



Fleet and vehicle activity

Data and results ***Comparison with national models***

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Overview

1. Road vehicles

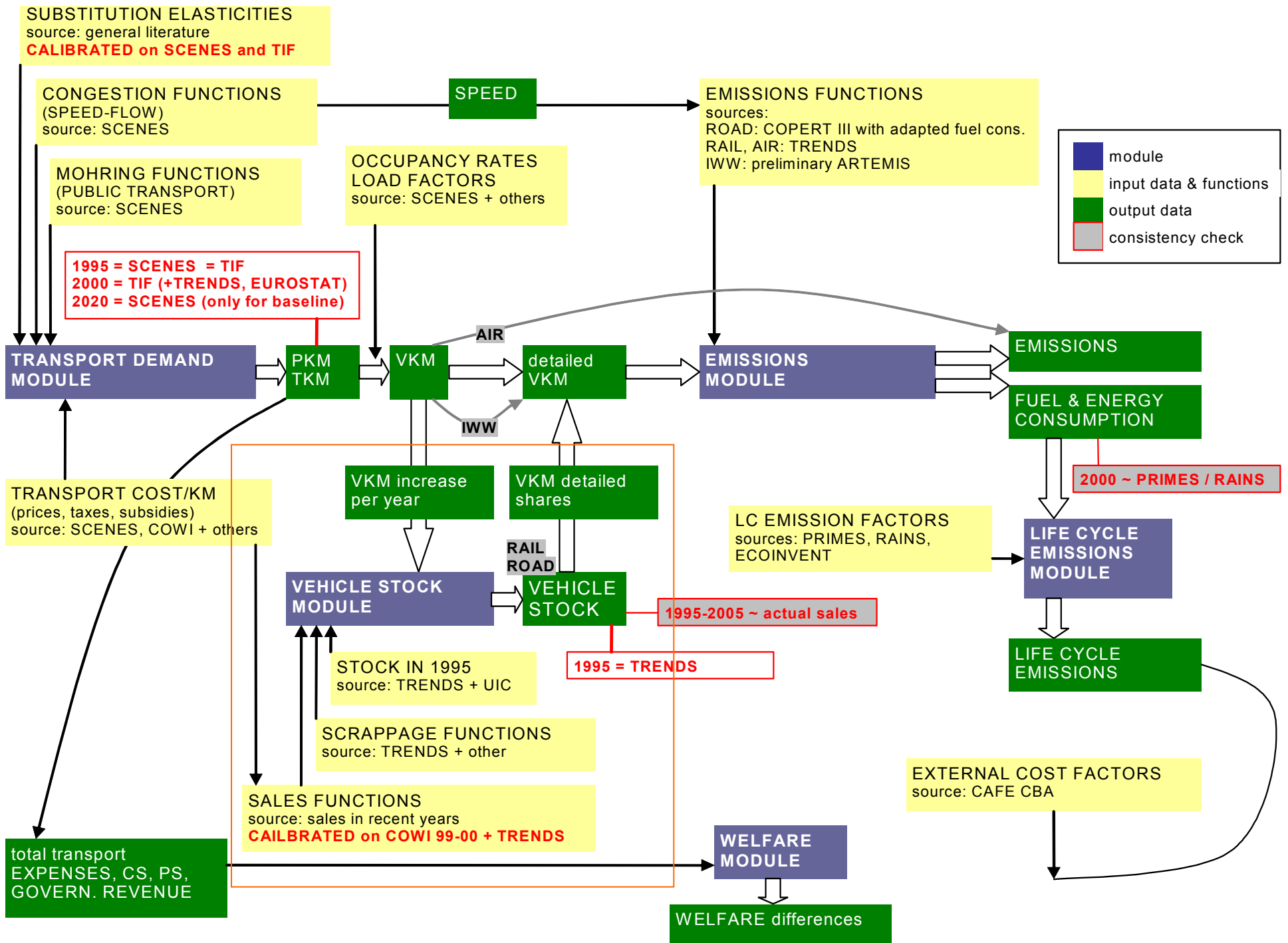
- Input data
- Model results
- Comparison with national model results

