


ROAD TRANSPORT sector and AIR POLLUTION CASE OF LEBANON

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Transport: In focus

1. Massive car fleet

1, 755,264
vehicles



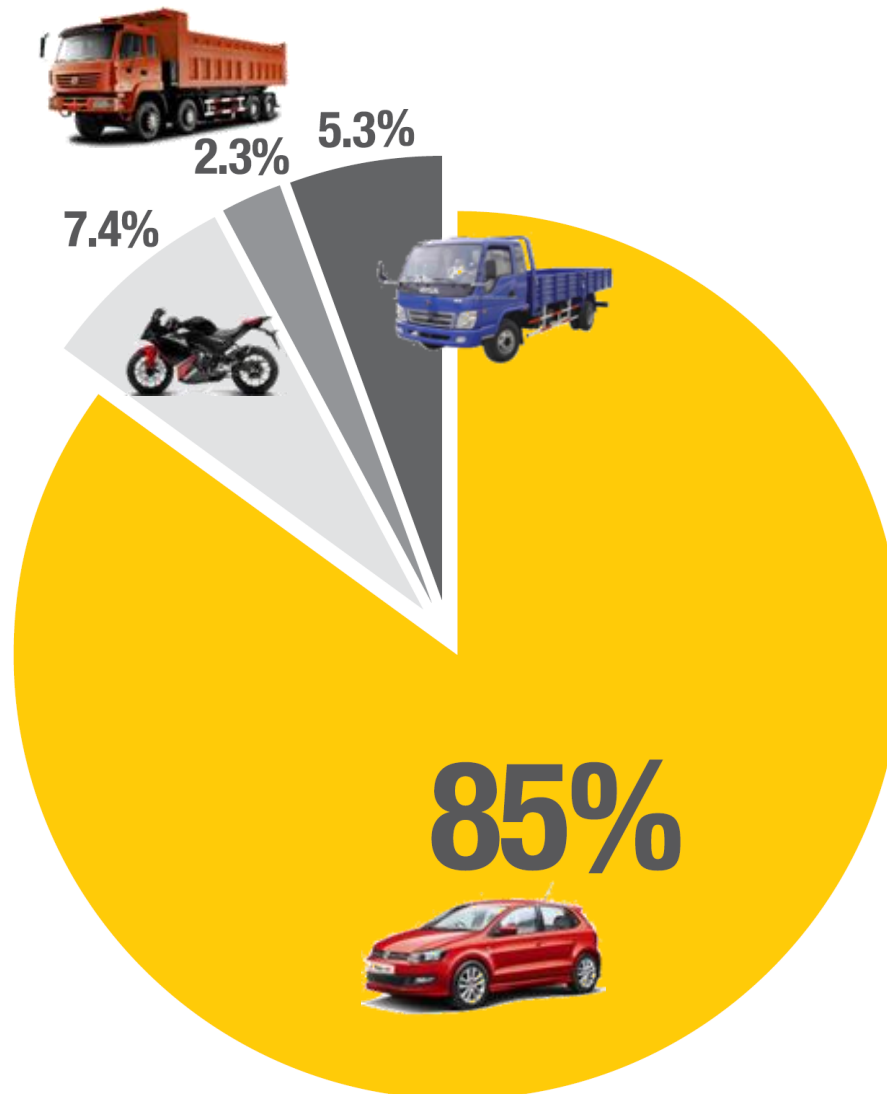
32,977
public transport vehicles

65 taxi per 10,000
inhabitant



UK → 36
Spain → 6.5
France → 3.8

Vehicle fleet distribution



2. High ownership rate and low occupancy rates



2.8 per car



1.2 per taxi

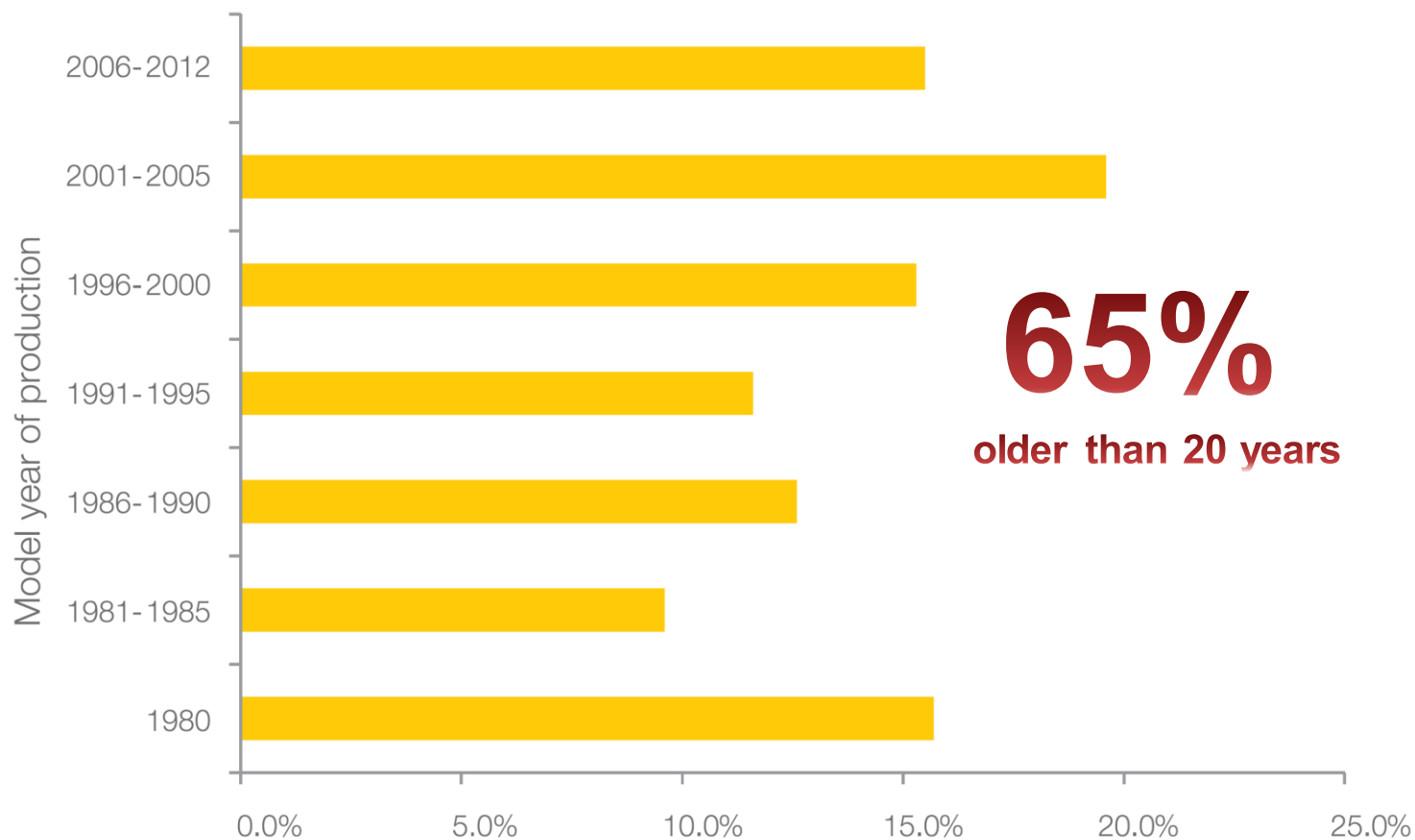


