

European Technology and Innovation Platform BioEnergy
8th Stakeholder Plenary Meeting
Brussels, April 11-12, 2018

How can the transport sector accomplish its part of the two degree target?

The case of Sweden.

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Background

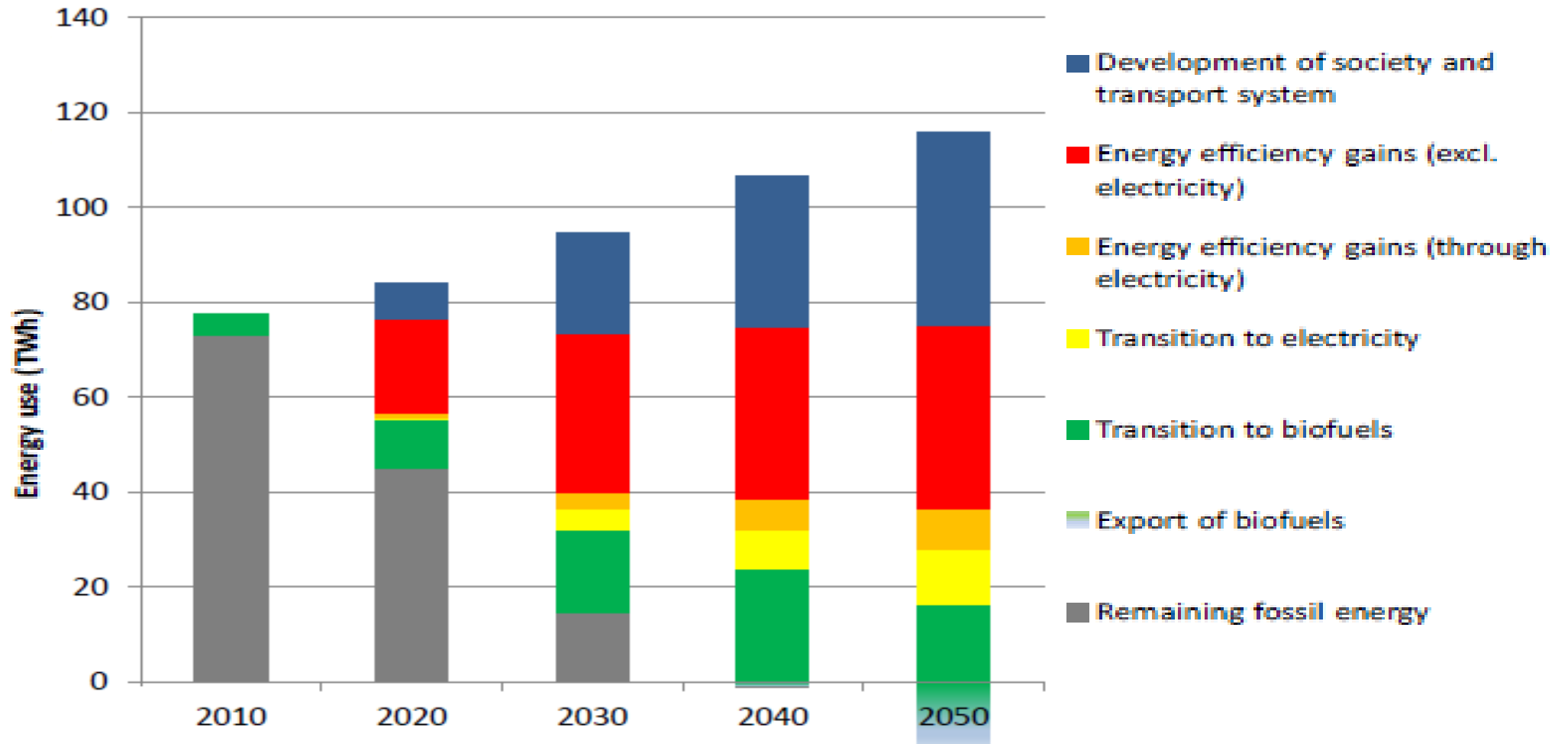
Gov't Bill to Parliament 2008/09:162

- Presents the vision of a Sweden with a sustainable and resource efficient energy system without net emissions of greenhouse gases to the atmosphere 2050.
- States the long term priority that Sweden 2030 should have a vehicle fleet that is independent of fossil fuels. This should be seen as a stepping stone towards the 2050 vision.
- Commission appointed in 2012.

