

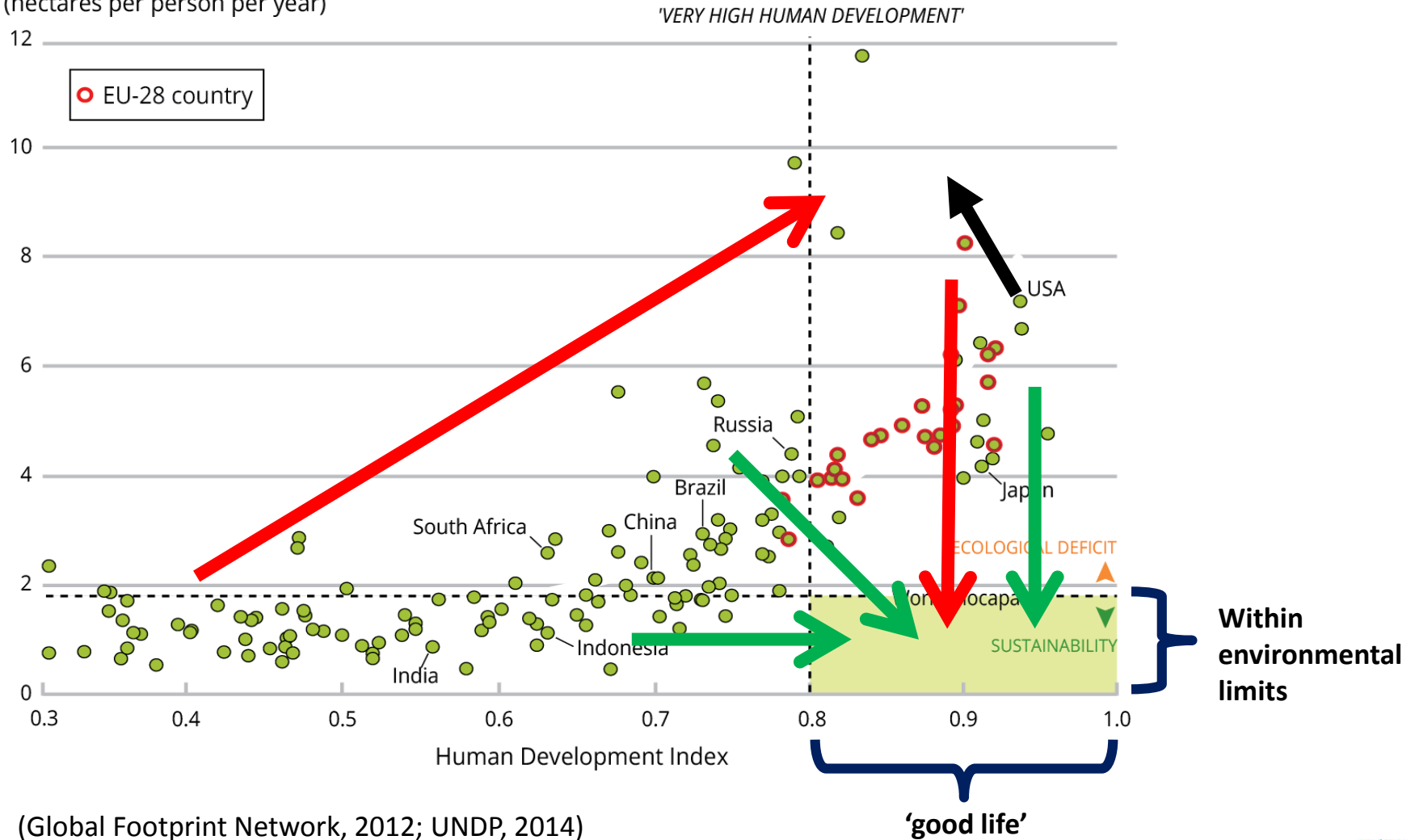
Urban Quality of Life in Europe: Environmental and Climate Challenges



Dr Hans Bruyninckx, 30 June 2017
The Foundation for the Urban Environment (FFUE), Brussels

10 billion people, one planet

Ecological footprint
(hectares per person per year)



(Global Footprint Network, 2012; UNDP, 2014)

Vision of the 7th Environment Action Programme

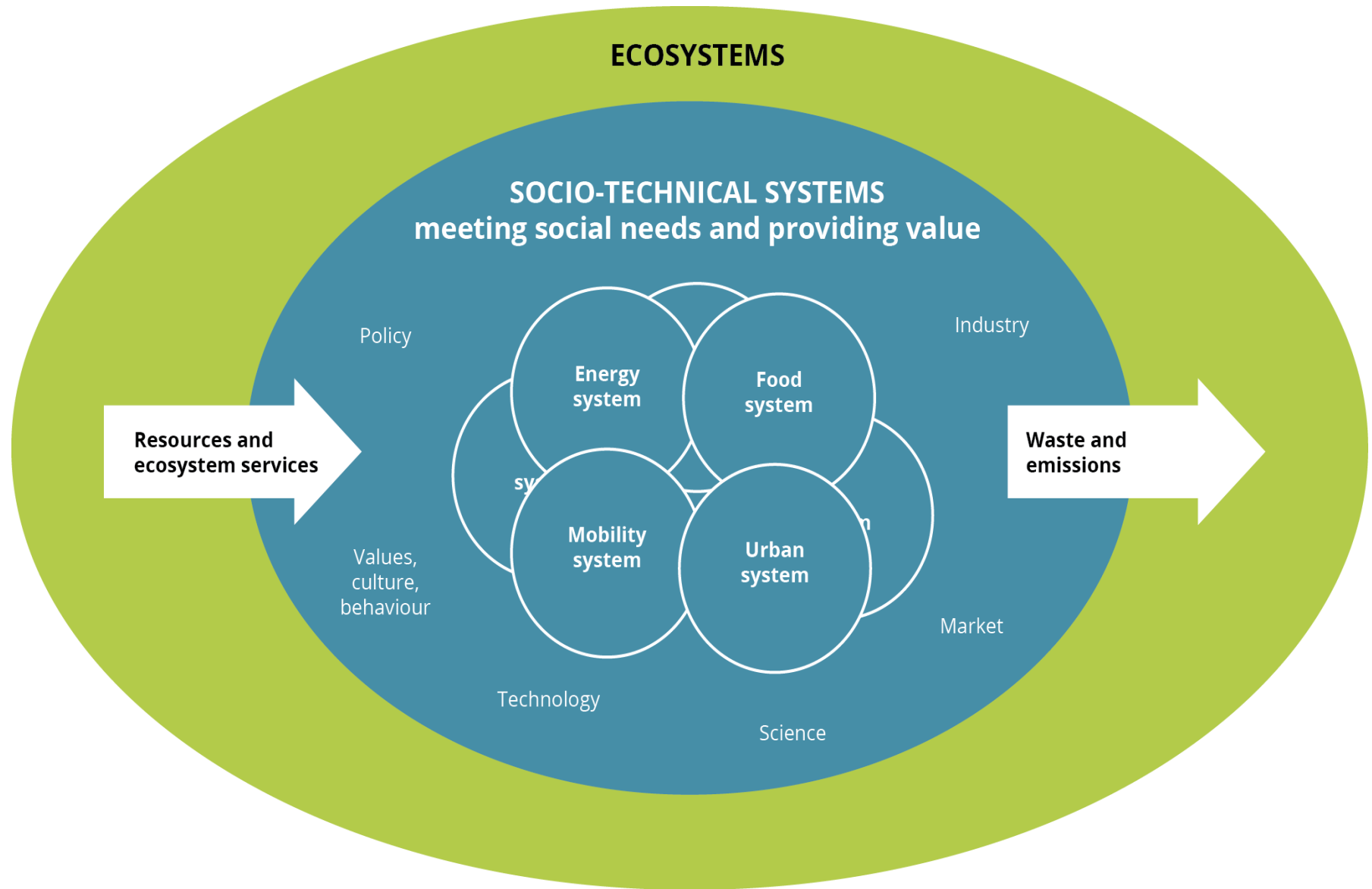
‘In 2050, we live well, within the planet's ecological limits.