6 per van



12 per bus

3. Old fleet



4. Heavy congestion

230,000
vehicles



BEIRUT



85,000
vehicles

5. Harmful driving patterns

Low driving range with a high rate of congestion and frequent stops at short time intervals

50%

of trips have a distance lower than 5 km

25%

of stops are below 2 seconds

15%

of travel time is stop

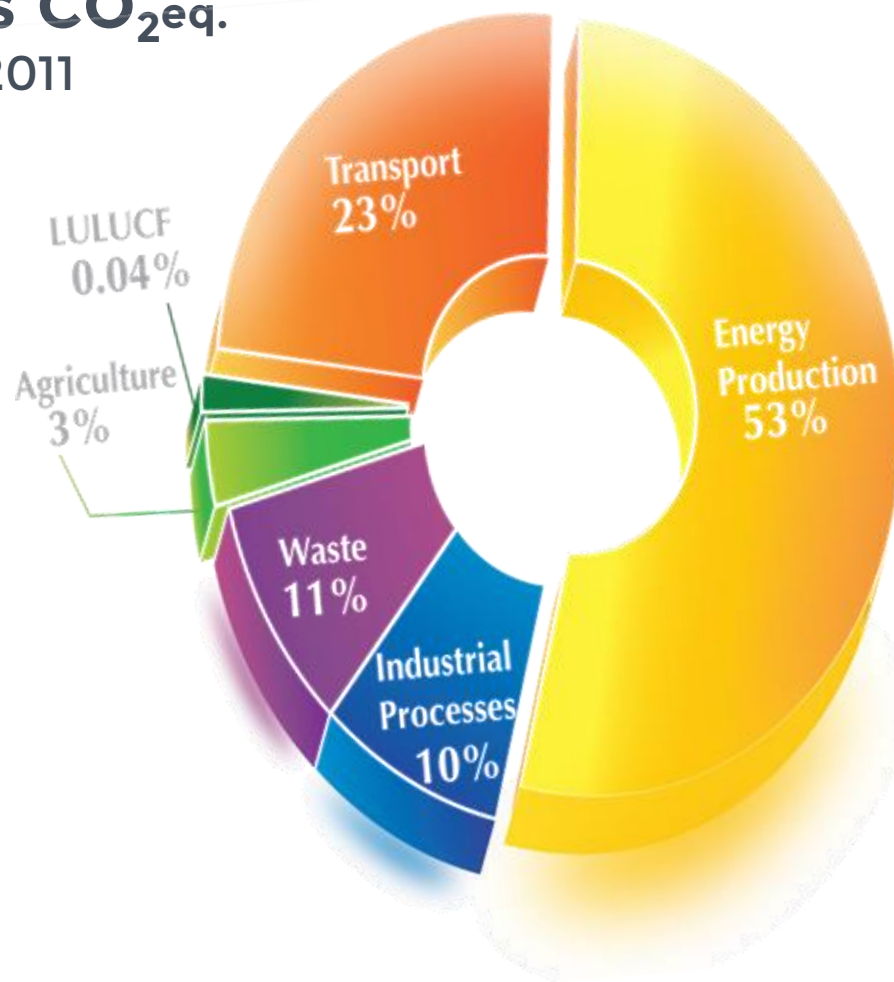
→ Inefficient operation of internal combustion engines & high rate of fuel consumption



