FONDAZIONE
PER LO SVILUPPO
SOSTENIBILE

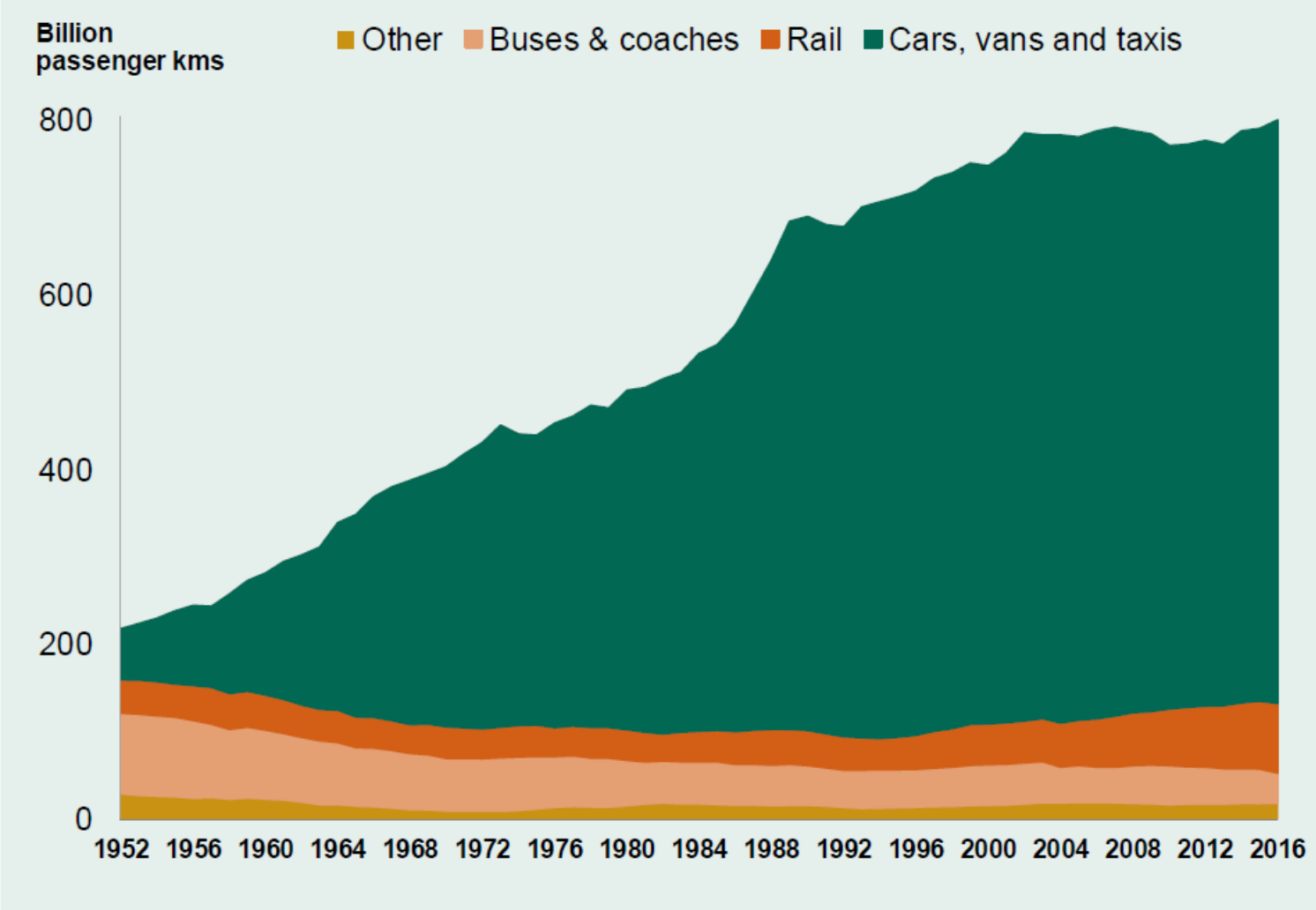
Sustainable Development Foundation

**Raimondo Orsini**

*Director*

# Transport – Road traffic

**Passagers-km par moyen de transport, Grande Bretagne: 1952 - 2016**




*Source: UK Government Department for Transport - Transport Statistics Great Britain 2017*