Our prosperity and healthy environment stem from an innovative, **circular economy** where nothing is wasted and where natural resources are managed sustainably, and **biodiversity is protected**, valued and restored in ways that enhance our society's resilience.

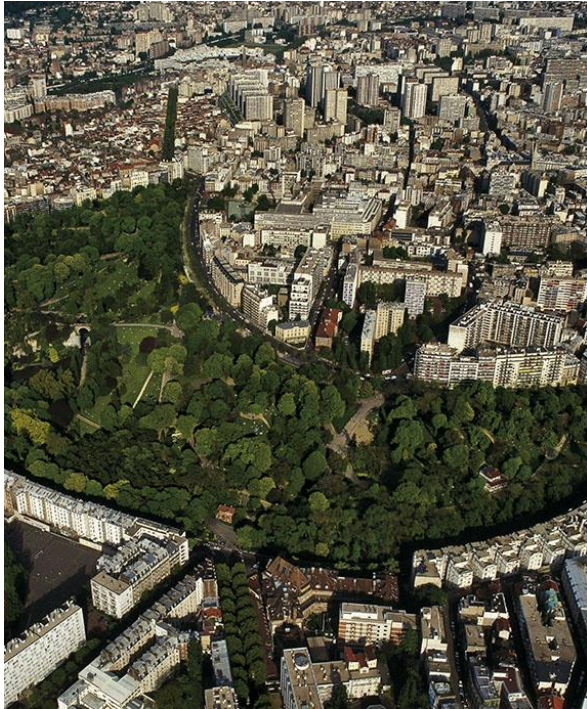
Our **low-carbon growth** has long been decoupled from resource use, setting the pace for a global safe and sustainable society.’

