

Low Emission Zones and Zero Net Land Take policies in Europe, impacts on urban logistics

Executive summary

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Abstract

This report examines the present and future impact of Low Emission Zones (LEZs) and No Net Land Take (NNLT) policies on urban logistics. By targeting logistics flows and locations respectively, these two public regulation tools condition the location of warehouses and the mobility required to access them. A Europe-wide comparison of the two systems highlights their different levels of operational maturity. While the absence of a shared definition hinders the application of the ZNLT objective, the existence of an air protection scheme supported by the European Union has encouraged the deployment of LEZs in Europe for the past twenty years, targeting diesel trucks as a priority. By the end of April 2024, however, the number of new LEZs had fallen off, and their implementation varied widely. A comparison of 37 representative LEZs is proposed.

Given the skepticism aroused by NNLT in other European countries, France is the only one to have imposed binding legislation on a national scale. Concern over the paradigm shift is causing tension among stakeholders, freezing the regional development, including the construction of warehouses. Competition for available land is penalizing logistics, whose growing needs to meet the sector's demand are coming up against a distorted representation of the current share of logistics plots. Although, according to *France Stratégie*, the floor area of warehouses authorized in 2022 is almost double that authorized in 2011, the rare data available on the annual artificialization of new land exclusively associated with logistics activity only estimates this at around 1%. Logistics is a powerful lever for decarbonization, but flows and locations are not sufficiently integrated into a systemic vision by public authorities. They don't necessarily understand the location requirements of this strategic sector. The fact that the average approval time for the construction of a logistics building is three times shorter in Germany than in France contributes to the fear of logistics real estate professionals of losing their attractiveness and seeing companies relocate their warehouses abroad.

In this context, the verticalization of logistics (multi-story warehouses), which is developing following the inspiration of Southeast Asian countries, offers technical characteristics on the floors that are increasingly similar to those of single-story warehouses. However, the rents expected by investors to meet profitability requirements limit their location to certain areas. The dual prospect of stricter access standards and Automatic Number-Plate Recognition (ANPR) control of LEZs – driven by the new European directive on ambient air quality – may well be a sign of a more favorable dynamic for this type of solution.

This report also provides updates to the previous survey of European LEZs carried out by the Logistics City Chair in 2021. Whereas the 2016-2021 period covered by Belliard, 2021 was marked by the deployment of over 200 LEZs in Europe and the UK, at the end of April 2024 we counted 315 LEZs spread across 13 European countries, i.e. **15 more than in 2021**. The slowdown in growth between 2021 and 2024 is accentuated by the repeal of 22 LEZs in Germany and the cancellation of plans to set up a LEZ in Wallonia, offsetting the creation of 38 new LEZs in the same period. The momentum is concentrated mainly in Spain, France and the UK (33 out of 38 LEZs). In terms of global ranking of the number of LEZs per country, Spain moves from 10th place ex aequo to 3rd place between 2021 and 2024. Over the same

period, France moves up from joint 7th place to joint 4th place, while the UK moves up from 5th to 6th place. The absence of LEZs in Finland and Norway is due to a change in the census criteria between 2021 and 2024. The targeting of municipal buses and garbage trucks in the Helsinki LEZ and the congestion charge in the Norwegian LEZs (whose amount is not linked to the age of the vehicle) were not taken into account.

Table 1. Number of Low Emission Zones in Europe, April 2024

Country rankings by number of LEZs	Number of LEZs by end of April 2024
Finland	*0
Norway	*0
Czechia	1
Greece	1
Portugal	1
Belgium (-1 LEZ)	3
Denmark	4
Austria (+2 LEZ)	*7
Sweden (+1 LEZ)	9
United Kingdom (+7 LEZ)	**13
Netherlands (+1 LEZ)	15
France (+ 11 LEZ)	15
Spain (+ 15 LEZ)	***17
Germany (- 22 ZFE)	****65
Italy (+1 ZFE ¹)	*****164

Source: Phan from data Belliard 2021, ADEME 2023, urbanaccesregulations.eu, green-zones.eu, 2024

* Due to a change in the census criterion

** ULEZ LEZ account separately

*** Including 3 in Madrid: Madrid (whole city); Madrid (Plaza Elíptica); Madrid (Distrito Centro)

****After data correction

***** including the Mont Blanc tunnel and inter-regional winter LEZs

¹ Based on updated data from Appendix 7.5 pp. 113-117 of the Belliard report, 2021, which lists all Italian LEZs.