Share in emissions

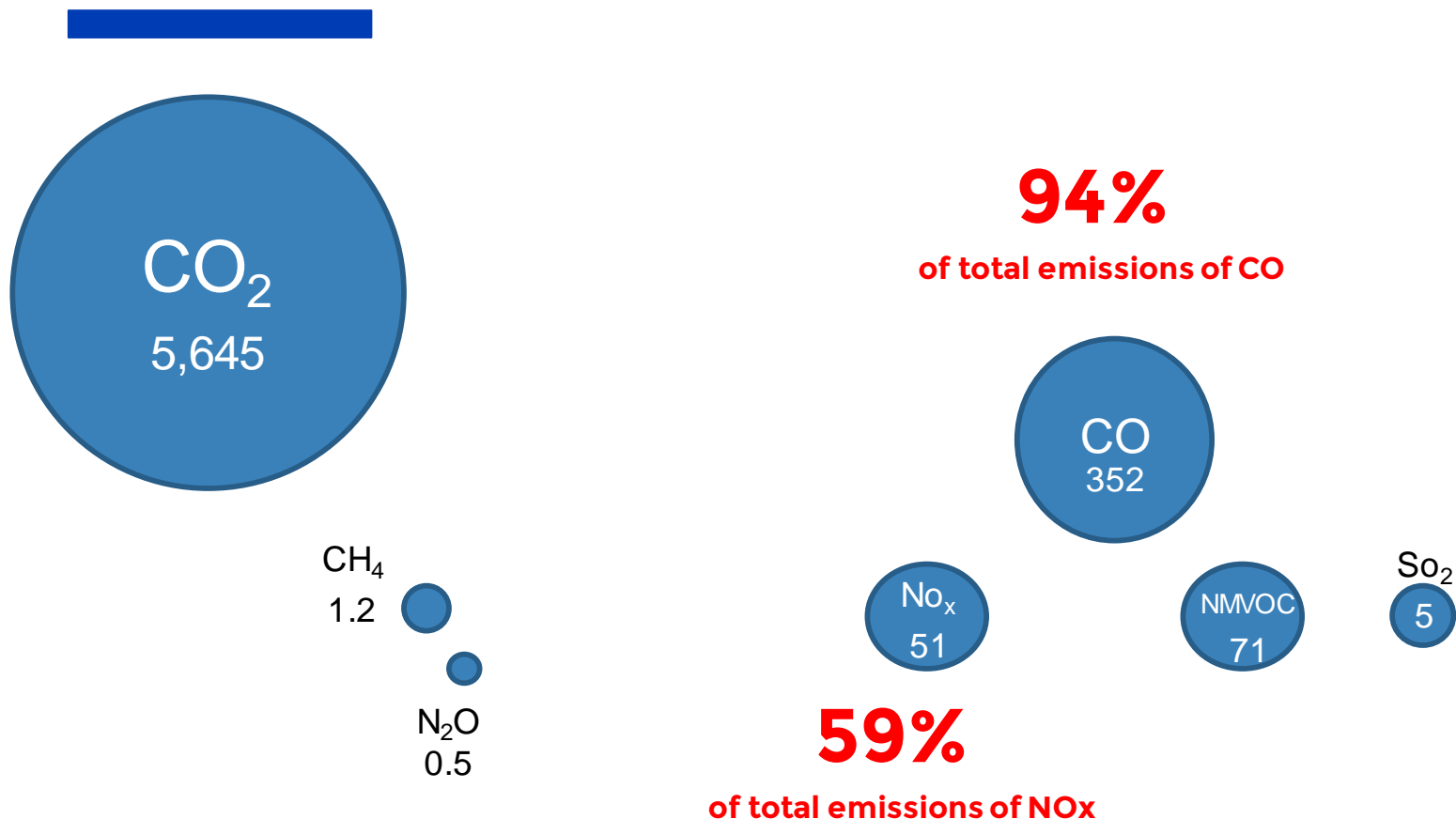
Share in Greenhouse gas emissions

+24.6 million tonnes CO₂eq.
Total emissions in 2011