2. Rail vehicles

- Input data and assumptions
- Model results

3. Inland waterways

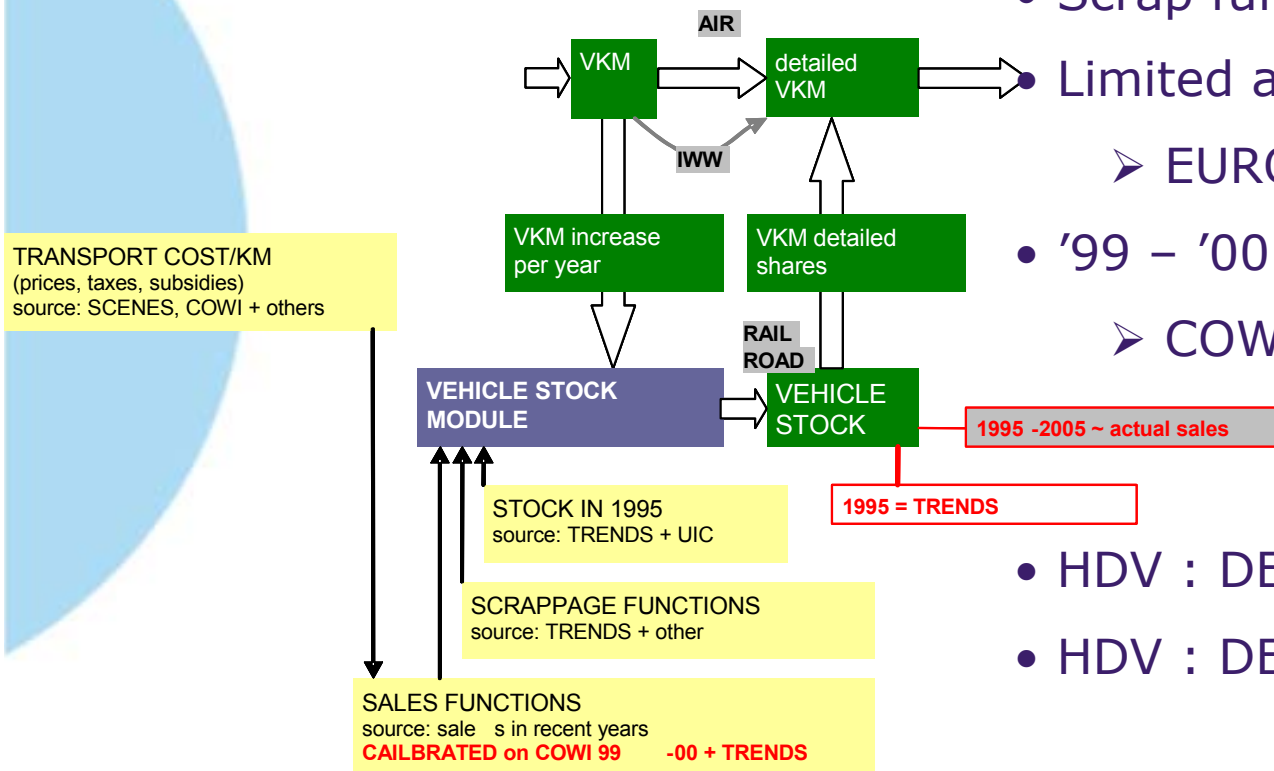
- Input data and assumptions
- Model results



Road : input data

European data sources :

