



Dear Sir/Madam,

We, the Waste Management Coalition and M.P. Paula Yacoubian, are writing to you since, as a company, you were pre-qualified to take part in the tender that the Municipality of Beirut is launching for a design, build, finance, operate and transfer contract ("DBFOT Contract") for a new grate-fired incineration facility.

The Waste Management Coalition (WMC) of Lebanon is a civil society organization comprising of organizations from the Lebanese and international civil society, experts from the academic sector, legal advisers, business people and environmentally conscious individuals aiming to push the government of Lebanon and concerned stakeholders to adopt sustainable waste management approaches.

We strongly discourage your company from investing in incinerators in Lebanon for the following reasons:

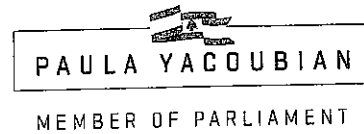
The composition of waste with low calorific value that will affect the cost efficiency of the incineration facility.

The waste composition in Beirut has already a low calorific value due to the high percentage of organic waste (63% or even more) as per a recent report of the Council of Development and Reconstruction of Lebanon. The calorific value of the mixed waste is less than 6 MJ/kg fluctuating between summer and winter seasons. Energy and fuel with unpredictable cost fluctuations will be needed to dry and incinerate the waste beyond 850 degree Celsius.

Moreover, the municipal waste in Lebanon is mixed with hazardous industrial, medical, and toxic waste. So the risk of having hazardous emissions and toxic bottom ash is very high and there is no infrastructure to dispose of this type of hazardous waste. WMC asked companies that export hazardous waste under Basel Convention on the possibility of exporting hazardous ashes for final disposal in other countries and the answer was negative. In this context, your company will be liable to properly dispose of this type of hazardous waste and as a civil society, we will take every necessary legal action in case of any mismanagement in this regard.

Several factors risk to decrease even more the calorific value of the waste which will increase the operation cost of the incineration facility as follows:

- Lebanon recycling industries are expanding with 93 recycling factories, and still counting, with a higher demand on plastic to be recycled. The Association of Lebanese Industrialists have been advising the government officials not to adopt incinerators and to work on increasing waste recycling noting that the Lebanese recycling industries need this waste and are creating more job opportunities essential for fighting the high unemployment rate in our country.
- Research and development initiatives are offering new technologies to recycle single use plastic.
- The number of waste pickers is increasing due to the poor economic situation of the country.



- Numerous campaigns are gaining grounds against plastic usage. Awareness for the necessity to reduce waste generation and recycle grew tremendously after the waste crisis of 2015.

Important delays to reach the operational phase.

In Lebanon, investors suffer from financial losses due to long delays in project implementation. For instance, IBC INC, an anaerobic waste digestion facility in Saida started their project in 2004; however, they were able to operate only in 2012 after suffering immense financial losses, with the project cost increasing 3-4 folds because of corruption and interferences. It is important to note that NGOs and citizens were eager to see the plant operating because they suffered for decades from the presence of a coastal open dump in the area. So feel free to imagine the magnitude of delays that will occur when numerous civil society organizations along with members of the parliament opposing this project, and appealing each decision and permit you need to achieve a project phase/milestone.

Fierce and well-informed social opposition against incinerators in Lebanon.

We believe that the installation of an incinerator in Lebanon is as a direct threat to our health and economy. Several studies and documents back up our fears including those developed by the World Bank¹ and the Ministry of Environment². Be aware that several experts from different Universities in Lebanon held conferences to warn against the implementation of incinerators in the country. To name a few, the symposium that was held at the Faculty of Public Health the Lebanese University and two other conferences held at the Issam Fares Institute at the American University of Beirut.

We would also like to inform you that several attempts to install waste incinerators in Lebanon were opposed by civilians and were stopped as follows:

- In 1985 citizens bombed Amrousieh's central waste incinerator, in Beirut.
- In 2009-2010, citizens stopped an incinerator brought in by the Municipality of Chekka, north of Lebanon.
- In 2016, citizens appealed and stopped an incinerator brought in by the Municipality of Dhour Shweir, Mount Lebanon.
- An incinerator public hearing for a waste to energy project was being held this year in Kfarchima, Mount Lebanon, during which citizens revolted and stopped the public hearing and were completely opposing the implementation of the project. As a result the meeting was cut short to avoid further escalation with the distressed public.
- A waste treatment plant in Ansar in south Lebanon was bombed in 2016 by citizens over a dispute on the plant.
- Numerous other waste plants were burned under mysterious conditions.

¹

<http://documents.worldbank.org/curated/en/360011468265768992/pdf/622660ESW0Gray0c060601100BOX361480B.pdf>

² <http://moe.gov.lb/Main/Announcements/Announcement/SolideWaste2015/6-SEA-of-the-National-Solid-Waste-Management-plan.aspx>



We believe that the Government of Lebanon and the Municipality of Beirut did not conduct a thorough analysis about the best waste solution to be adopted in the city. This can be confirmed by the World Bank report in reply to the Government's capital investment program proposed for solid waste at CEDRE (2018 donor conference) indicating that:

- Specifically for Beirut incinerator **no substantial market test for the scheme based on a 25 years concession has been made.**
- **Contingency planning:** The development of WtE is complex and at the current development stage, without a solid market test, it is difficult to foresee what challenges lie ahead in contractual and financing arrangements with investors, in planning (ESIA, public consultation) and in operational and financial arrangements to be made with the participating LGs (local government). It is important to plan for waste management in the period up to the operationalization of the 5 regional facilities and include provisions for set-backs.
- **Lebanon is locking in into waste incineration and treatment, with limited focus on waste recycling and waste reduction.** In high income countries, incineration has been a key element in waste systems to reduce waste for disposal. However, it is regarded as a lower level solution in the waste management hierarchy and recent developments (circular economy) see a substantial shift from waste incineration to waste recycling and reduction. With the proposed program, Lebanon is locking in into waste incineration for decades.
- **Financial sustainability, tariff system and financial arrangements with LGs.** In addition to the US\$ 1.4 billion investments, the schemes will need roughly US\$ 150-200 million per year to operate. At present there are no arrangements to have these costs covered by waste generators (households) or the LGs. There is thinking of putting a tariff system in place based on electricity consumption, and possibly linking billing to electricity billing. Tariffs systems take time to develop and have social implications. It is critical for the success of the regional investments that improvement in services go hand in hand with cost recovery, etc.

Based on the above, we really advise you not to venture in this type of investment which will prove to be very risky in a country like Lebanon and with people opposing the project. On the other hand, we welcome and support any sustainable waste management project that promotes waste minimization, reduction, reuse, recycling, biological treatment, etc. We would encourage you to engage the Beirut Municipality in these sustainable projects and shift away from incineration.

Hoping that you will make a wise decision before engaging in this very high risk investment and wishing you the best of luck in your endeavors.

Best regards,

Waste Management Coalition

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