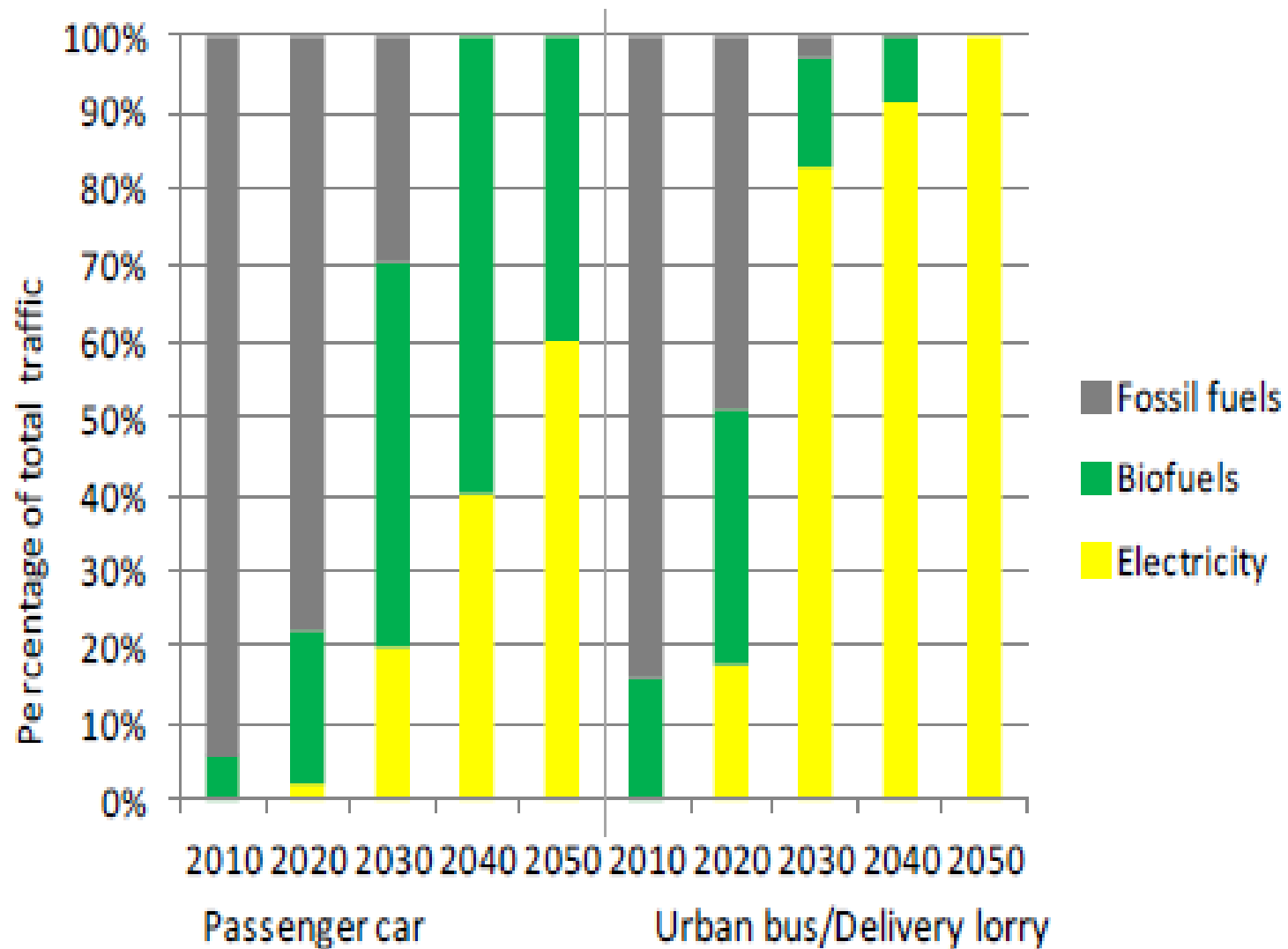
Explore five areas of measures to see how far measures could contribute towards fossil free road transport:

- 1. Stimulate continued societal transition towards reduced and more efficient transport**
- 2. Infrastructure investments and change of traffic mode**
- 3. More energy efficient vehicles**
- 4. Electrically powered road transport**
- 5. Bio fuels**

Fossil fuel use for road traffic, with and without measures



Traffic forms by mode of propulsion



Biofuels

To increase the use:

- **Enhanced quota obligation**

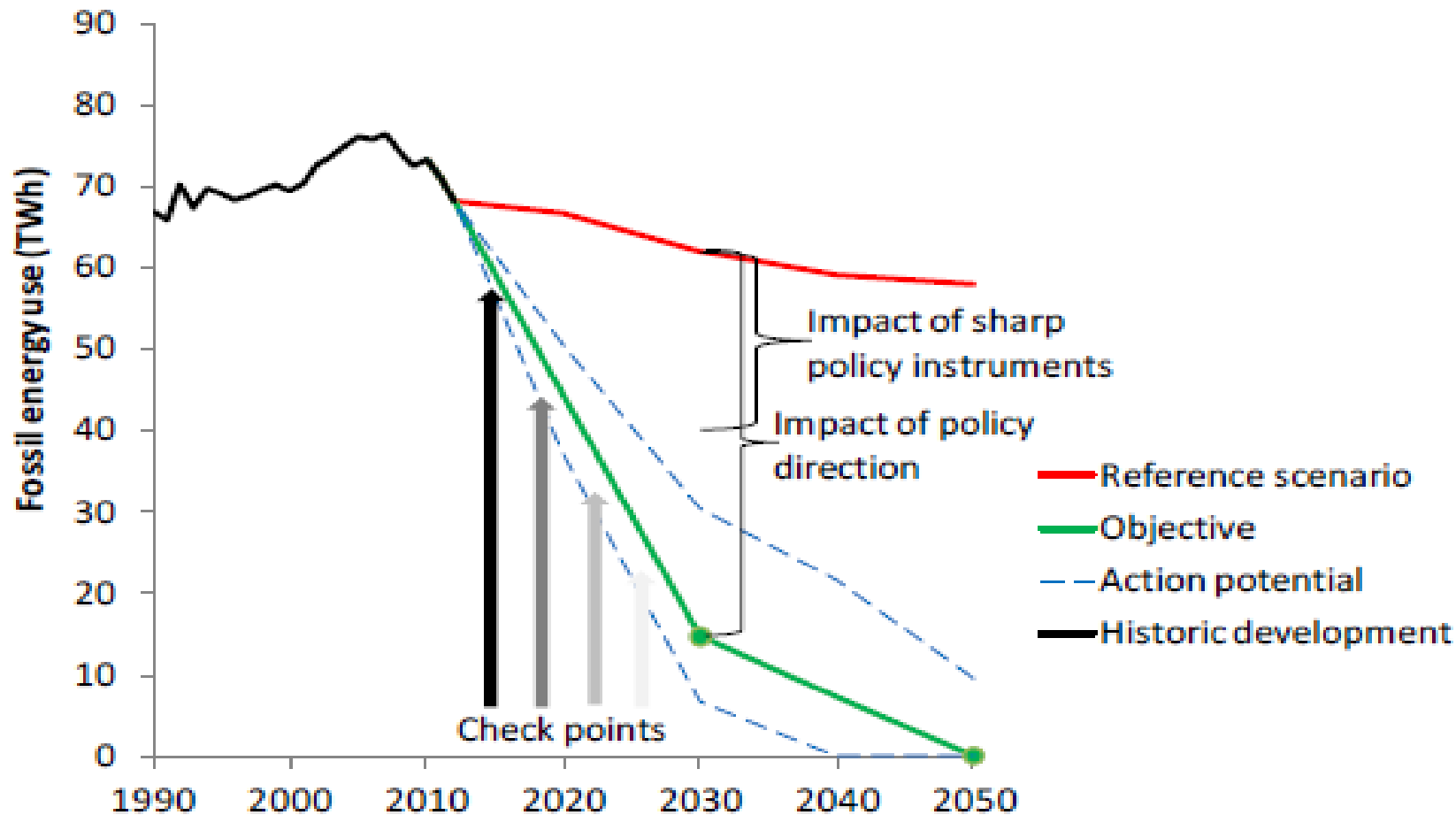
To support new technology and new raw materials:

- **Framework for the support of certain biofuels (the price premium model)**

Both proposals are well developed.

- **National** coordinator to facilitate the introduction of biofuels.

Outline diagram comparing action potential and impacts of steering mechanisms. The need for further or adjusted instruments will be assessed at periodic checkpoints.



