19 Pandemic, are ending up thrown anywhere and everywhere. These two factors that were born post taking the necessary measurements to fight the deadly virus are gravely contributing in the garbage crisis.

With this uncontrollable garbage hell, the government must apply a long-term, sustainable, realistic solution to insure a safer environment for the Lebanese citizens. As a first, amends must be made to the framework law for the protection of the environment which was adopted in 1988 and amended in 2002. Sorting and recycling must be mandatory in every household followed by local authorities' collection of the sorted trash. If not, the government must issue a fine to insure the recycling of household wastes. Studies made by the American University of Beirut state that only 12 to 10% of the trash cannot be recycled. If so, then why not make use of the remaining 88%? One solution is converting waste to energy, thus solving the garbage crisis as well as electricity crisis simultaneously. A waste-to-

energy facility must be built in a remote area where thermal energy is transformed into electrical energy by turning a turbine. Moreover, another energy resource that garbage offers is the methane gas that is produced as the waste decomposes. This gas can be used as fuel. Also, organic wastes could be turned into compost in order to benefit the agricultural sector in Lebanon which contributes 3.6% to GDP and employs 4% of the working population. Other than transforming raw waste to beneficial resources that are essential, the Lebanese government could come to an agreement with countries that would greatly benefit from Lebanese debris and trash such as Sweden and Norway. In fact, Norway and Sweden both have too much capacity for burning waste and not enough waste coming from their residents.<sup>iii</sup> In this case, the agreement could revolve around a trade: Raw waste in exchange for money or any other resource Sweden or Norway could offer and that could benefit Lebanon. A win-win situation!

In a nutshell, the lands of Lebanon have become gas chambers intoxicating all of the Lebanese population. With the endless over flooding dumpsites and landfills endangering the Lebanese population, one must stay optimistic and start by making a difference at home. This small gesture coming from each citizen may only delay the eruption of the ticking time bomb in our government's hands.

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<sup>i</sup> Al Jazeera. "Lebanese Protest against Waste-Disposal Crisis." Lebanon News | Al Jazeera, Al Jazeera, 26 July 2015, [www.aljazeera.com/news/2015/07/lebanon-beirut-trash-rubbish-crisis-150725060723178.html](http://www.aljazeera.com/news/2015/07/lebanon-beirut-trash-rubbish-crisis-150725060723178.html).

<sup>ii</sup> "Lebanon: No Quick Fixes to Trash Crisis." Human Rights Watch, 6 June 2020, [www.hrw.org/news/2019/08/10/lebanon-no-quick-fixes-trash-crisis](http://www.hrw.org/news/2019/08/10/lebanon-no-quick-fixes-trash-crisis).

<sup>iii</sup> Deutsche Welle. "First-World Problem? Norway and Sweden Battle over Who Gets to Burn Waste: DW: 23.11.2015." DW.COM, [www.dw.com/en/first-world-problem-norway-and-sweden-battle-over-who-gets-to-burn-waste/a-18772064](http://www.dw.com/en/first-world-problem-norway-and-sweden-battle-over-who-gets-to-burn-waste/a-18772064).