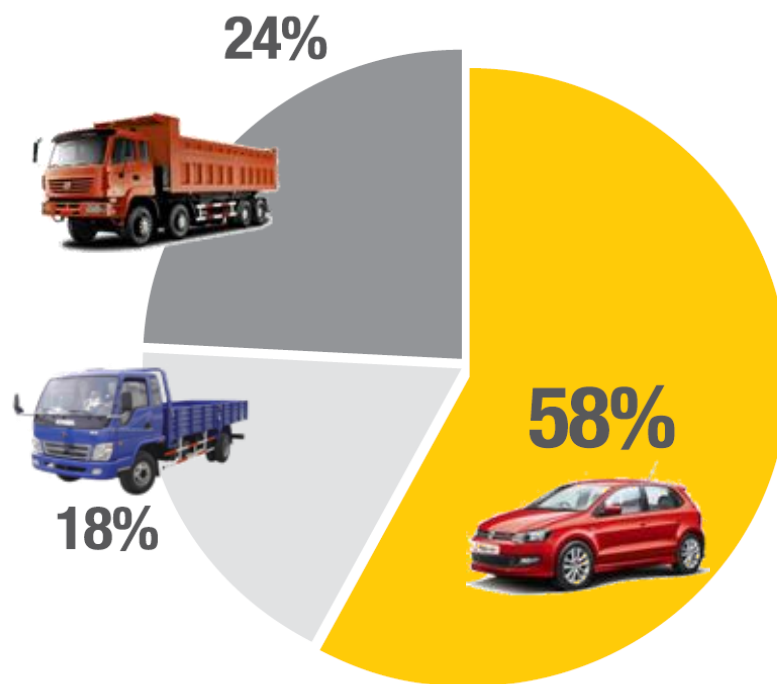
Distribution of emissions

million tonnes



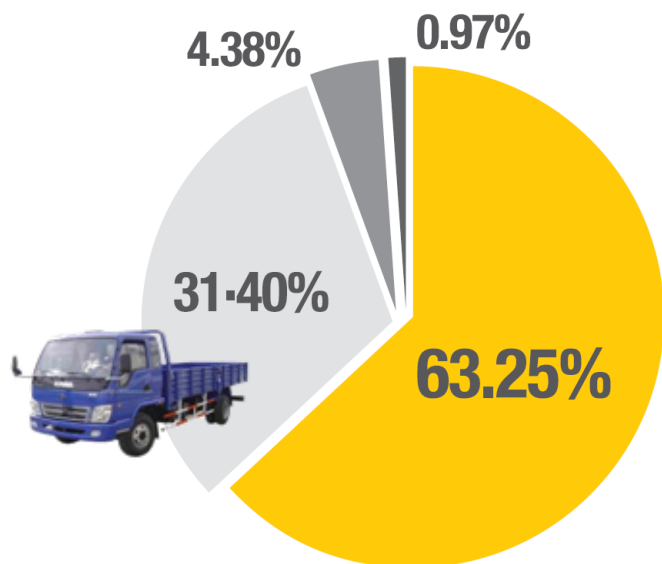
Share of vehicles in emissions

CO₂