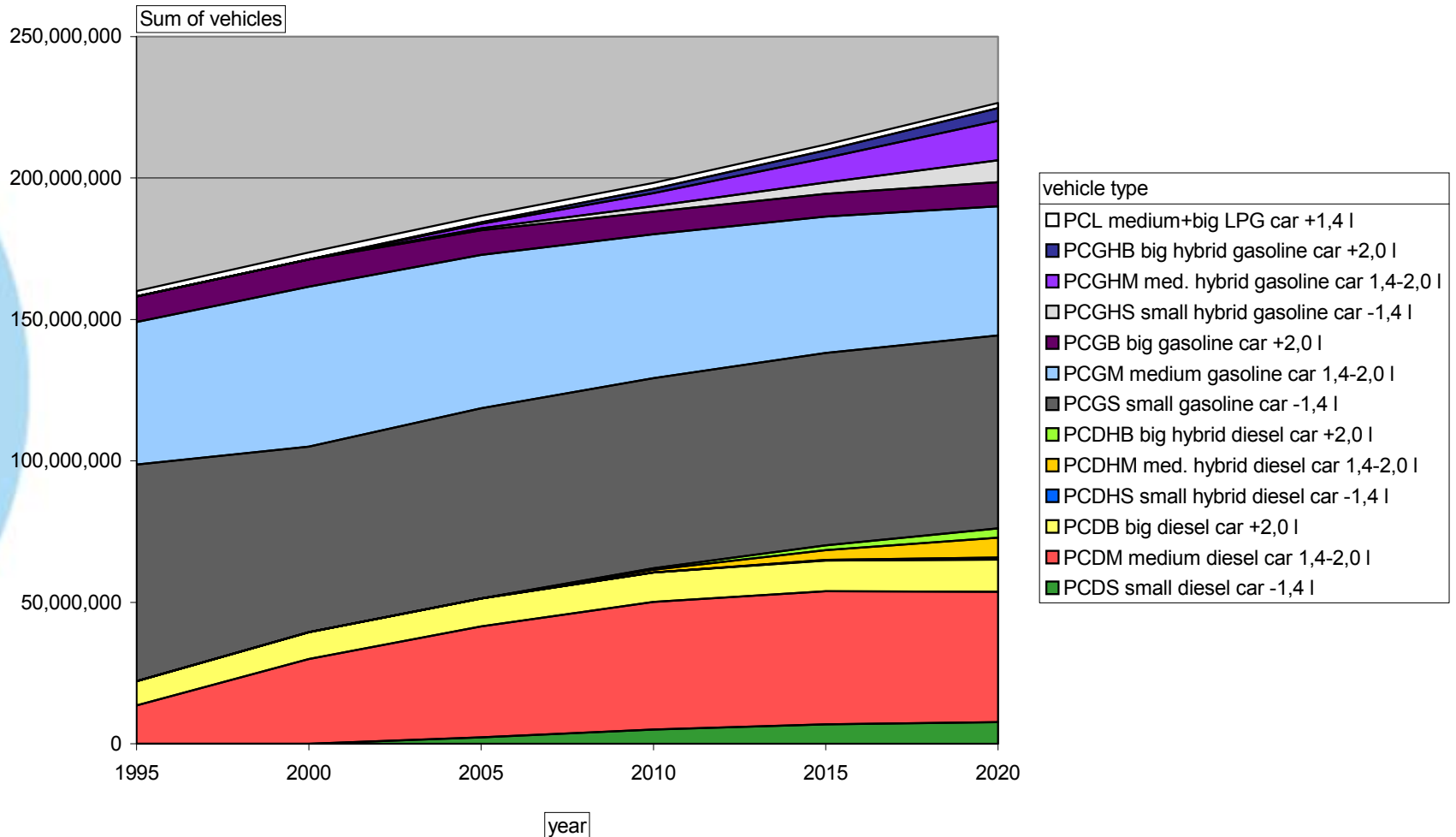
- 1995 fleet statistics (by type, age)
- Mileage estimates by type, age
- Scrap functions (except AT, CH)
- Limited aggregate 2000 statistics
 - EUROSTAT-TRENDS
- '99 – '00 detailed sales and prices
 - COWI -> Polk dB