Source: 7th Environment Action Programme, European Commission, 2013

Living well, within the limits of the planet



Challenges can be seen throughout the urban system



Challenge 1:
Ecosystems



Challenge 2:
Social systems

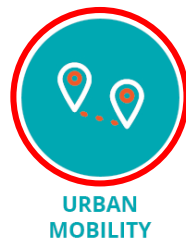


Challenge 3:
The "grey"
urban system

The European context

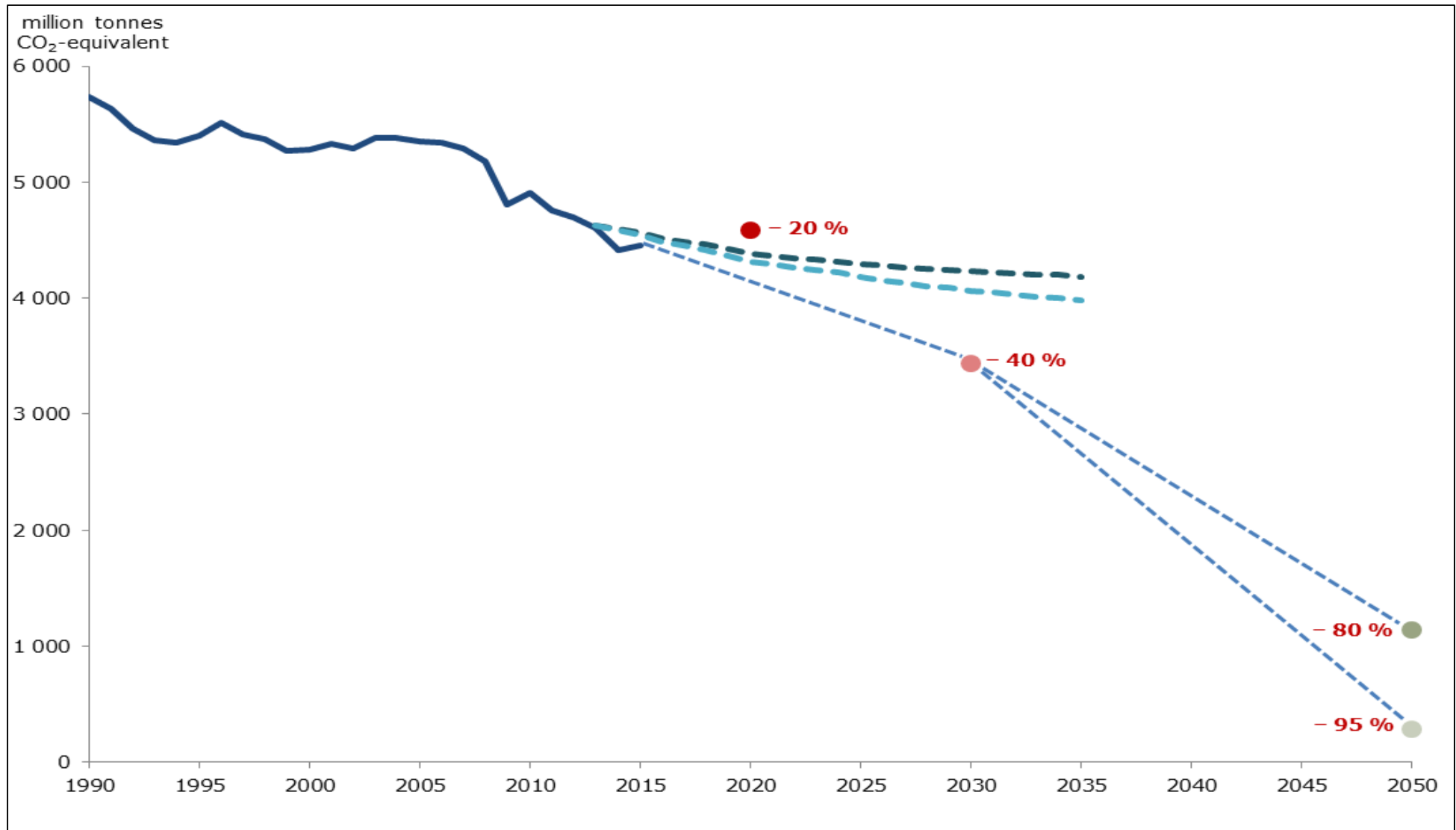


12 PRIORITY THEMES



Source: European Commission, 2017

De langetermijuitdaging: uitstootvermindering versnellen I

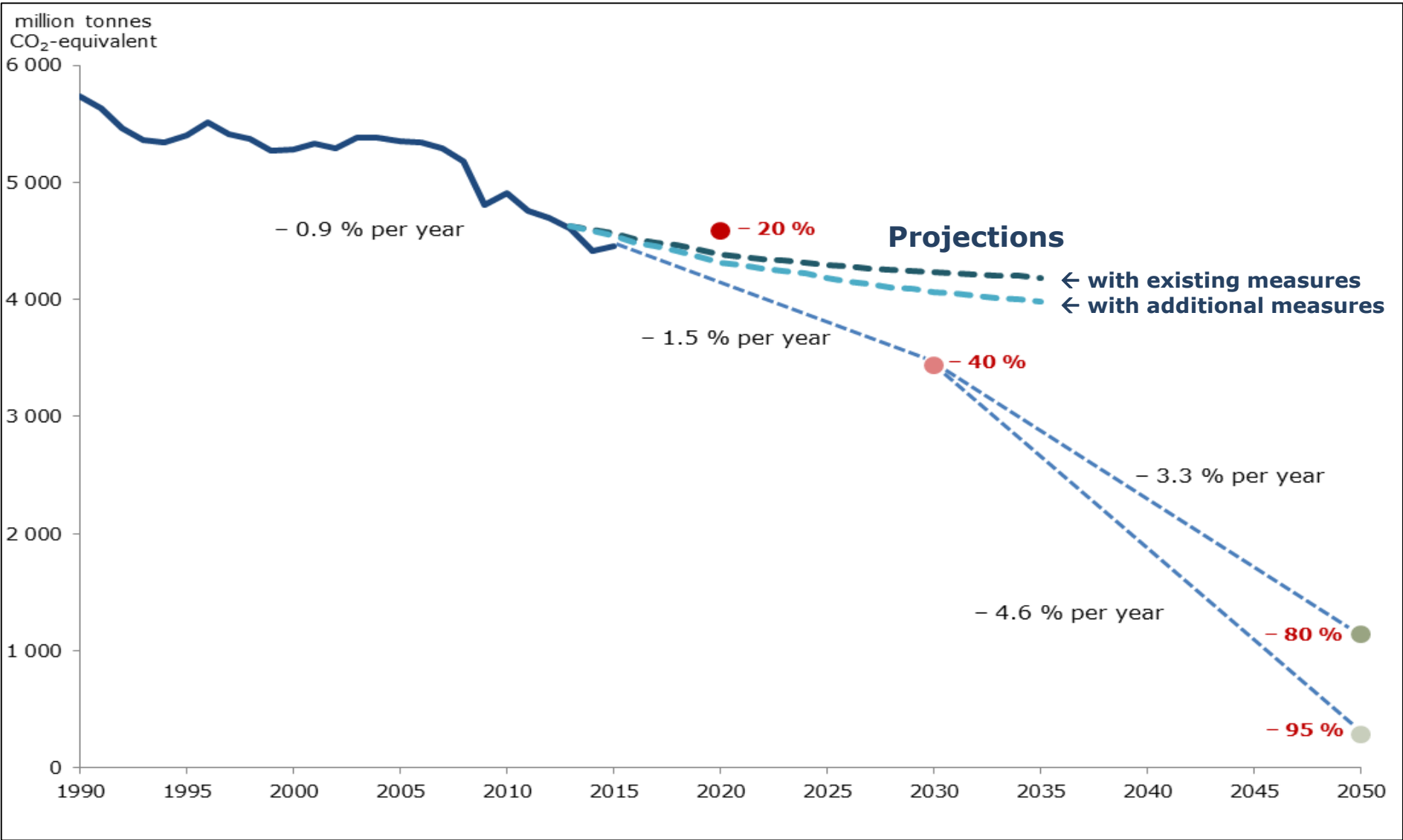


Source: EEA, Trends and projections in Europe 2016 — Tracking progress towards Europe's climate and energy targets.

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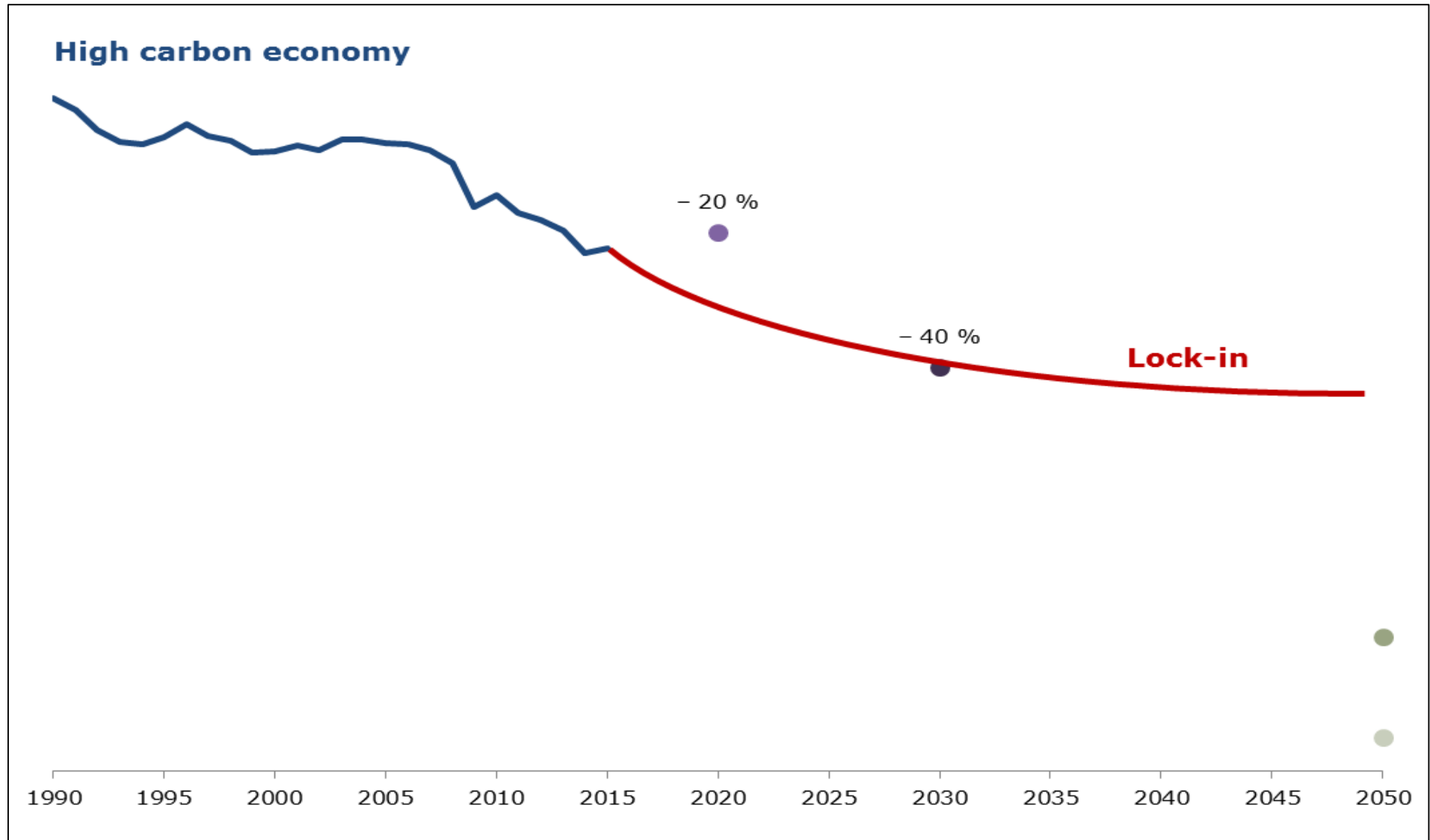


