



Live, love, recycle initiative: an on-demand collection scheme

Live Love Recycle is a free of charge, on-demand, home-based recyclables' collection initiative that is managed by a smartphone application. The Live Love Recycle mobile application gives the opportunity to Lebanese citizens to recycle their waste by requesting an on-the-spot pick-up with just one click. Within an hour a Live Love Recycle driver will be at the user's location to collect their recyclables.

OBJECTIVES

As Lebanon's garbage problem reached the level of a national catastrophe in 2015, the Live Love Recycle initiative was developed to reduce the impact of the waste crisis and to offer job opportunities. It is used also as a platform to build awareness on the importance of sorting and recycling.

BACKGROUND INFORMATION AND LOCATION

General information on the waste collection service:

- By 2020, more than 40,581 bags of recyclables have been collected from 4,111 households in Beirut - saving 100 tons of waste from ending up in open pit dumps, burnt, or in the ocean¹.
- Since the initiative's establishment, more than 6,000 tons of waste have been collected².
- Each driver collects four (4) tons of recyclables from 300 houses per month which is equivalent to 50 tons per year.

General information on the territory:

- Location: Beirut, Tripoli, Metn, Jounieh, Baabda
- Country: Lebanon

General information on the initiative

- Live Love Recycle currently has more than 25,000 subscribers;
- Users are allowed up to two (2) 60L bags of recyclables at each pick-up;
- It operates a fleet of around 400 drivers, ~50 electric bikes, 1 truck and 4 tuk-tuks to pick up recyclables;
- 5,000 Volunteers joined 50+ Live Love Recycle Nature Clean-ups;
- Over 400 jobs have been created for the collection and recycling process, for people from vulnerable communities, including women.

KEY INFORMATION

- **Topic:** recycling
- **Waste fraction:** paper/cardboard, plastic, nylon, can, metal, transparent glass, used cooking oil, electronics, batteries, clothes, food donations
- **Target group:** Lebanese citizens
- **Instruments:** Mobile application, social inclusion

DATE OF IMPLEMENTATION

Since 2018.



¹ <http://www.liveloverecycle.tilda.ws/>, accessed in September 2021

² <https://beryltech.org/support-live-love-recycle/>, accessed in October 2021



IMPLEMENTING BODIES

Live Love Recycle was founded by George Bitar and supported by Live Love Beirut, an NGO supporting the environment and communities. The system is operated by employees and volunteers who contribute to its implementation in the country.

KEY STAKEHOLDERS INVOLVED

Live Love Recycle developed partnerships with local municipalities, private recycling facilities, Berytech, the French NGO named ACTED and the United Nations World Food Programme, as well as with Germany's Federal Ministry of Economic Cooperation and Development (BMZ) that funded the initiative in 2018.

GENERAL CONTEXT

The idea of the Live Love Recycle initiative was created due to the massive crisis that Lebanon was facing in 2015. In Beirut, waste is mostly collected as mixed residual waste and then sent to landfills or illegally disposed. Recycling could be performed, but it required that people take their recyclables to a recycling centre.

The mobile application was developed earlier but due to lack of funding, it was not launched until 2018 when the initiative received a grant from the World Food Programme (WFP) and the Federal Ministry for Economic Cooperation and Development (BMZ).

DESCRIPTION OF THE ACTIVITIES

Live Love Recycle provides a door-to-door waste collection service upon request via a user-friendly application and transports the waste to its different warehouses in the city. The app's users sort their recyclables at home and then request a pick-up which arrives within an hour. The system makes sorting and collection quite simple and convenient for households. Collections were initially for free, but limited to four per month and per household. However, fees were introduced in mid-2020 to support economic viability.

Live Love Recycling also appointed and trained waste collectors, that are equipped with e-bikes and tuk-tuks.

Users can sort the following waste fractions:

- Paper, cardboard, plastic, nylon, cans, metal, transparent glass, that are collected in a single stream;
- Used cooking oil;
- Small WEEE;
- Batteries;
- Clothes;

The initiative also collects food donations (nonperishable food).

Live Love Recycle counts on effective customer communication to get its customers to carry out the otherwise very resource intensive activity of sorting waste at source.

The Live Love Recycle initiative includes door-to-door recyclables collection; and recyclables' transportation to recycling facilities.

FINANCING AND COST RECOVERY CONTEXT

Live Love Recycle raises some revenue from selling the recyclables to various local recycling facilities. Advertising also helps cover part of the expenses. In 2019, when BMZ funding ended, the Live Love Recycle



initiative, in order to stay in operation, started a crowdfunding from which an amount of around 70,000 USD was raised³. In 2020, the initiative received grant from the Swiss and German Embassy⁴. Currently, donations help Live Love Recycle move forward, sustain the operation, and continue promoting and building an environmentally conscious society.

The main source of income was initially the sale of sorted materials, with each ton representing about LBP 250,000. However, it proved insufficient to balance the collection costs, and a fee of LBP 3,000 was planned to be introduced in July 2020. At the moment, the initiative is still collecting recyclables for free, giving, though, the e-payment option to the subscribers on the application.

MAIN ACHIEVEMENTS AND RESULTS

The Live Love Recycle initiative plays an important role to the sustainable waste management in Lebanon. It gives people the opportunity to sort their recyclables and properly dispose them. In other words, except for the recyclable's disposal, the initiative has an educational aspect too, as it teaches its users how to sort their waste and raises awareness with regards to the environmental benefits of recycling. Not to mention that the data provided through the application could be eventually used as a design base for the placement of recycling bins throughout the cities and as a result optimize the waste management services.

So far, through the app more than 6,000 tons of waste have been collected and 25,000 households have been served in Beirut.

KEY FACTORS OF SUCCESS

The timing of the establishment of the Live Love Recycle initiative played an important role in its success. The waste crisis of 2015 enhanced the citizens' demand for a sustainable waste management. Since solutions provided by Lebanon's government were insufficient, the Live Love recycle initiative addressed a real need, filling a gap and contributing actively to meeting citizens' demand.

The success of the system also comes from the convenience it offers: citizens can choose when collection occurs, and the system is very reactive.

BOTTLENECKS, LIMITATIONS AND CHALLENGES

The political instability in Lebanon, funding issues, as well as the 2020 blast in the Port of Beirut have been rather challenging for Live Love Recycle's expansion. The sales of materials proved insufficient to reach economic stability.

LESSONS LEARNED AND REPLICABILITY

Live Love Recycle is an initiative that could be applied in every city of Lebanon and beyond. In fact, within 2021 the initiative has expanded its operation in Beirut, Metn, Hazmieh, and Baabda and new regions such as Jounieh and Tripoli. The latter is the second largest city of the country where 15 new full-time jobs have been created, tackling the high unemployment rate in the country.

³ <https://berytech.org/live-love-recycle-solving-the-garbage-crisis-one-bag-at-a-time/>, accessed in September 2021

⁴ <https://berytech.org/support-live-love-recycle/>, accessed in October 2021



CONTACTS

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REFERENCES, LINKS TO FURTHER INFORMATION

- <http://www.liveloverecycle.tilda.ws/>
- <https://berytech.org/live-love-recycle-solving-the-garbage-crisis-one-bag-at-a-time/>
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- <https://www.lorientlejour.com/article/1120713/live-love-recycle-a-100-social-solution-to-the-waste-crisis-in-beirut.html>
- [Victime de son succès, Live Love Recycle change de modèle \(lecommercedulevant.com\)](#)



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