- HDV : DE road counts by type
- HDV : DE load factors by type

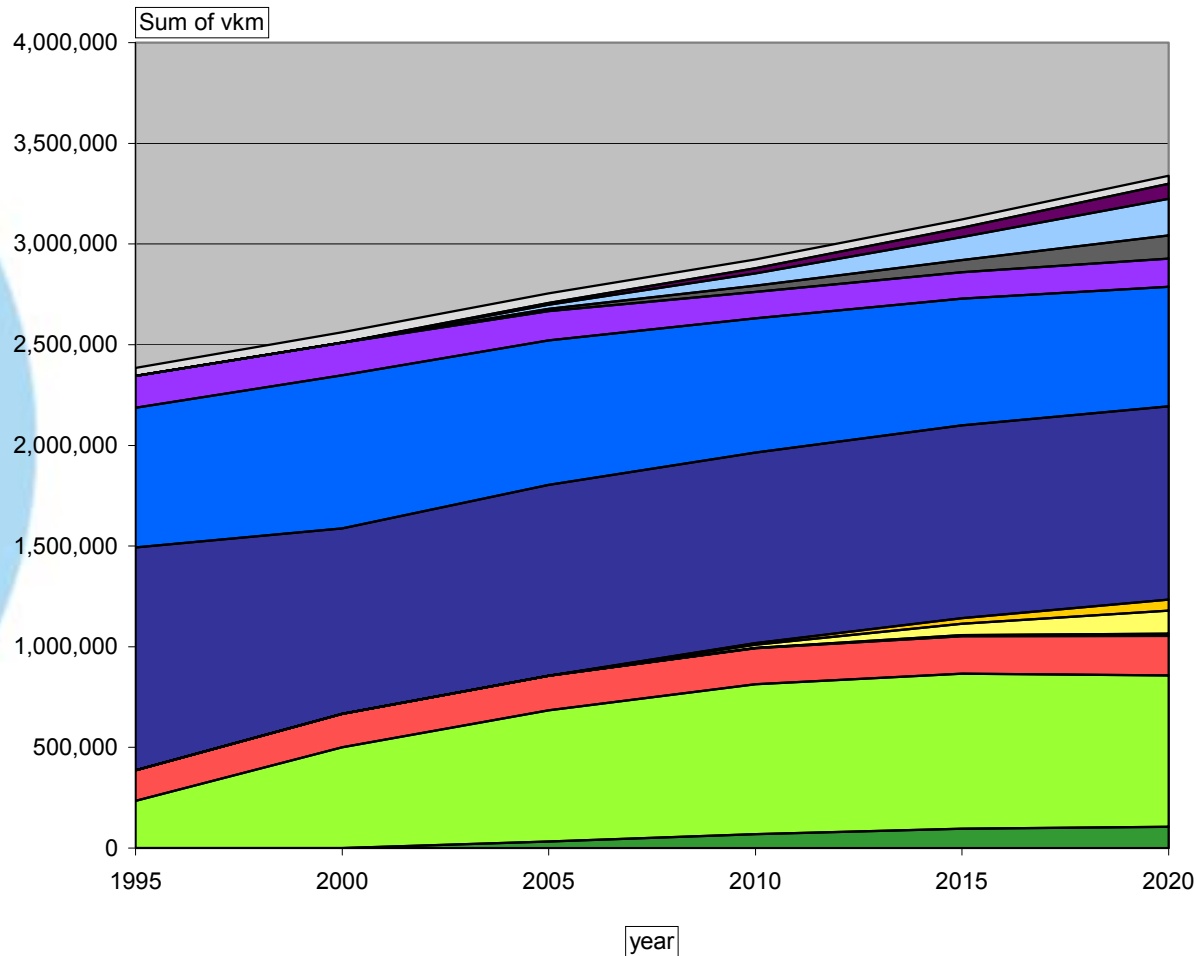
Results – EU15 car fleet

country (All) vehicle category (All) run BC



Results - EU15 car vkm

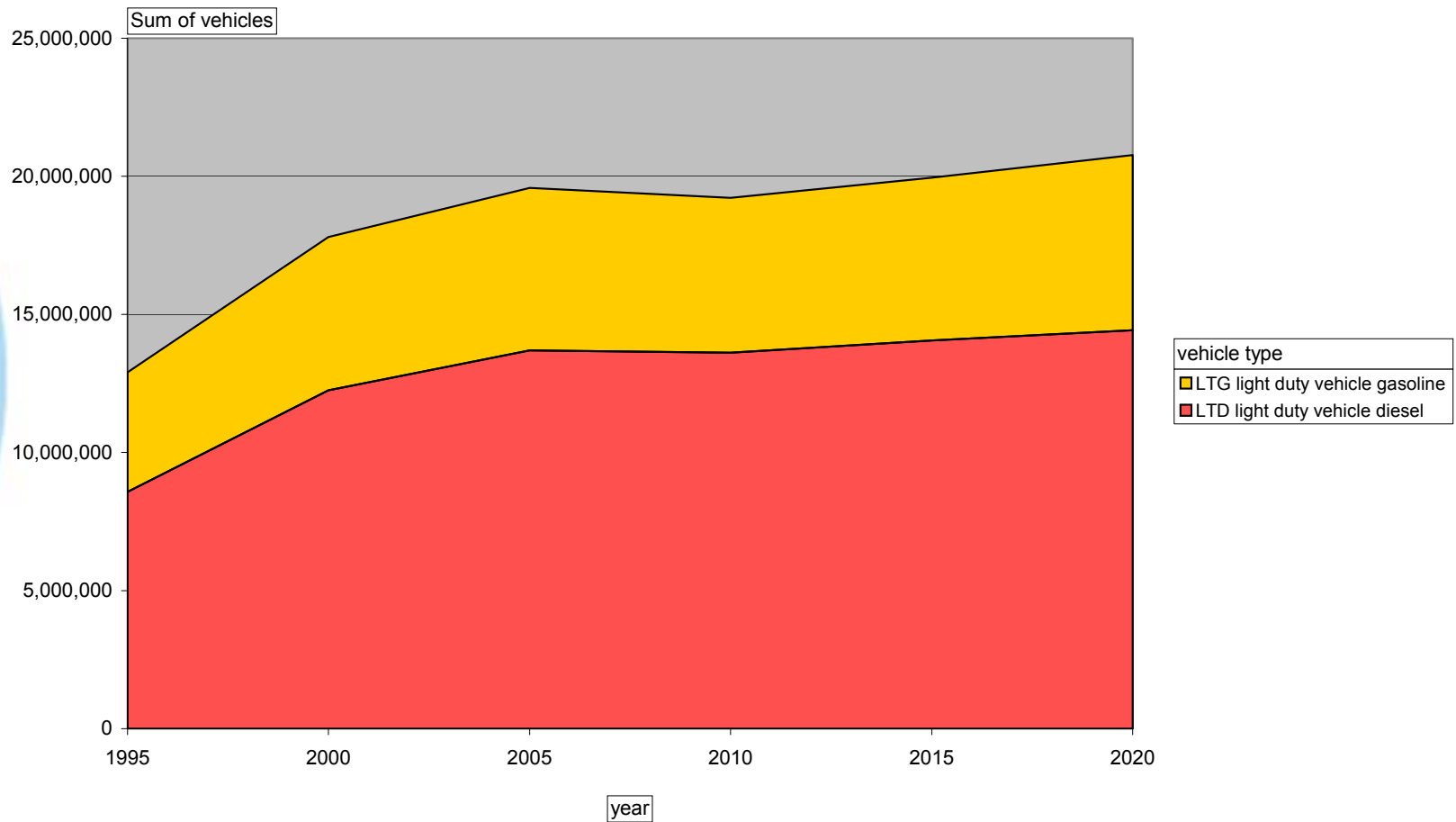
country (All) run BC vehicle category (All)



- vehicle type
- PCL medium+big LPG car +1,4 l
 - PCGHB big hybrid gasoline car +2,0 l
 - PCGHM med. hybrid gasoline car 1,4-2,0 l
 - PCGHS small hybrid gasoline car -1,4 l
 - PCGB big gasoline car +2,0 l
 - PCGM medium gasoline car 1,4-2,0 l
 - PCGS small gasoline car -1,4 l
 - PCDHB big hybrid diesel car +2,0 l
 - PCDHM med. hybrid diesel car 1,4-2,0 l
 - PCDHS small hybrid diesel car -1,4 l
 - PCDB big diesel car +2,0 l
 - PCDM medium diesel car 1,4-2,0 l
 - PCDS small diesel car -1,4 l