De langetermijuitdaging: uitstootvermindering versnellen II

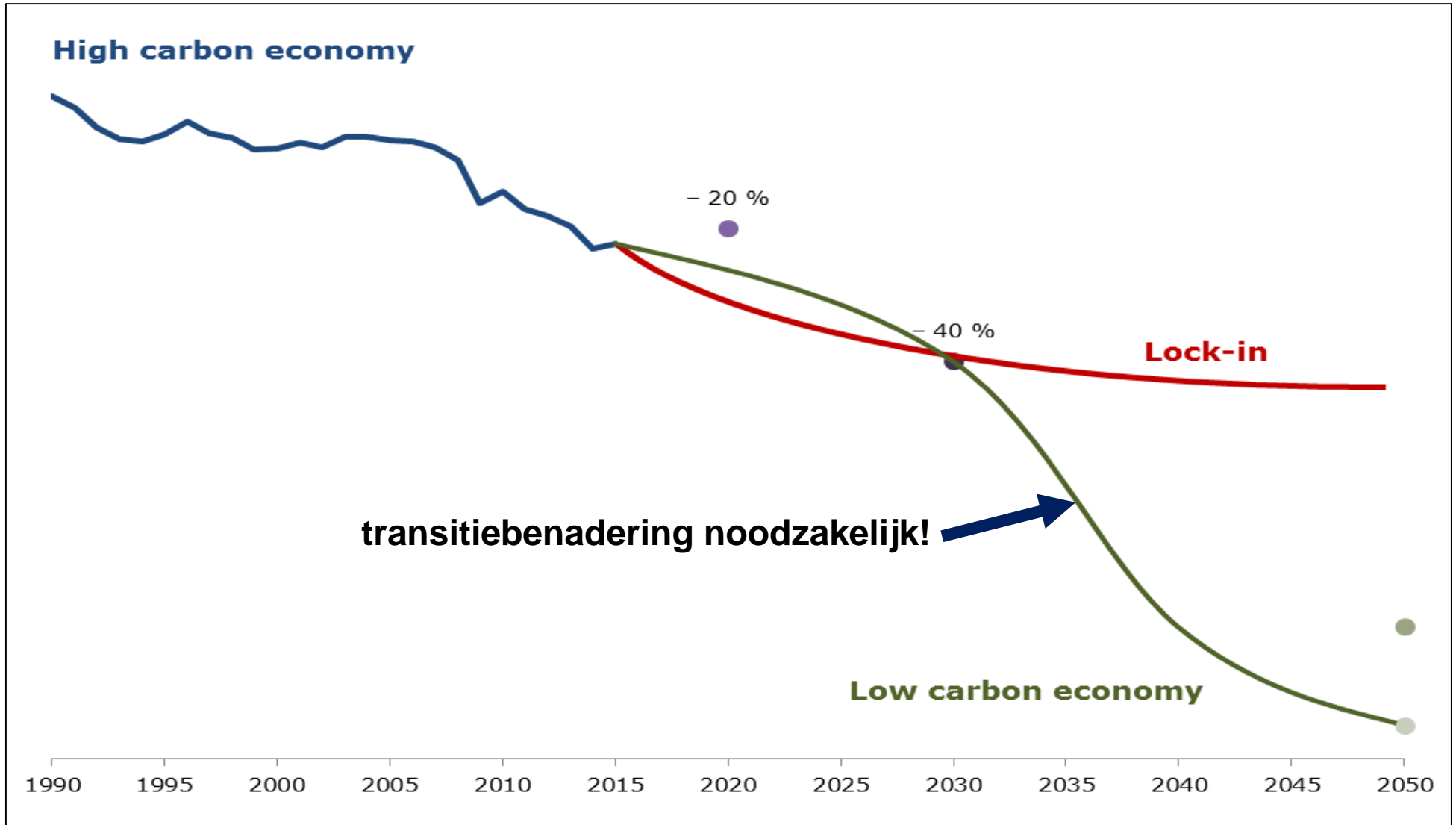


Source: EEA, Trends and projections in Europe 2016 — Tracking progress towards Europe's climate and energy targets.

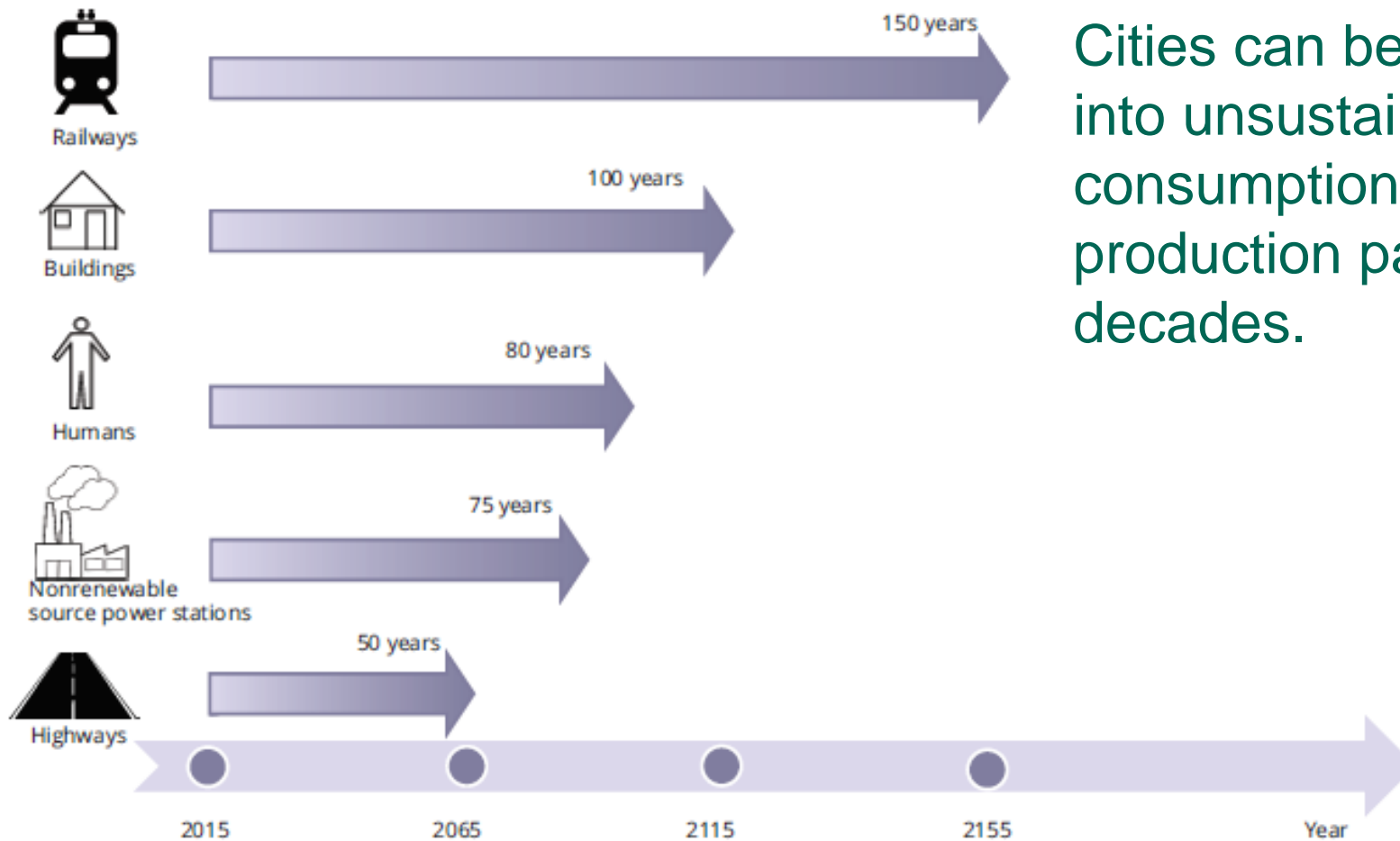
2030 als eindpunt? Gevaar voor “lock-ins”!