Systematically exploited synergies

- **Significant parts of Swedish industry have world class competencies and can both contribute to and benefit from a targeted climate mitigation effort**
- **Providing opportunities for Swedish process industry to develop advanced biofuels can increase the offering of fossil free fuels**
- **Swedish vehicle industry has solutions for improved energy efficiency, engines for biofuels, and electrification. Important to continue to support that development.**

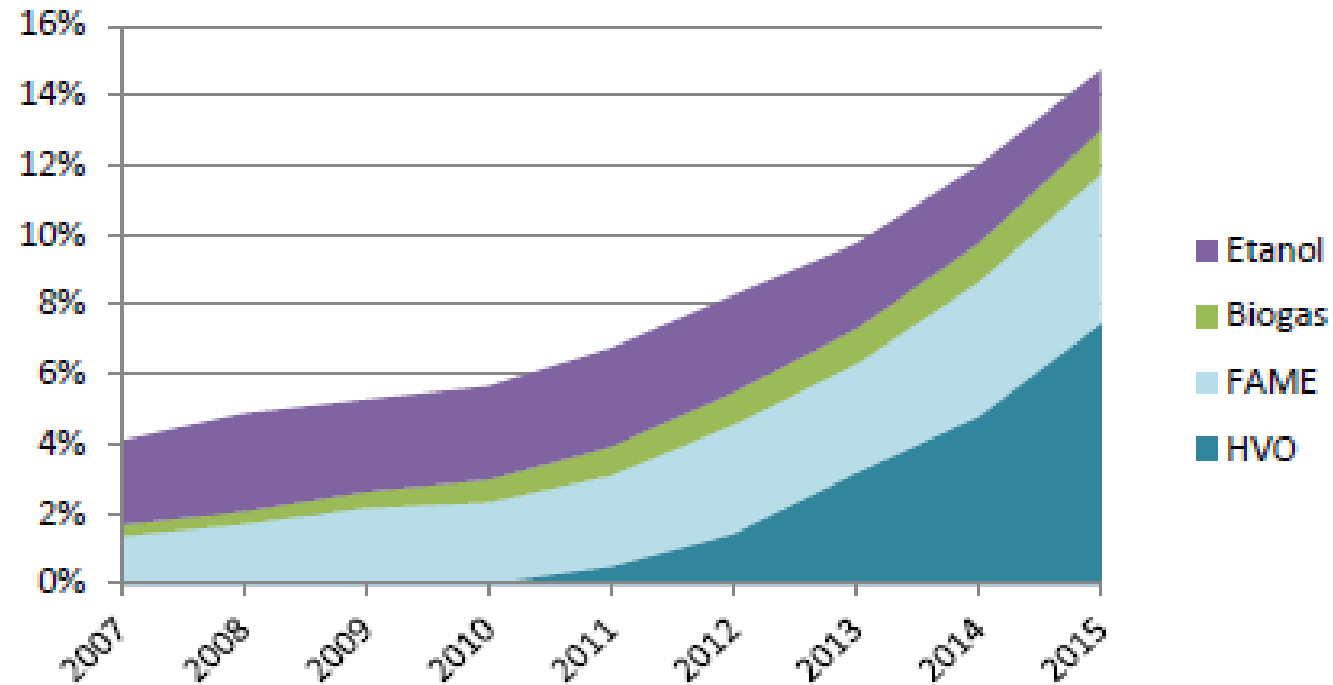
The larger picture: multiple benefits

- **More secure energy supply**
- **More job opportunities**
- **Improved accessibility in cities**
- **Reduced emissions of air pollutants and noise**
- **Increased physical activity and health**
- **Increased basis for public transport**
- **Reduced land requirements for transport**
- **Improved social integration and equality**
- **Improved road safety**
- **Reduced costs over time**

Progress since 2013:

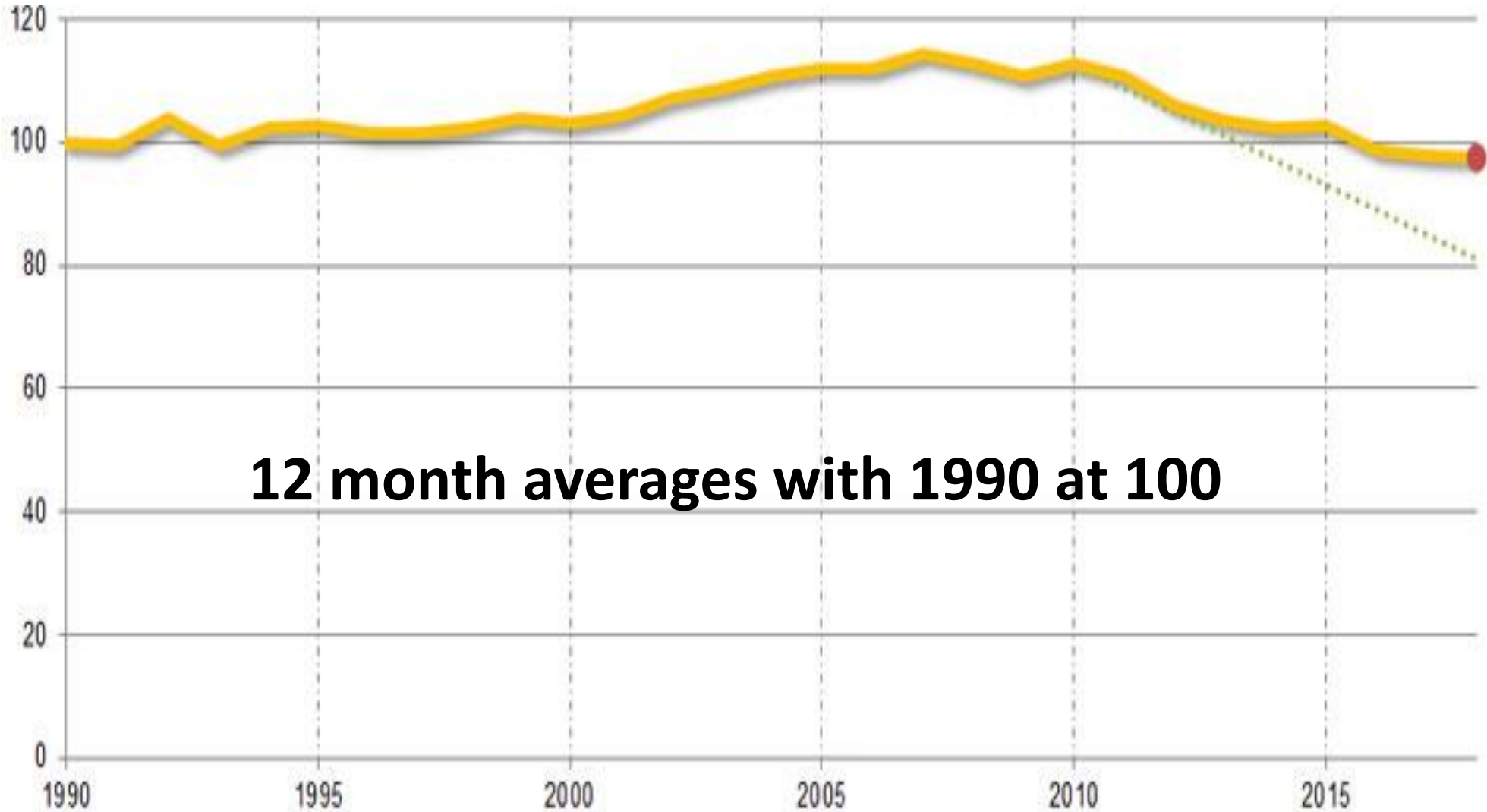
- **Bonus-malus (weak) becoming effective 2018**
- **Biofuels quota (unambitious) becoming effective 2018**
- **City/State environment agreements**
- **Modest effort to create charging infrastructure**
- **Improve cycling infrastructure**
- **Rail?**
- **Public transport?**
- **City developments?**
- **Transport sector emissions constant?**

