



75  
आज़ादी का  
अमृत महोत्सव



GOVERNMENT OF INDIA  
MINISTRY OF HOUSING AND URBAN AFFAIRS



# GLOBAL OVERVIEW OF LOW EMISSION ZONES



BY PRAMODA GODE

SENIOR EXPERT, SUSTAINABLE  
TRANSPORTATION & ELECTRIC  
MOBILITY

# URBAN VEHICLE ACCESS RESTRICTIONS (UVARS)



Golden Temple, Amritsar

**Pedestrian Zones**



Delhi, NCR

**Emergency Zones**



Kevadia, Gujarat

**Special Zones**

# UVARS IN INDIA

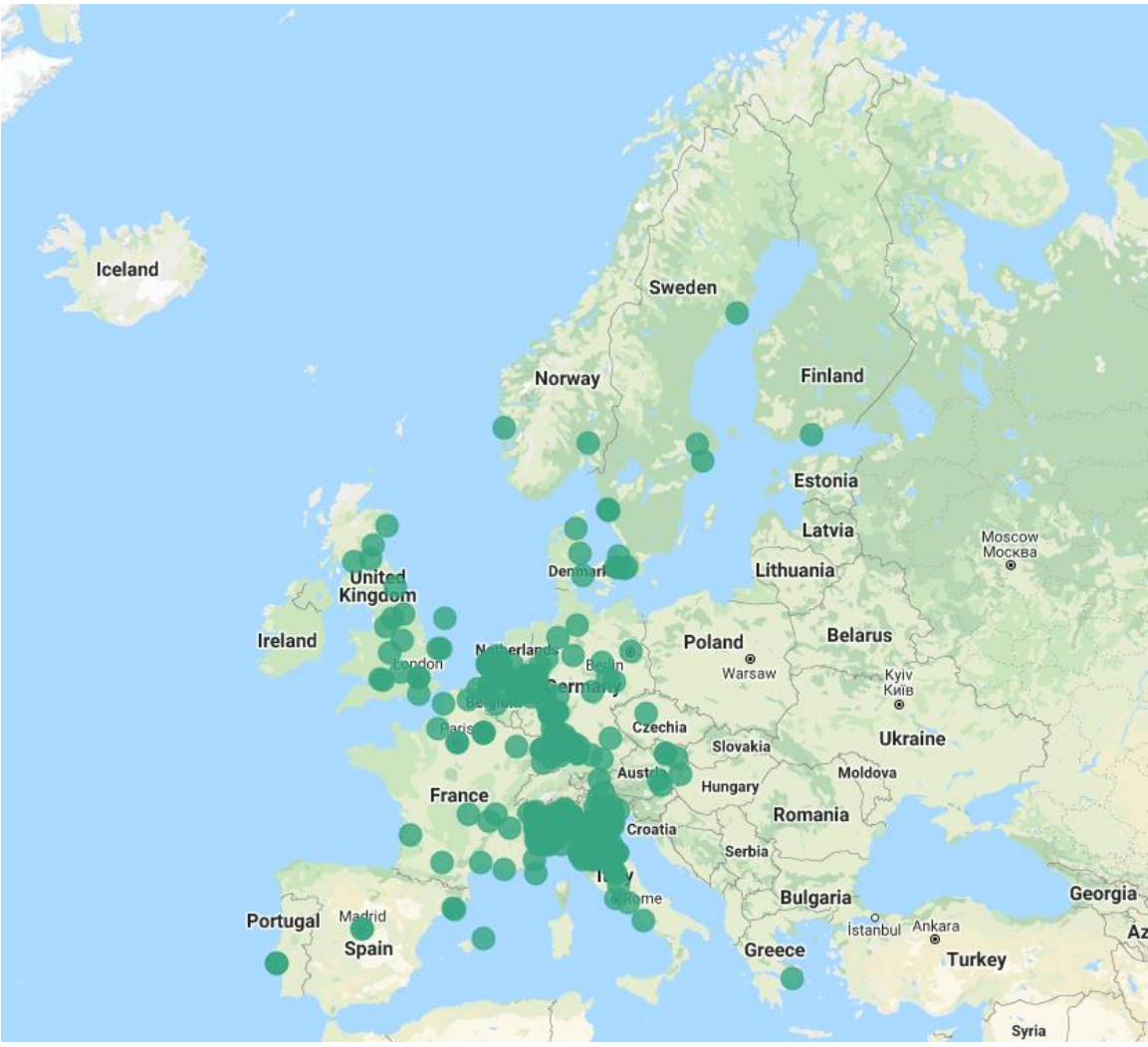
UVAR type	Indian examples	Better air quality	Lower congestion	Road safety	Road Rationalisation	Raising revenue	Quality of life	Cleaner vehicle fleet	Acceptance	Potential of large scale impact
Ped-friendly streets	Raahgiri	Somewhat								
Complete streets	Pune/Chennai			Moderate	Certain					
HDV timings	Ahmedabad									
Congestion charge	Mumbai*									
Environmental cess	Delhi									
Toll	Highways									
Low/zero emission zone	Kevadia**									
Zero emission area	none									

\* Proposed \*\* Planned

# WHAT IS A LOW EMISSION ZONE?

- **well-defined geographic area**
- **entry to vehicles is regulated**
- **depending on tail-pipe emissions**
- **restrictions are tied to the emission standards**
- **strictly enforced**
- **backed by a host of complementary measures**
- **to improve local air quality and reduce GHGs**