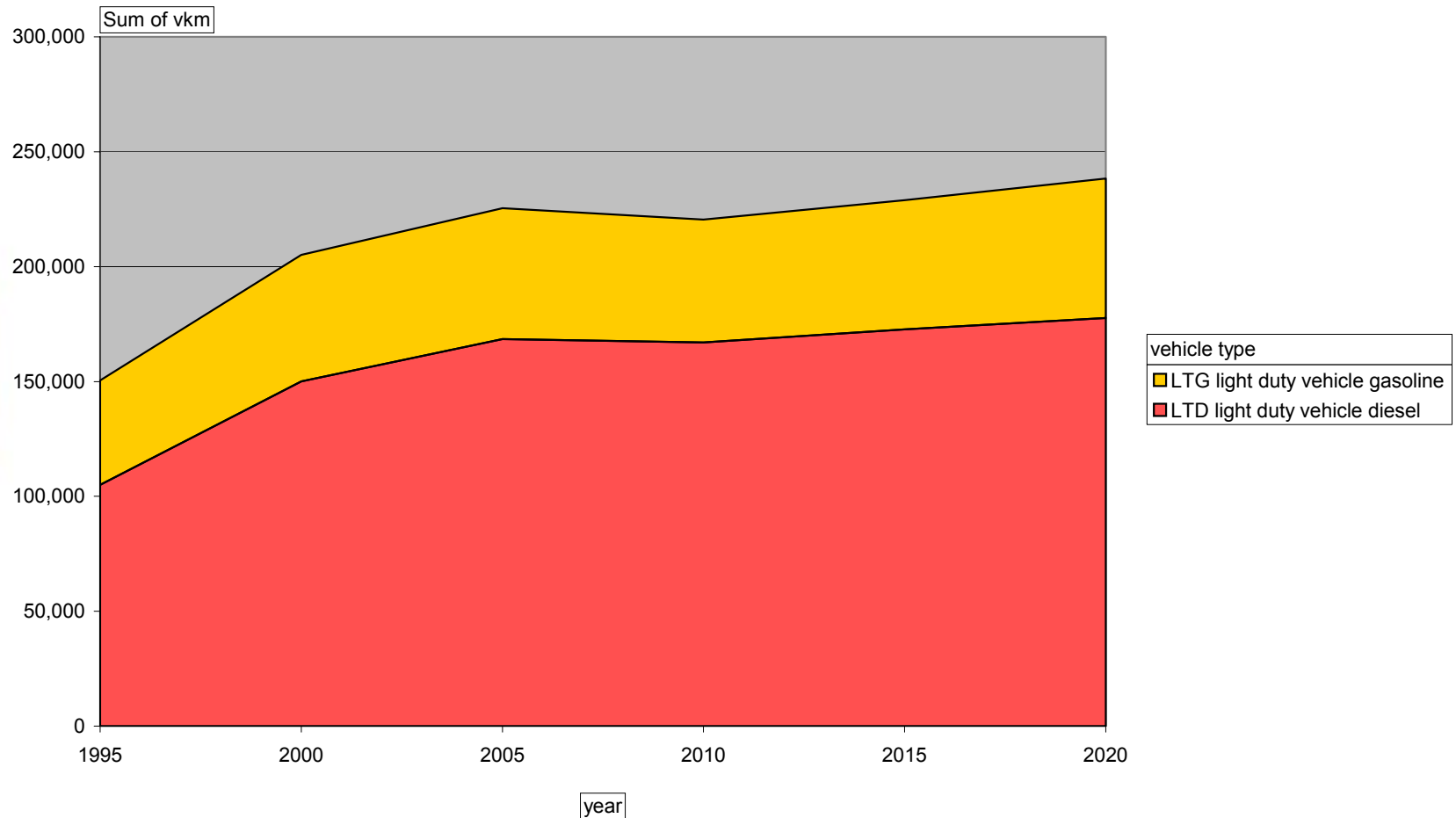
Results – EU15 LDT fleet

country (All) vehicle category (All) run BC



