Today, the Swiss Post delivers packages to Lausanne from the nearest sorting center in Daillens (about 20 km North of Lausanne). These packages could be brought to a Microhub in the city-center and then be delivered to the customers using electric vehicles.

Using five days of real delivery data, route simulations were made using the RaaS routing software. Scenarios with one or two microhubs chosen among the Post’s subsidiaries were compared to find the solution with the lowest carbon impact.

There are two ways to reduce the carbon footprint of delivering packages in Lausanne. The first is to implement a microhub: optimized logistics mean less distance travelled and less CO₂ emissions. The second is to use electric vehicles. Combining these two options allow for 80% reduction in CO₂ emissions.

Using two microhubs is not efficient in such a small delivery area.

Electric cargo bikes could be an interesting solution to deliver effectively urban and dense areas. These vehicles have a much smaller carbon footprint than delivery vans but have space limitations.

Smaller delivery vans could be considered to deliver dense urban areas. This could help limit as much as possible the carbon footprint of package delivery in urban centers.

**RESULTS**

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**BOTTOM LINE**

The Post committed to reduce its CO₂ emissions by 93% by 2040[1].

Concerning package deliveries in city centers, our results show that combining optimized deliveries using microhubs and electric vehicles allow for only 80% reduction in carbon footprint.

Alternative solutions must be considered to reach this 93% goal in the package delivery sector.

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