# 1.5°C scenarios are the only possible solution…but not easy

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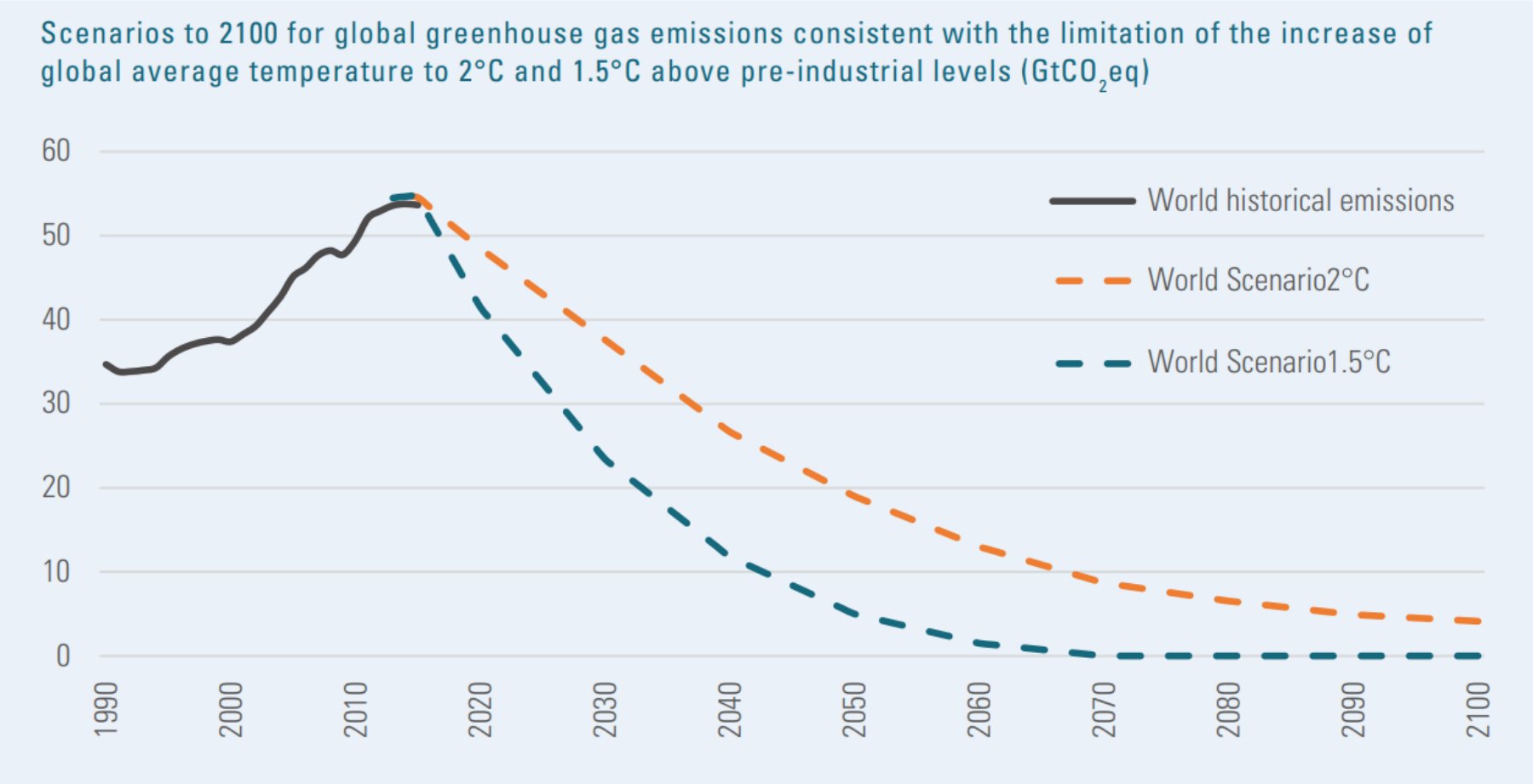