# >300 LEZS IN EUROPE ALONE



**2019: 228**  
**2022: 320**  
**2025: 507\***

Source: <https://urbanaccessregulations.eu/>

# SUCCESS DEPENDS ON FEATURES



## Compliance

- emission standards (BS VI, EV)
- fee/permit



## Scale

- street-based
- district-based
- cordon-based



## Enforcement

- barriers
- police
- cameras



## Affect

- cars
- urban delivery
- freight
- all

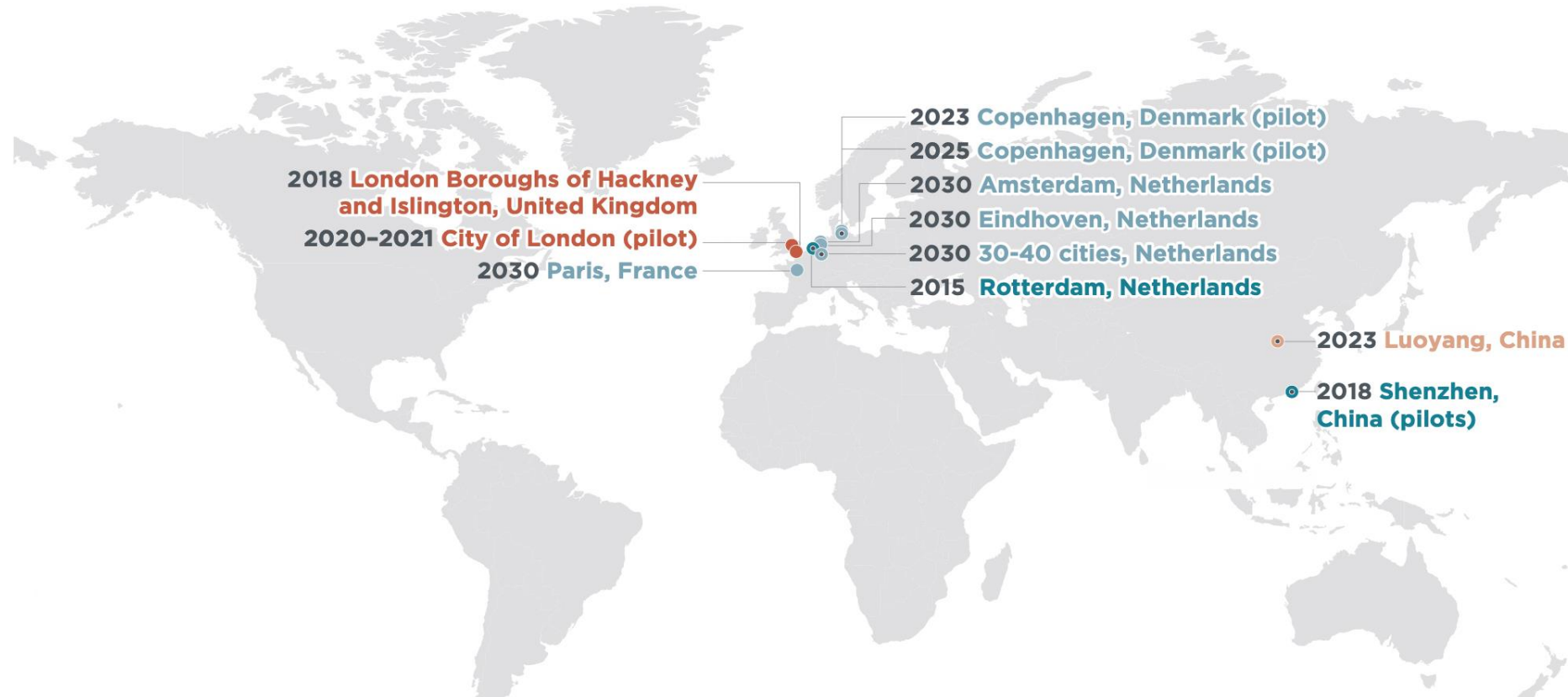


## Design

- permanent
- pre-defined
- weekdays



# CITIES ARE MOVING TOWARDS ZEZS



	Zero-emission zone for freight (ZEZ-F) to allow BEVs and FCEVs only	Near-zero-emission zone for freight (near-ZEZ-F) to allow BEVs, FCEVs, and PHEVs only
Implemented	●	—
Planned	●	●

Applies to freight vehicles only (e.g., urban delivery vehicles and trucks)

	Zero-emission zone (ZEZ) to allow BEVs and FCEVs only	Near-zero-emission zone (near-ZEZ) to allow BEVs, FCEVs, and PHEVs only
Implemented	—	●
Planned	●	—

Applies to all motorized vehicles

Source: <https://theicct.org>

# LESSONS FROM GLOBAL EXPERIENCES

- **Alignment with political mandate is key**
- **Early stakeholder engagement is required**
- **Real alternatives need to be provided**
- **National legal framework is fundamental**
- ***Feasibility Analysis* is essential**
- **Start with a pilot**
- **Increase ambition with phased implementation**



# THANK YOU!

**Connect via:**

**Email: [pramoda.gode@gmail.com](mailto:pramoda.gode@gmail.com)**

**LinkedIn: [www.linkedin.com/in/pramoda-gode](http://www.linkedin.com/in/pramoda-gode)**