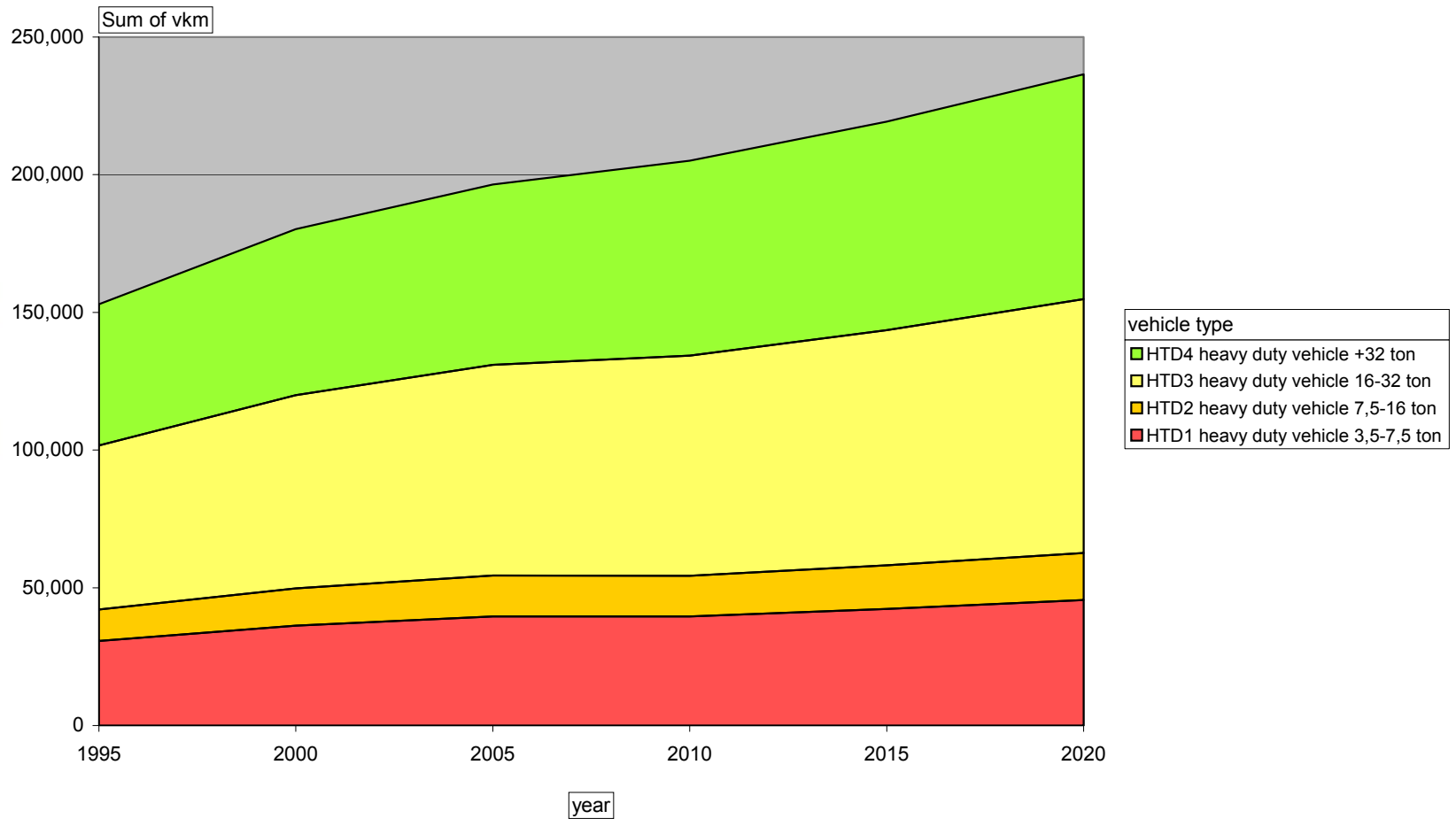
Results – EU15 LDT vkm

country|(All)|run|BC|vehicle category|(All)|