Source: SUSDEF

# Tax measures

## Instruments of internalization

- Congestion charge
- Taxes on polluting fuels / clean fuel subsidies
- Vehicle taxes
- Emission charges
- Subsidies for clean vehicles
- Parking regulation/parking fees

Source: World Bank

# It just doesn't work easily …….

**Donald J. Trump**
@realDonaldTrump

Follow

The Paris Agreement isn't working out so well for Paris. Protests and riots all over France. People do not want to pay large sums of money, much to third world countries (that are questionably run), in order to maybe protect the environment. Chanting "We Want Trump!" Love France.

4:34 AM - 8 Dec 2018

# Inequalities in the transport system: some examples of links between transport and equity

- The transportation system can exacerbate or reduce social inequalities. A transport system based on private transport, for example, does not allow those who do not have cars to access all available economic and social opportunities.

- The impacts on transport are also paid by those who do not determine them. Impacts generated by road traffic, for example, are also paid by those who do not own and use a personal vehicle.

- The transportation system uses common goods belonging to all, such as roads. The road space, for example, is mainly intended for certain means of transport according to a hierarchy that does not reflect an efficient use of space

# Tax measures

## Key principles of fiscal policy

### Equity and social inclusion

The user pays a price that reflects the costs to society, the richest do not impose costs to the poorest, accompanying measures such as exemptions, revenues to be used in the transport sector

### Transparency

Clear calculation of external costs and their distribution, clear communication of the political objectives to be achieved (for example: fewer accidents, more efficient choice of vehicles etc.), cost changes introduced over time with clear notice