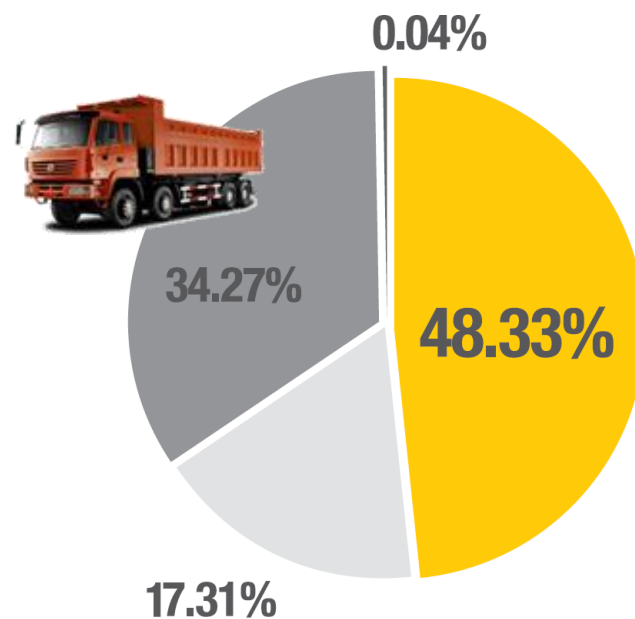


Share of vehicles in emissions

CO

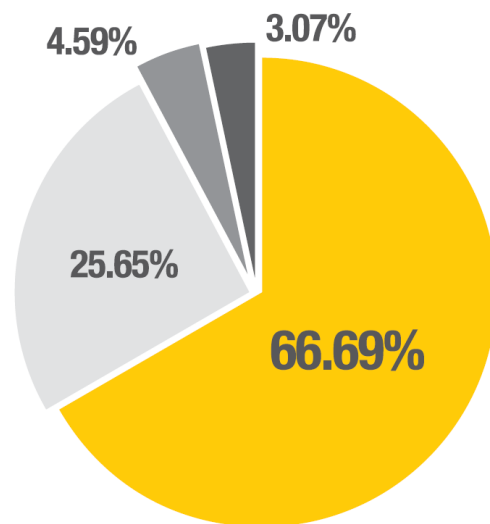


NO_x

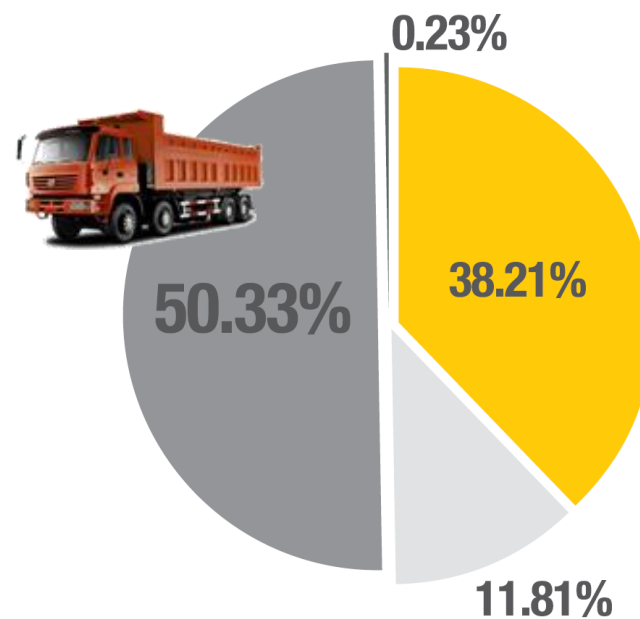


