Energy efficiency transport policies in the Netherlands

Sacha Scheffer, Rijkswaterstaat
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Introduction

Avoid

Shift

Improve
Overview National Climate Agreement

National Climate Agreement in 2019:
- 49% or 48.7 Mton CO₂ reduction by 2030
- 5 sectoral agreements
- Mobility one of them, 7.3 Mton CO₂ reduction
- Electric mobility as part of mobility
Avoid policies - Climate Agreement - transport

**Passenger**
- Urban planning policies
- Bike infrastructure (within cities and inter-city)
- Car sharing schemes (number of users tripled 2017-2021)

**Freight**
- Bike delivery increasingly common
- Less business travel (big jump via COVID)
Shift policies - Climate Agreement - transport

**Passenger**
- Investments in public transport (National Growth Fund)
- Mobility as a service

**Freight**
- City hubs
- Investments in rail and inland shipping
Improve policies - Climate Agreement - transport

**Passenger**
› All new passenger cars zero-emission by 2030
› All public transport zero-emission by 2030

**Freight**
› Zero-emission construction logistics and mobile machinery
› Climate neutral and circular soil, road and water construction
› 30% CO₂ reduction of regional and international long-haul transport 2030
› More sustainable inland shipping
› City logistics zero-emission by 2030
Dutch approach to electric mobility

- Government leadership
  - strong ambitions
  - e-mobility action plans since 2011

- Fiscal incentives

- Attention to charging infrastructure
  - local & regional participation
  - interoperability from the start
  - open protocols

- Public private cooperation
Instruments for introduction new technologies

- Fiscal measures / taxation
- Subsidy on purchase
- Procurement / launching customer
- Guarantees
- Financing (NL Invest, EIB)
- Programmes for scientific and applied research
- DKTI-Transport

- R&D onderzoeks-fase
- Prototype/pilot
- Markt-voorbereiding/demonstratie
- Marktintroductie-fase/nichemarkt
- Opschalingsfase
- Beheerfase

- 16% achterblijvers
- 34% Late meerderheid
- 34% Vroege meerderheid
- 13.5% Vroege gebruikers
- 2.5% Innovatoren
Demonstration of electric and plug-in hybrid trucks at Albert Heijn = PHEV = BEV
Overview of global fuel efficiency and CO$_2$ emission standards

Zifei Yang

2022 International Symposium on Energy Efficiency VIRTUAL
April 6, 2022
Emissions reductions are dominated by efficiency and electrification in light and heavy-duty vehicles

Source: Vision 2050: a strategy to decarbonize the global transport sector by mid-century
Fuel efficiency/CO$_2$ emission standards have evolved in the past five years

Source: https://theicct.org/pv-fuel-economy/
There is a global race toward electrification

Source: 2021: Another chapter in the global race toward electrification https://theicct.org/2021-global-race-evs-mar22/
More and more countries show strong electrification commitment

China
20% by 2025

United States
(without California and New York)
50% by 2030

Others

California
United States
100% by 2035

United Kingdom
100% by 2035

Canada
100% by 2035

New York
100% by 2035

Norway
100% by 2025

Costa Rica
100% by 2050

Pakistan
100% by 2040

Singapore
100% by 2030

Cape Verde
100% by 2035

Iceland
100% by 2030

27 European Union Member States, Proposal by the European Commission 100% by 2035

Source: Global passenger car marketshare of countries planning to phase out new sales of internal combustion engine vehicles
Transitioning to zero tailpipe emission vehicle technology is the only effective approach to decarbonization of the on-road transport sector.
There is a need to close the real-world and laboratory gap

Divergence between real-world and type approval fuel consumption of new passenger car fleet by year in China

Thank you!
zifei.yang@theicct.org
United States’ Transportation Emissions Challenge

ACEEE International Symposium on Energy Efficiency
Wednesday, April 6, 2022
Prioritize maintenance

Cut the road, bridge, and transit maintenance backlog in half by dedicating formula highway funds to maintenance.

Did you know: States are permitted to neglect their basic maintenance needs in order to expand their roadway systems—and then rewarded with more funding.

www.t4america.org/platform
Design for safety over speed

A serious effort to reduce deaths on our roadways requires slower speeds on local and arterial roads. The federal program should require designs and approaches that put safety first.
PRINCIPLE #3

Connect people to jobs and services

Don’t focus on speed. Instead, determine how well the transportation system connects people to jobs and services, and prioritize the projects that will improve those connections.

Transportation for America

www.t4america.org/platform
Highway trust fund formula programs (by percentage)

- National Highway Performance Program: 53%
- Surface Transportation Block Grant: 23%
- Highway Safety Improvement Program: 6%
- Congestion Mitigation & Air Quality: 5%
- National Highway Freight Program: 3%
- STBG Transportation Alternatives: 3%
- Carbon Reduction Program: 2%
- Metropolitan Planning Program: 1%
- State Planning & Research: 2%
- PROTECT: 3%

Transportation for America
U.S. SENATE

SEN. JAMES INHOFE
Future of Transportation Caucus

Rep. Mark Takano on...
EXPANDING ACCESS TO TRANSPORTATION GRANTS
<table>
<thead>
<tr>
<th></th>
<th>House bill</th>
<th>Senate bill</th>
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<tbody>
<tr>
<td><strong>Maintenance</strong></td>
<td>✔️</td>
<td>✗</td>
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<tr>
<td>Does it cut the maintenance backlog in half?</td>
<td>✔️</td>
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<tr>
<td><strong>Speed</strong></td>
<td>✔️</td>
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<td>Does it address speed as a major cause of roadway crashes?</td>
<td>✔️</td>
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<tr>
<td><strong>Access</strong></td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td>Is it organized around connecting people to jobs and services?</td>
<td>✔️</td>
<td>✗</td>
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Thank you

T4America.org
@t4america