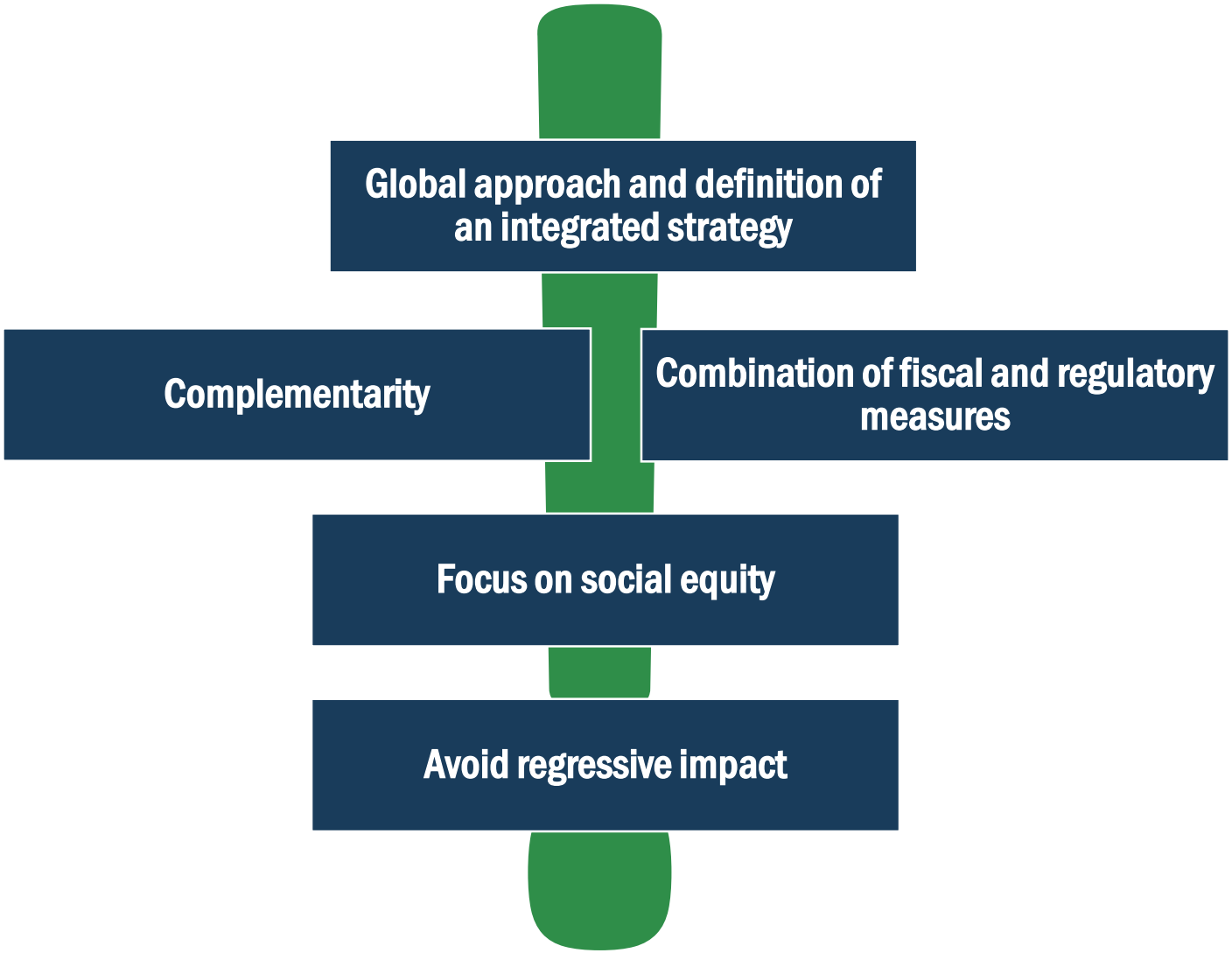
### Effectiveness

Use of new technologies for calculation and collection of new burdens, efficient use of funds raised to improve sustainable mobility

### Participatory approach

Tax policy in the transport sector should be developed in consultation with the transport sector and its users

# Tips for fiscal measures



# Technology can…..

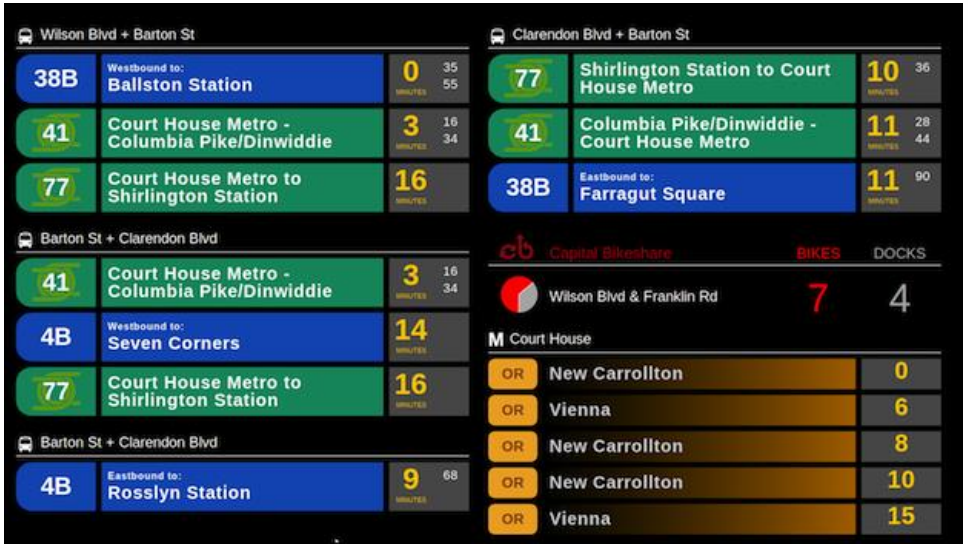
**BAU: analyze demand**

- Ridesourcing services (e.g., Lyft and Uber) are most frequently used for social trips between 10 p.m. and 4 a.m., times when transit runs infrequently or is unavailable.
- Relatively few people (21% of respondents) use ridesourcing to commute—and those who do, do so occasionally, mostly one way trips.