2030 als tussenstap naar 2050

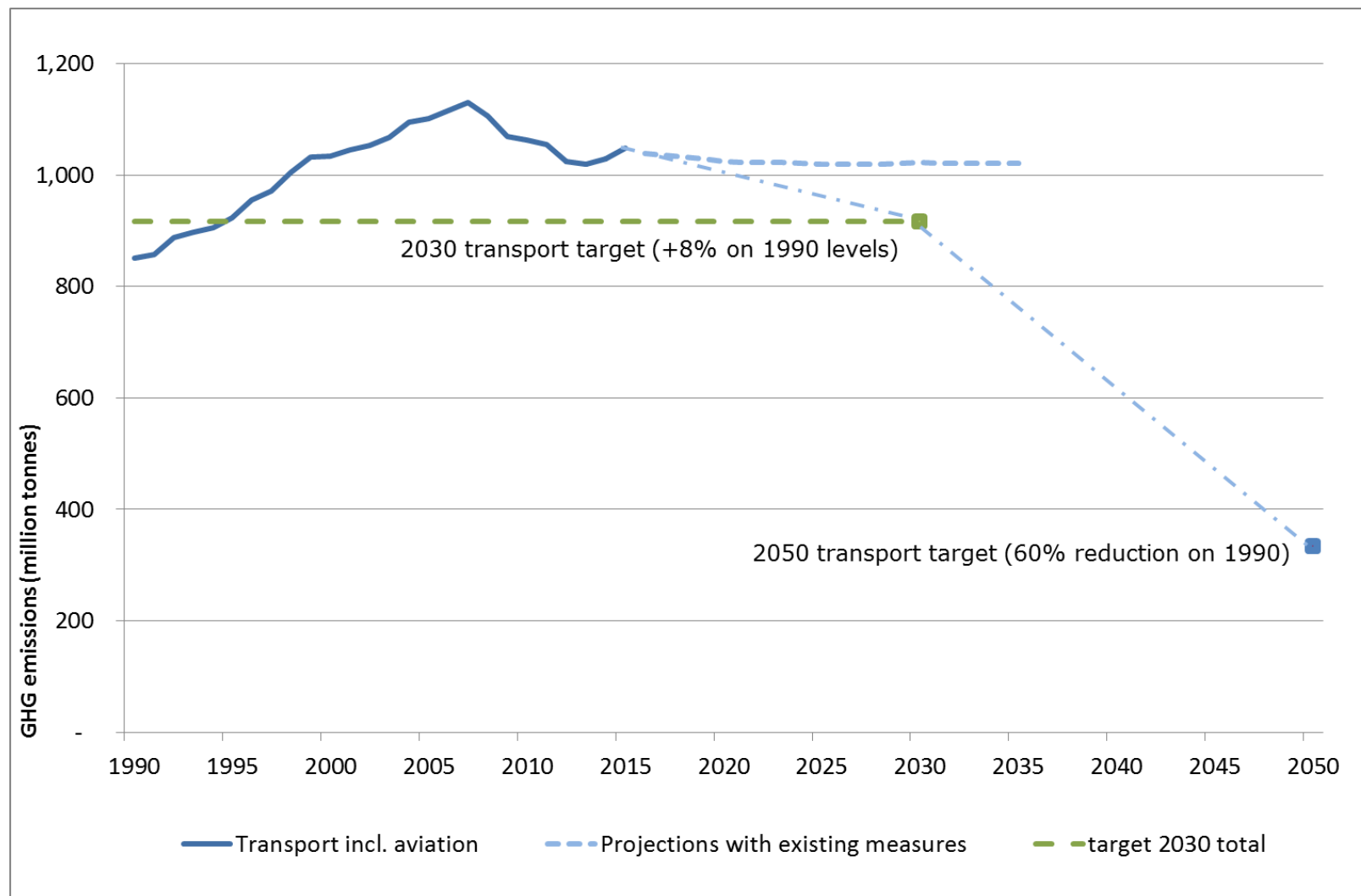


The “grey” urban system



Cities can be “locked-in” into unsustainable consumption and production patterns for decades.

The policy context: EU GHG emissions from transport



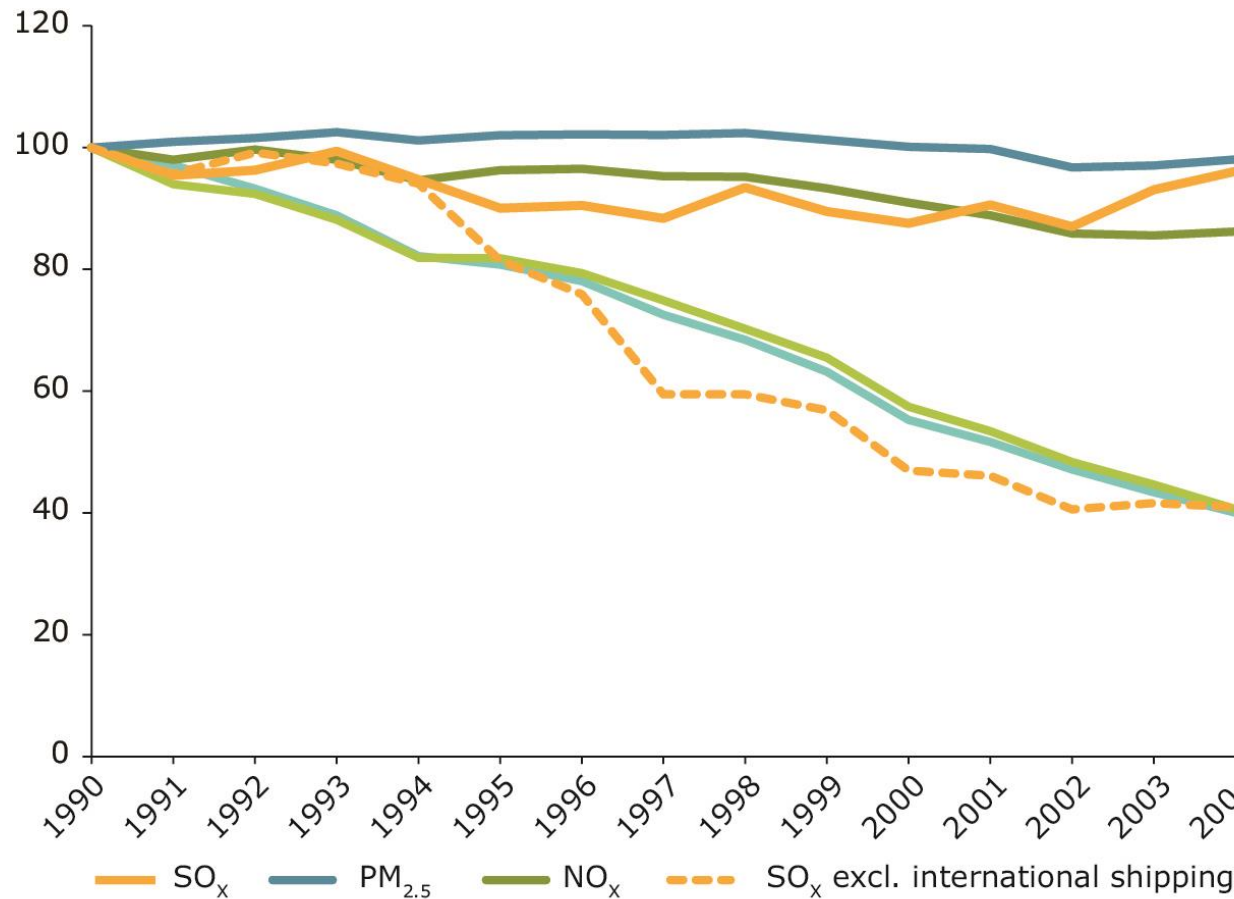
Source: EEA, 2017.