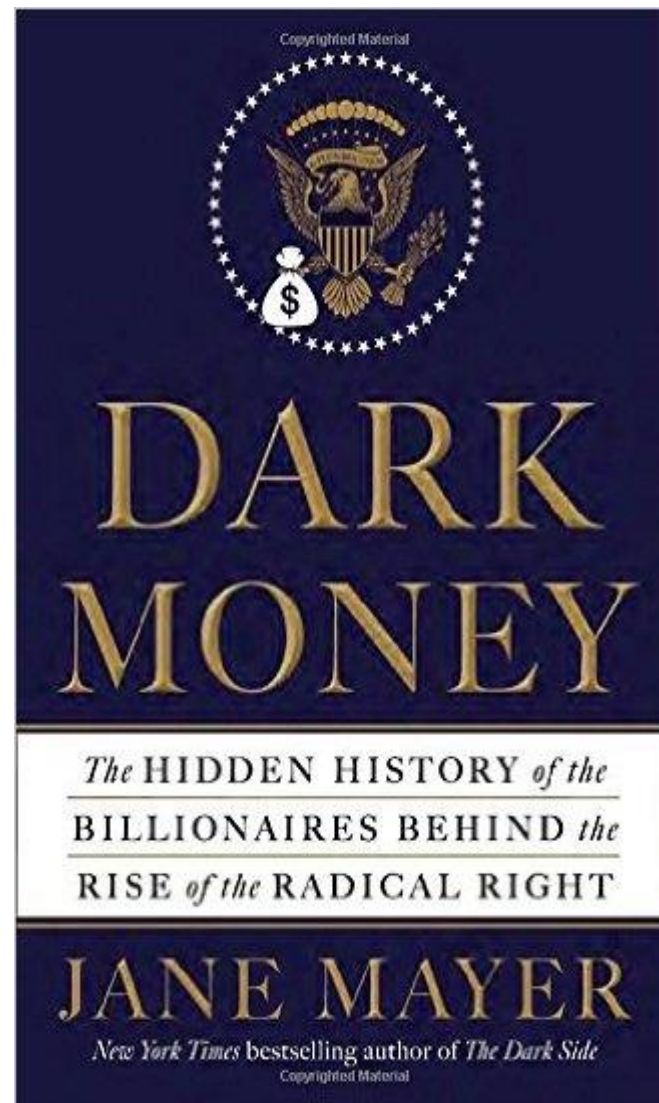
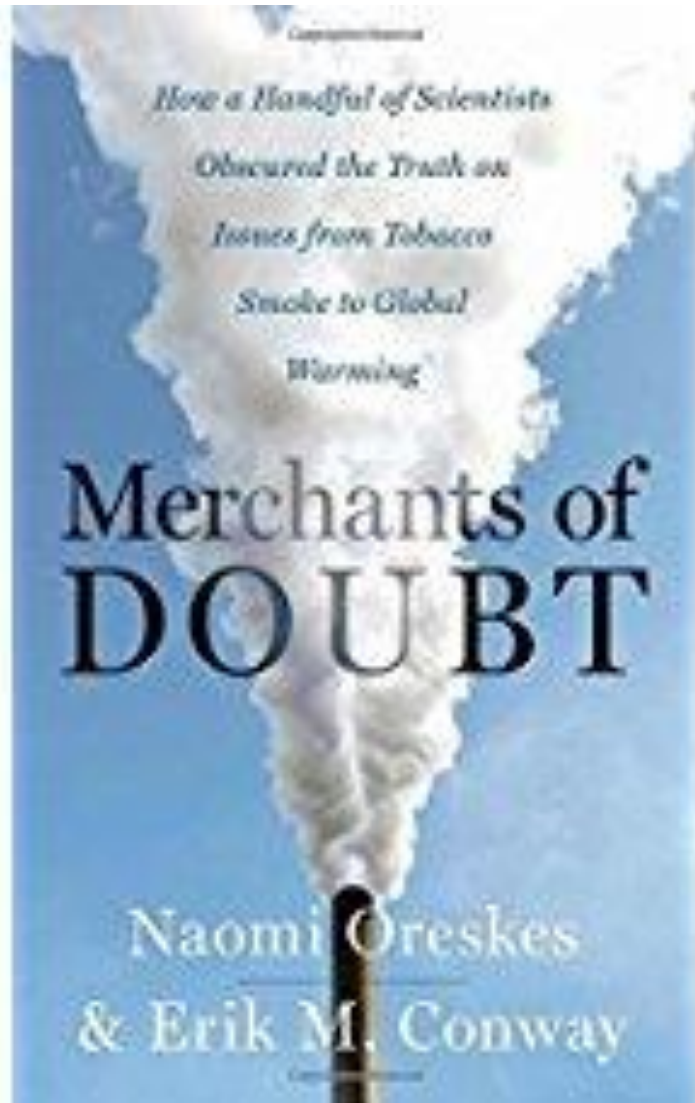
Fraction of biofuels in the transport sector (domestic) by fuel in relation to total energy in fuels in the road transport sector, 2007 – 2015, per cent.



Källa: Energimyndigheten och SCB.

Carbon dioxide emissions from all fuels Sweden 1990 -- 2018





Thank you!



<http://www.regeringen.se/sb/d/17075/a/230739>

Or google: **Fossilfrihet på väg**