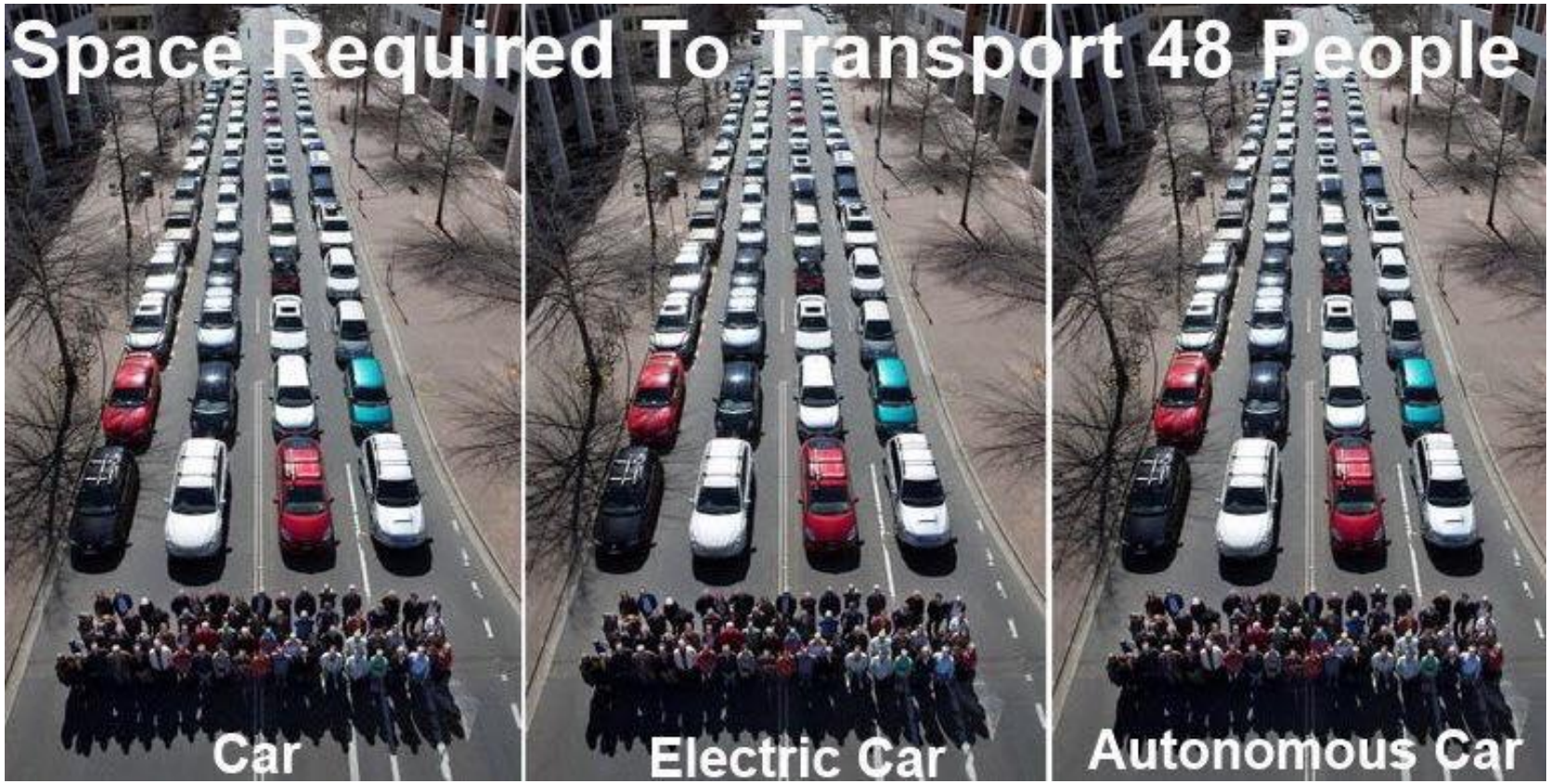
# .....help to internalize costs

## Fare Integration,

congestion pricing for shared mobility- incentivize mode shift in real time



| PRICING STRATEGY EQUITY MATRIX | |
|---|---|
| ***PRICING STRATEGY*** | ***EQUITY IMPACTS*** |
| 24 hour<br>**Flat-rate pricing** | Likely to be most regressive strategy, charging low-income drivers who often don't commute at peak commute hours. Least efficient at reducing congestion. Used on many tolled facilities. |
| **Dynamic pricing** varies with time or congestion | Efficient charging system but may be regressive (though likely less regressive than gas and sales taxes). |