Share of vehicles in emissions

NMVOCs

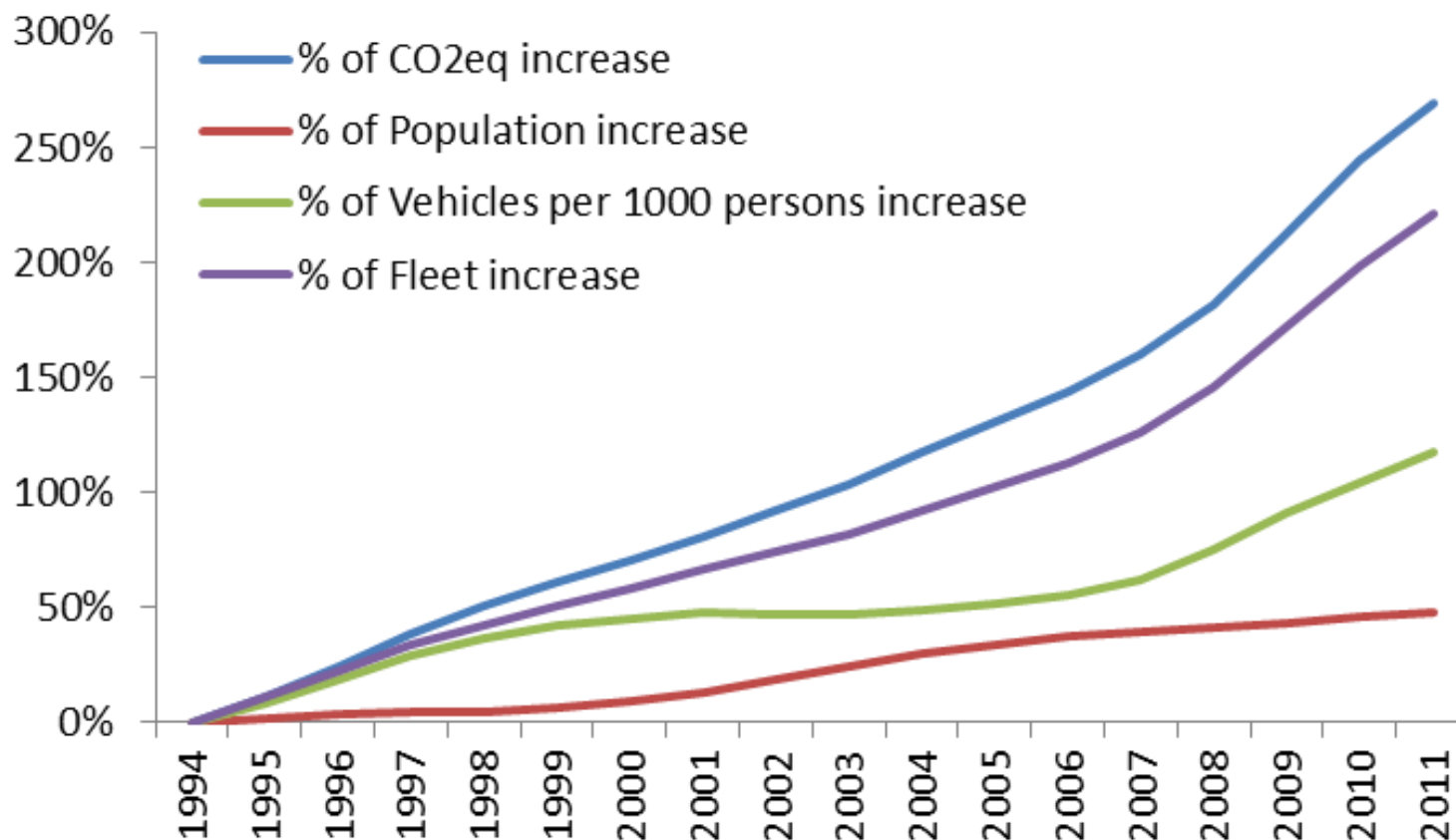


SO₂

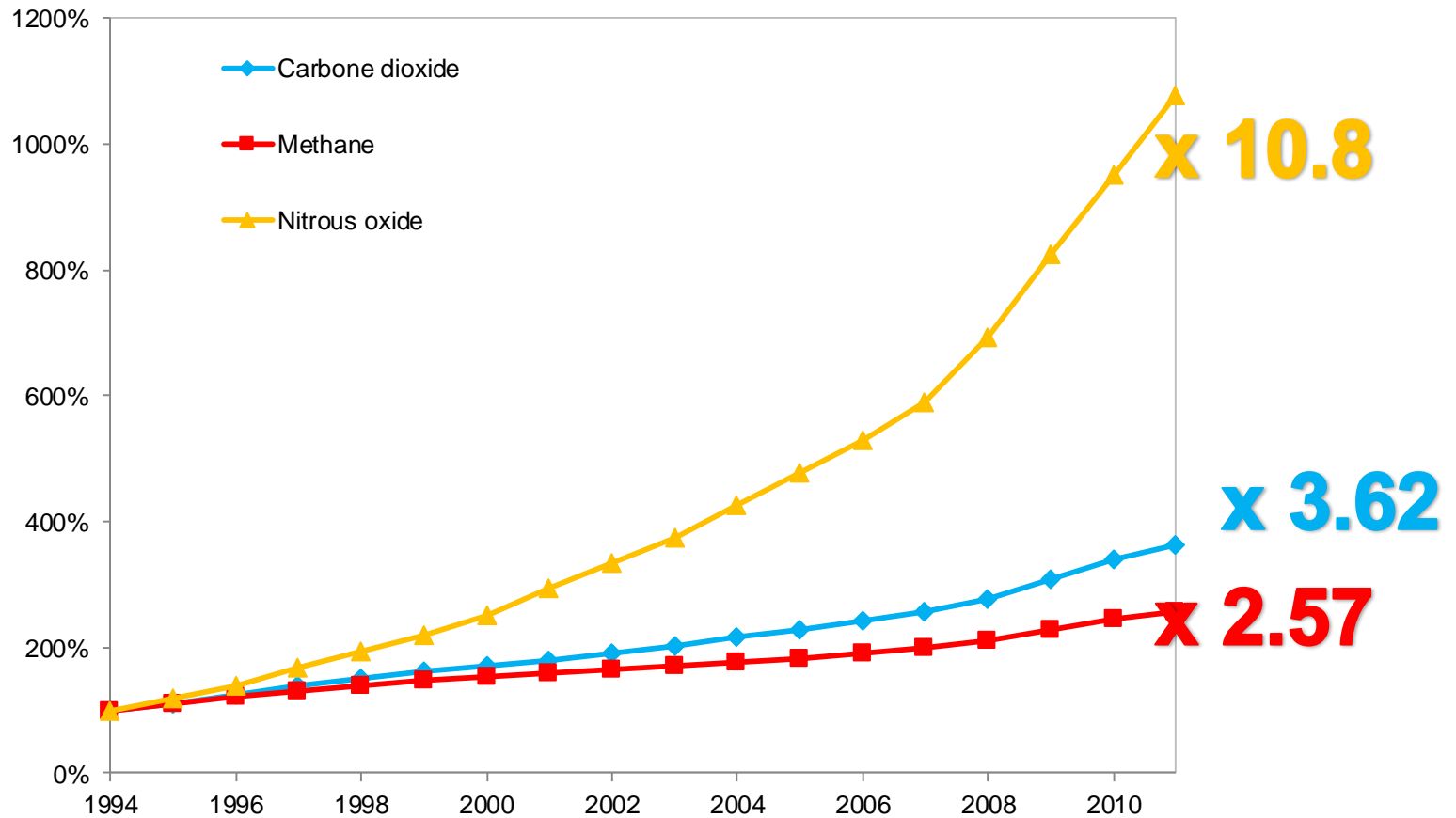


How bad is it?