More than GHG: emissions of air pollutants

Trend in emissions of air pollutants from transport in EEA-33

Index 1990 = 100

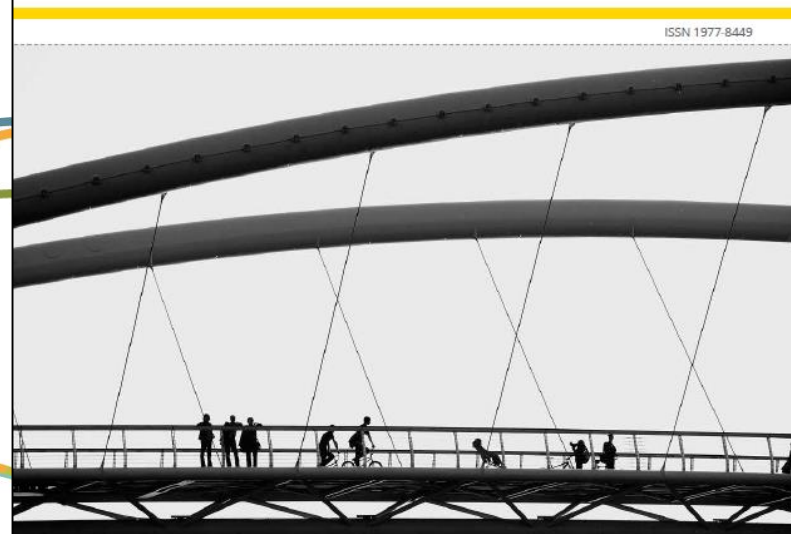


Source: EEA, 2015

EEA Report | No 28/2016

Air quality in Europe — 2016 report

ISSN 1977-8449



European Environment Agency



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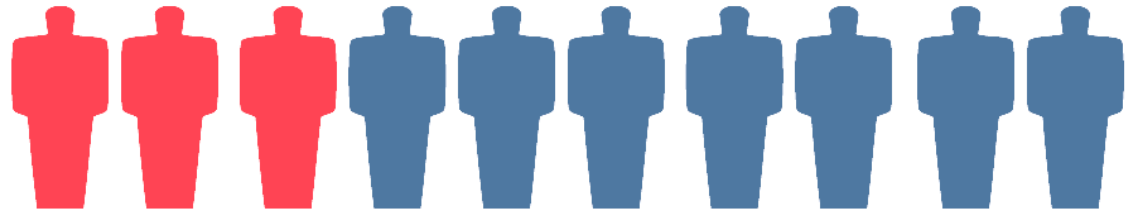


Despite reductions PM concentrations have not yet declined to safe levels

Share of urban population exposed to dangerous levels of particulate matter in Europe