| **Dynamic pricing** with some means-based discounts or rebates | Less regressive due to discounts. |
| **Means-based pricing** with targeted caps and/or exemptions | System designed specifically not to be regressive. Some loss of efficiency as plentiful discounts, caps and exemptions may limit the congestion and climate benefits. |


Space Required To Transport 48 People
Car
Electric Car
Autonomous Car

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SHARING MOBILITY

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SHARING MOBILITY
SCAN

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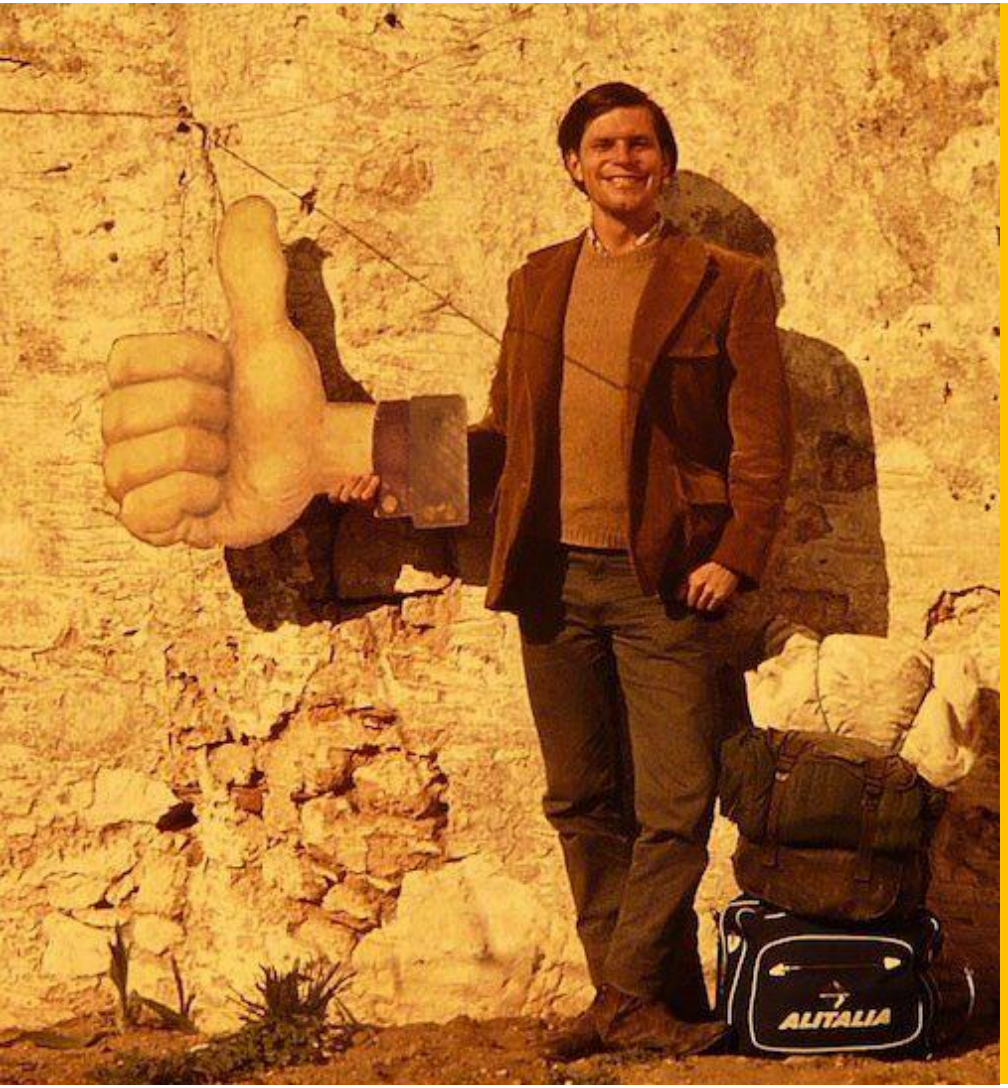
SHARING MOBILITY