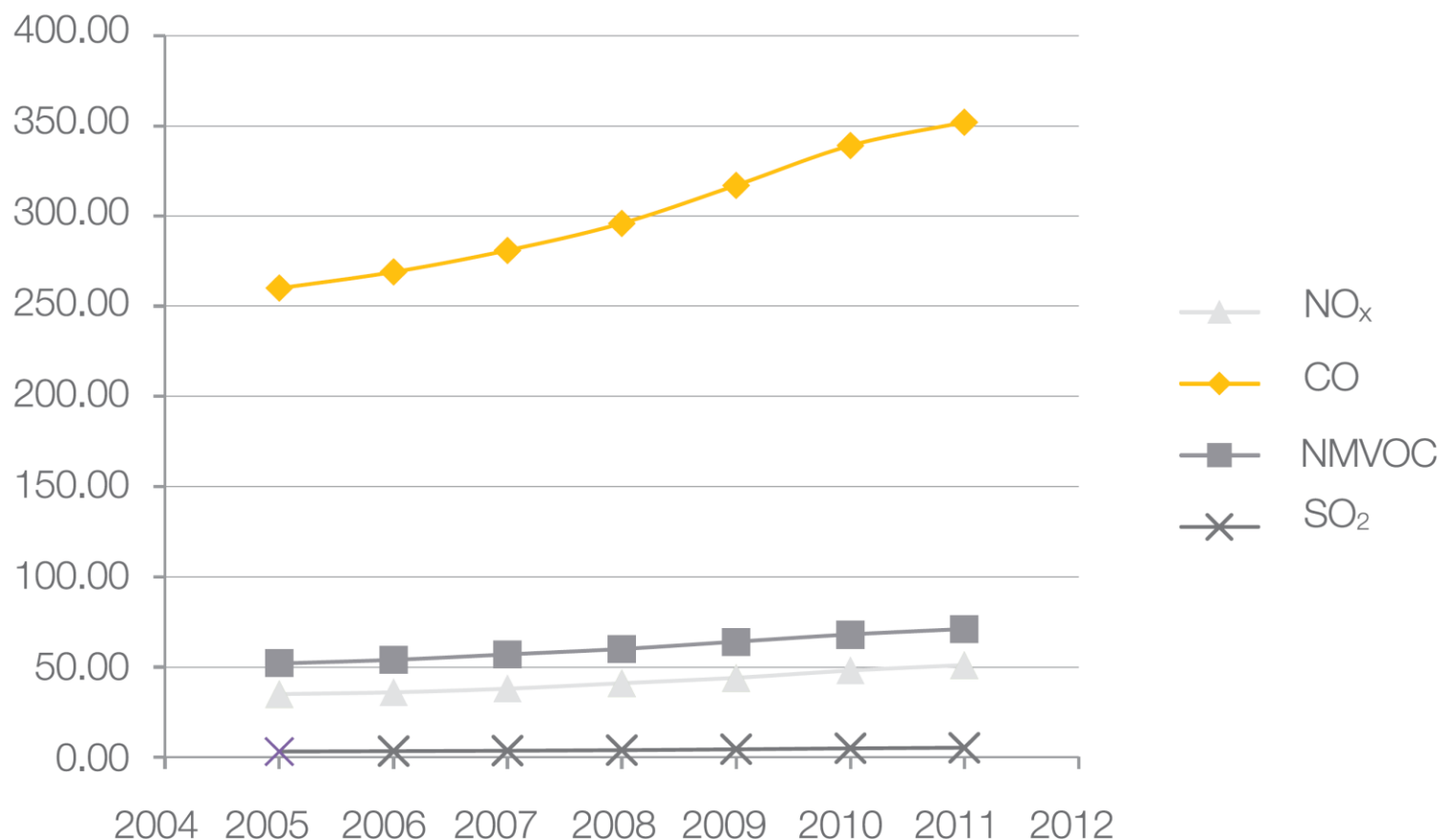
Emissions increasing since 1994



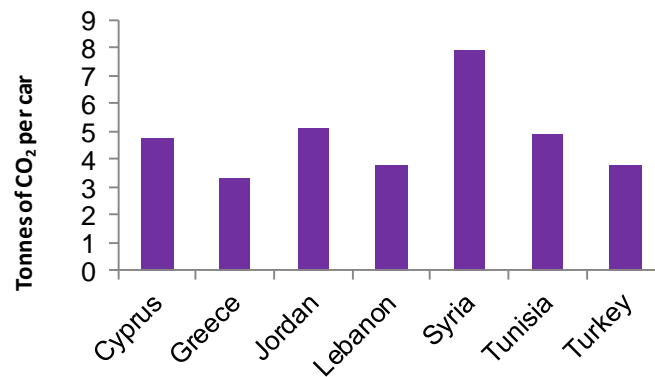
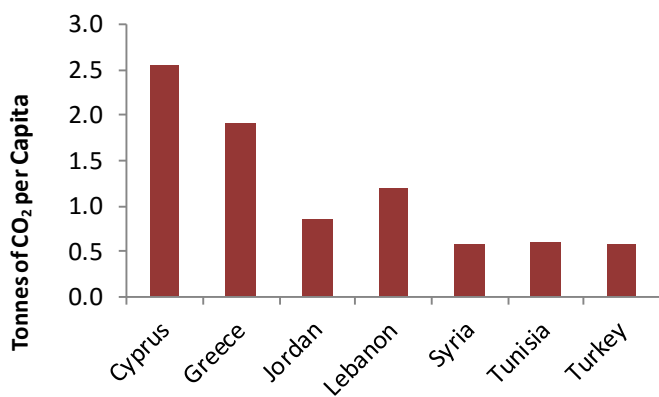
Emissions increasing since 1994