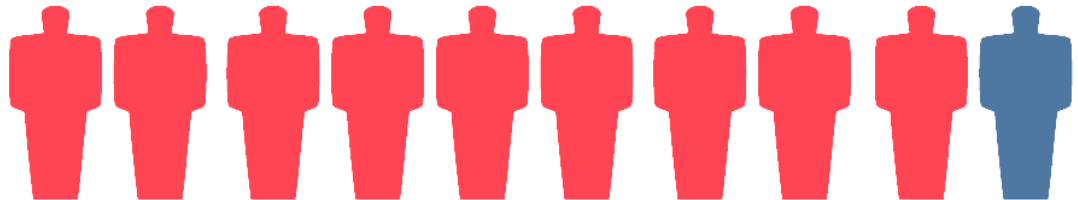
3 out of 10

exposed to exceedances of the EU daily limit value

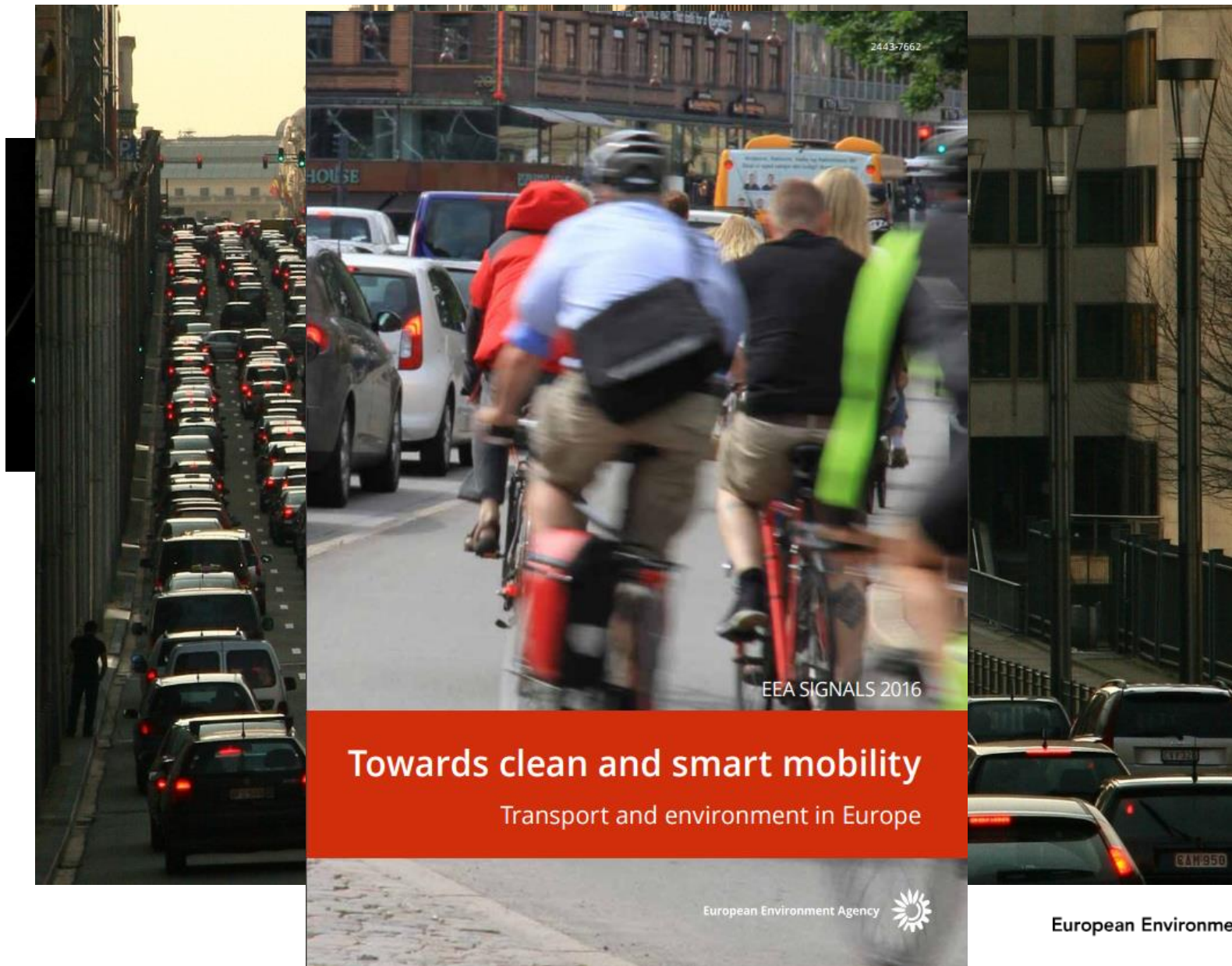


9 out of 10

exposed to exceedances of the WHO guideline value



Limits to efficiency and technological gains



Towards clean and smart mobility

Transport and environment in Europe

European Environment Agency

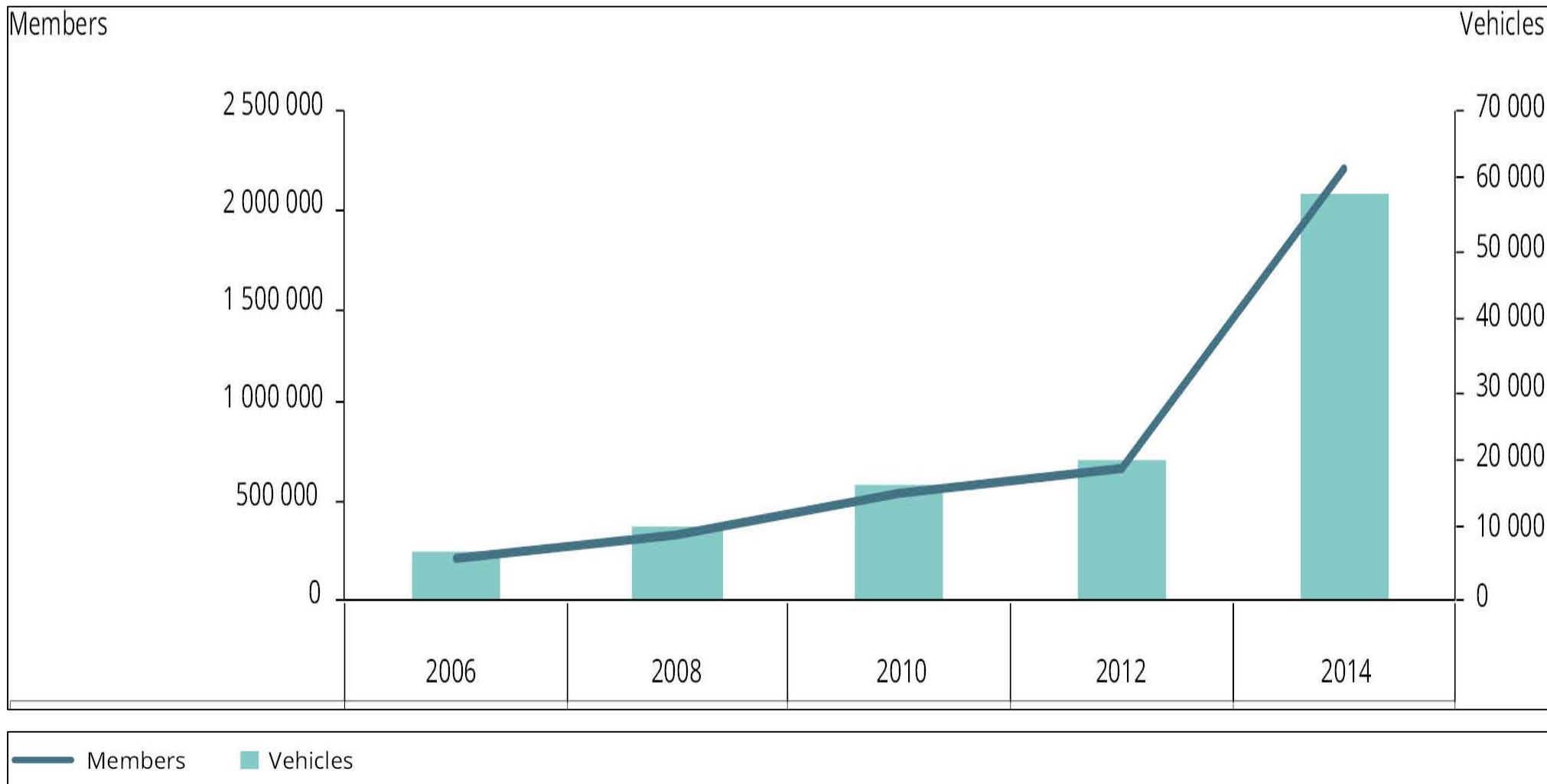


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Niches and policies that can create change