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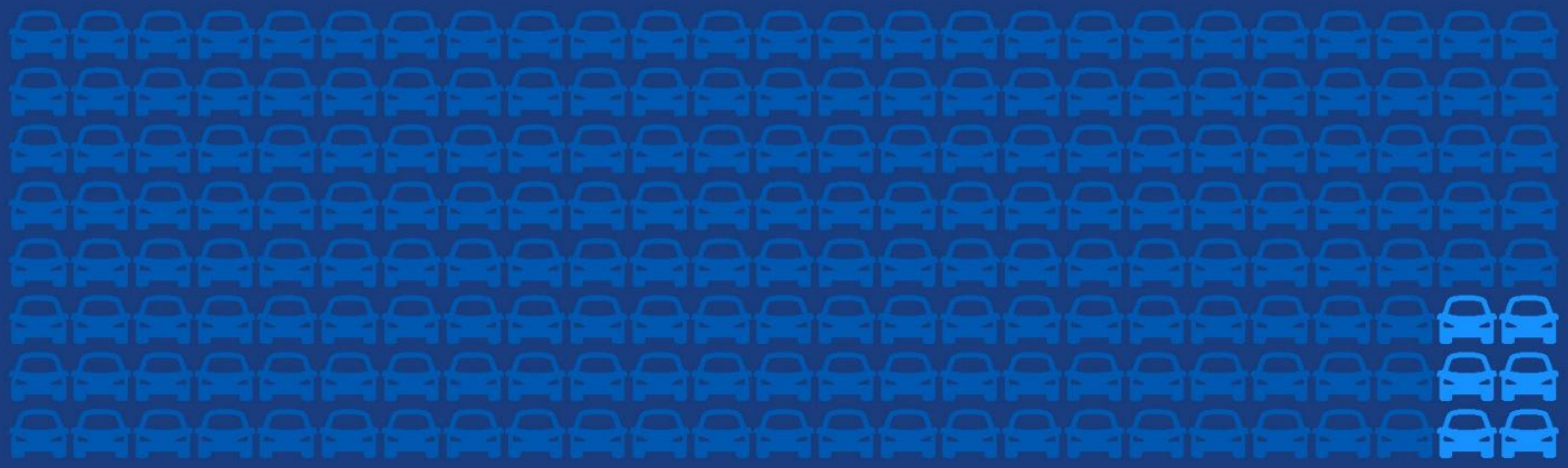
SHARING MOBILITY

# Lisbon



Scenario: 24 hours

number of cars required to provide the same trips as before: **3%**