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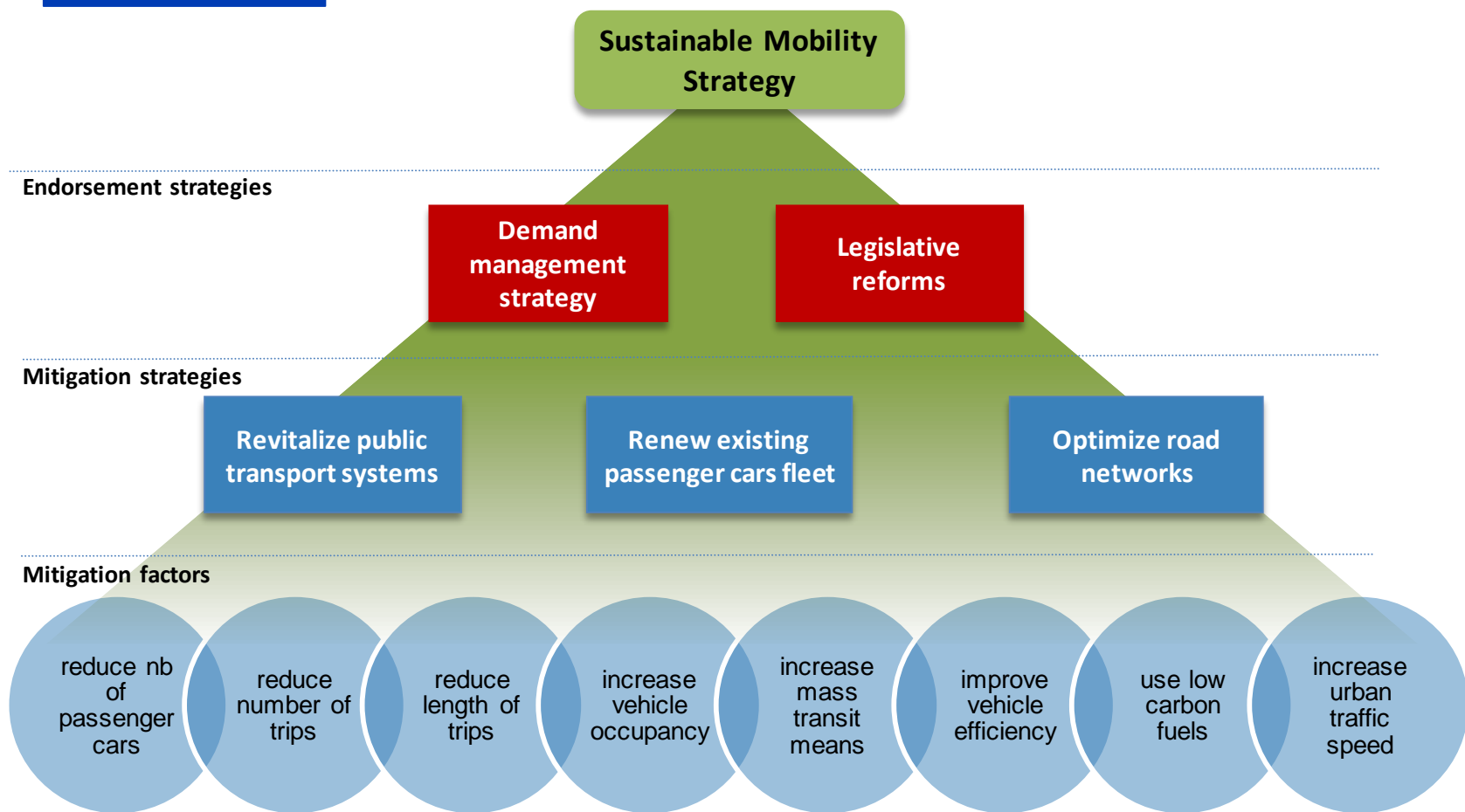
Comparison with other countries





Main recommendations

Mitigation strategies: Process for reducing GHG and pollutant emissions



Ongoing efforts



Master plan of the Ministry of Public Works and Transport

- Implementation of phase 1 of the rail transportation plan
- Deployment of a Bus Rapid Transit
- Revitalization of the public buses inside cities
- Traffic management in GBA
- Improved infrastructure

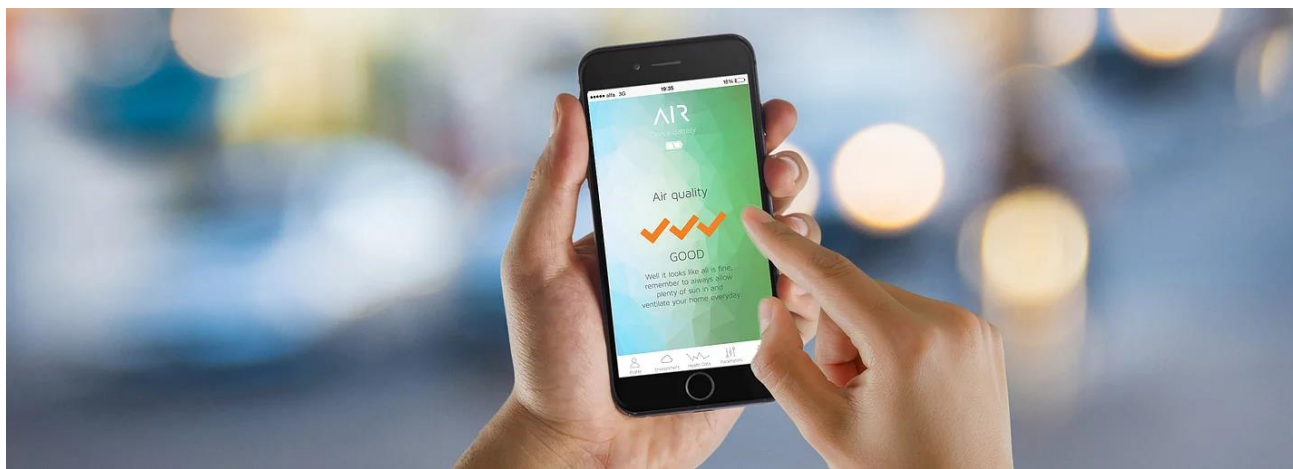
Ongoing efforts



National Air Quality Strategy



- Draft strategy and action plan
- National network of air quality stations for criteria air pollutions (18 stations)
- Air quality index (sensio air application)



Ongoing efforts



Fleet renewal programme



- Project on the Lebanese fleet renewal through a scrapping scheme
- The 15 million USD project is being presented as a NAMA to the UNFCCC for potential funding opportunities



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Resilient nations.

Thanks!



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