European trends in car sharing



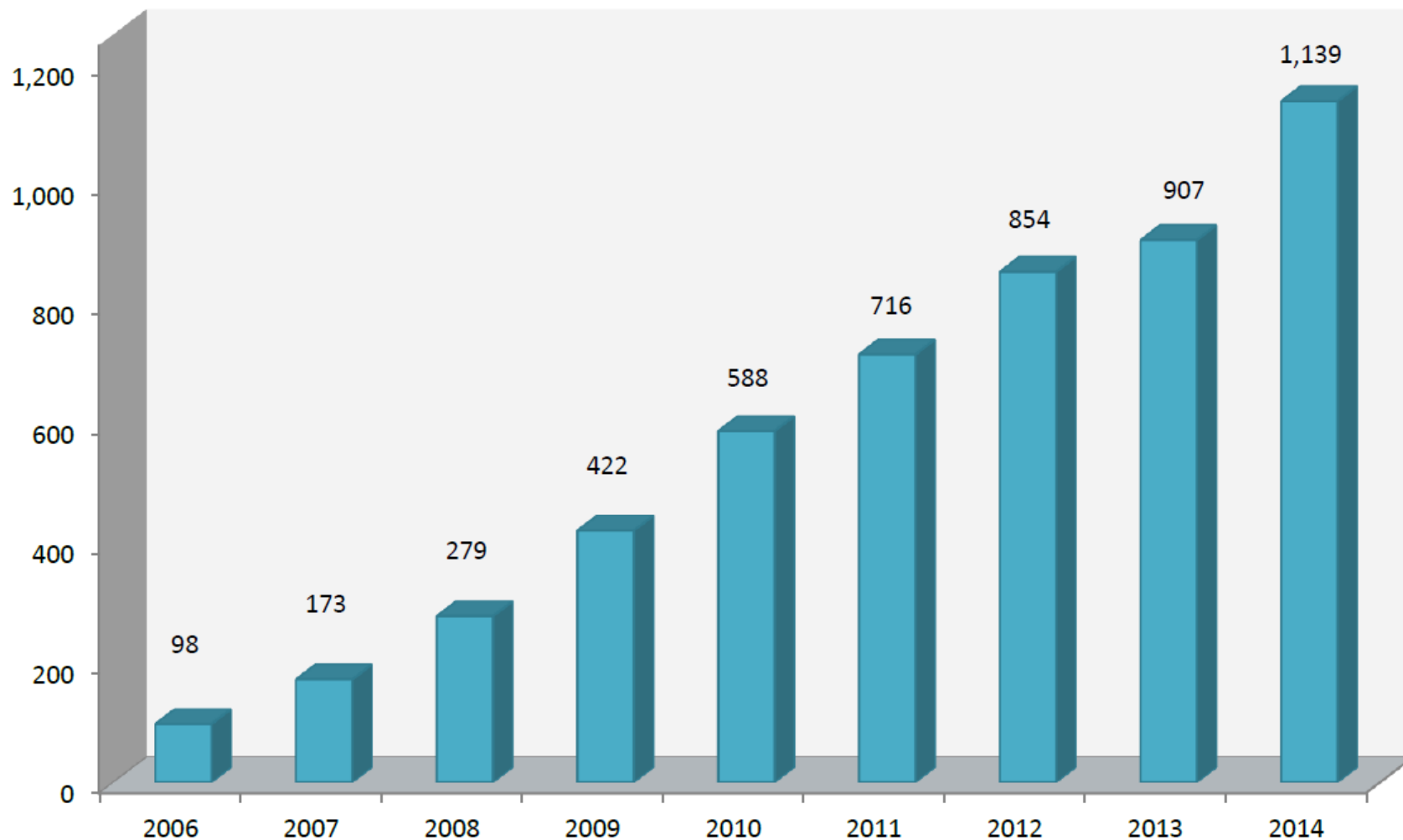
Source: Shaheen, and Cohen, 2016.

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Niches and policies that can create change II

European electric bicycle sales (EU 28) (1 000 units) 2009 – 2014



Source: CONEBI, 2015.

Ecosystems / green areas inside and around cities

Local climate
regulation

Carbon
sequestration

Flood
regulations



Ecosystem
services

Economic/recrea-
-tional value

Aesthetic
values



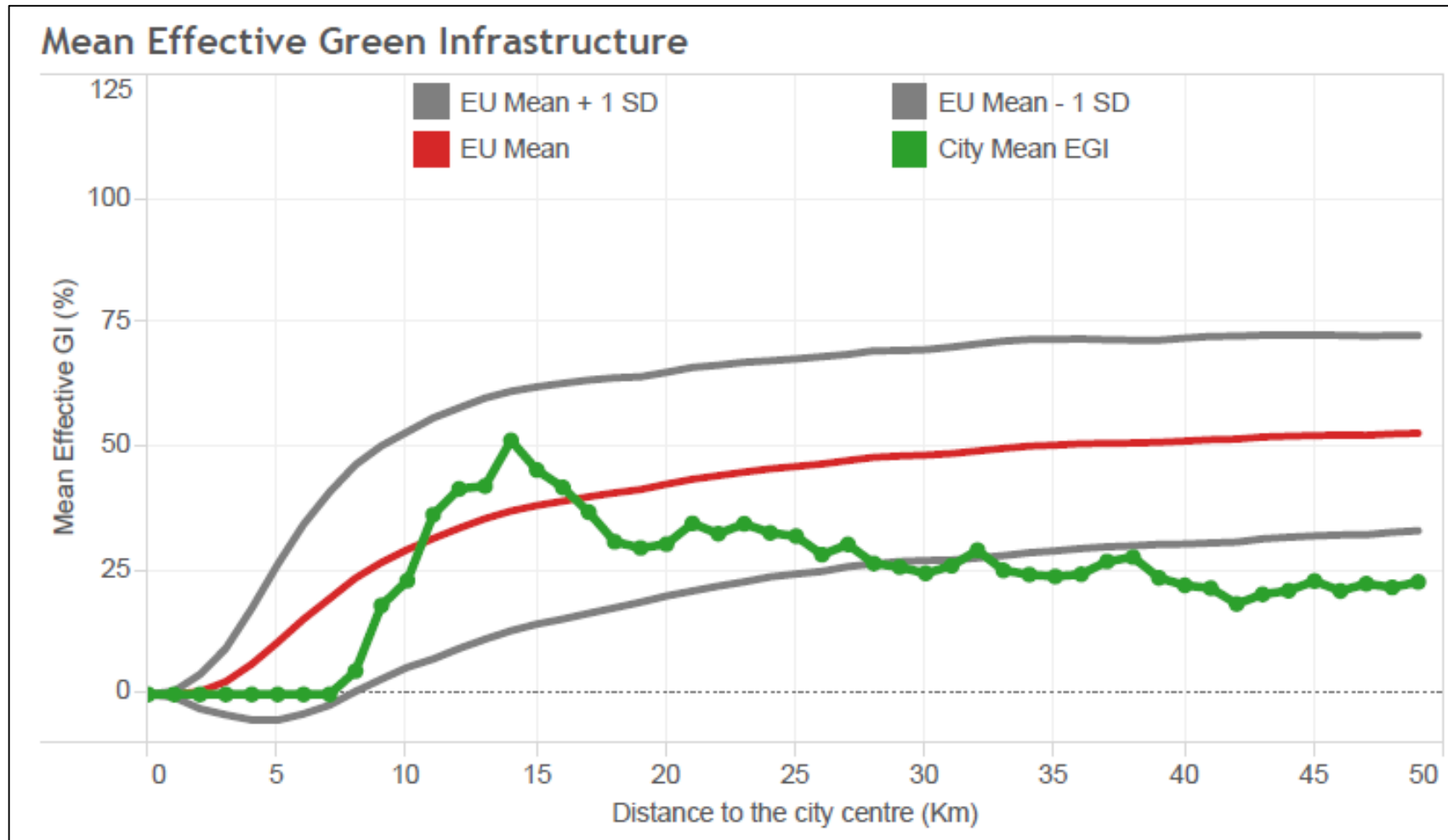
Groene daken in Hamburg



The green roofs programme helps to keep the costs for storm water management manageable.

Visualisation: TH Treibhaus Landschaftsarchitektur; Image: Matthias Friedel

Is Gent een groene stad?



Lock-ins and barriers for change



Source: Marc Hoffmann

Systemic approach

- Spatial planning
- (Urban) infrastructure
- Fiscal system
- Pricing of externalities
- R&D
- Lack of long-term vision (Pact idea)
- Behaviour
- Attractive alternatives
- SMART

Alternatives?



Noodzakelijke en ondersteunende beleidsfactoren

- Consistentie
- Coherentie
- Implementation
- Sense of urgency
- Visionair en wervend

EEA reports on urban issues



Thank you

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