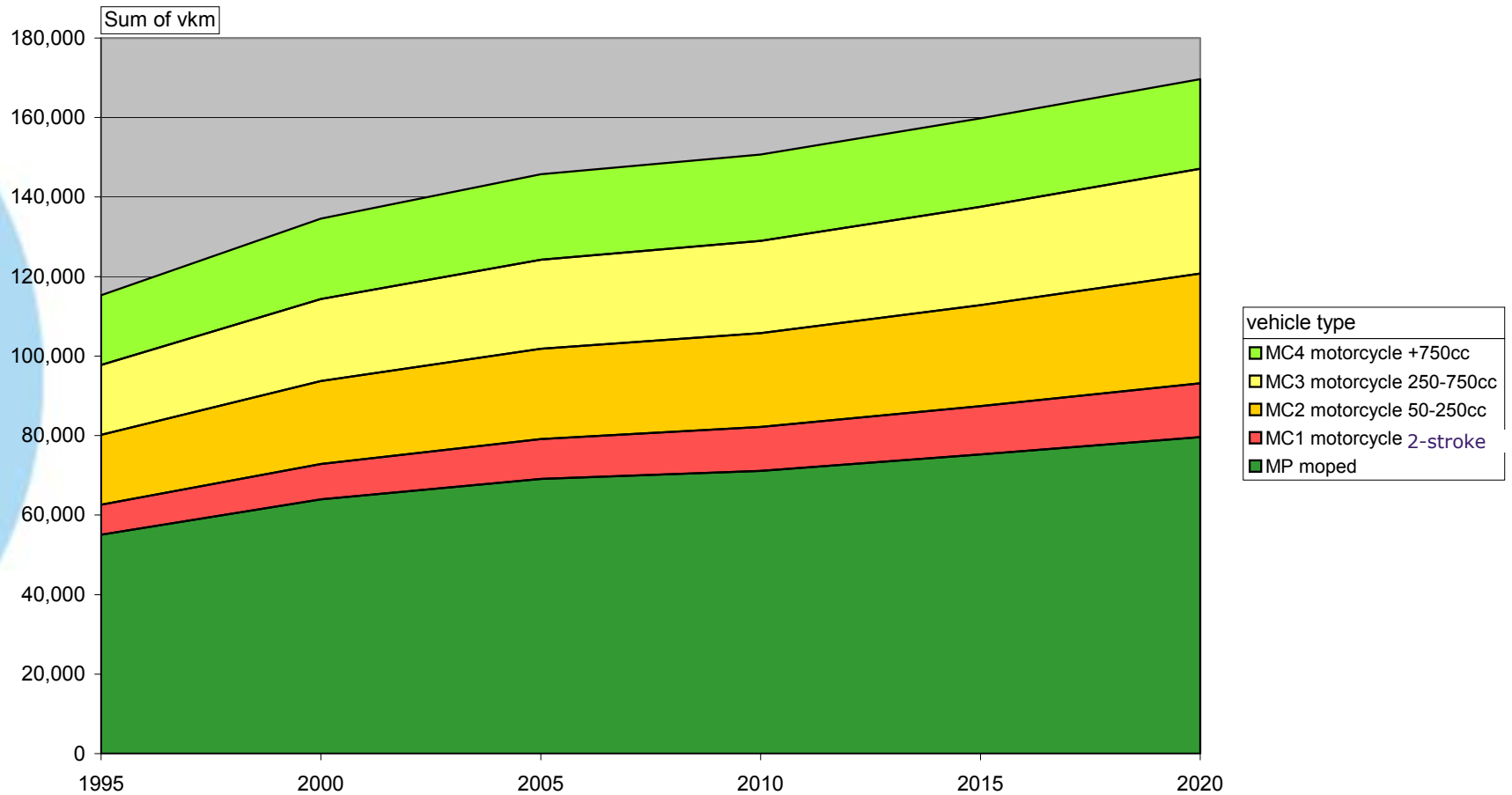
Results – EU15 HDV vkm

country (All) run BC vehicle category (All)



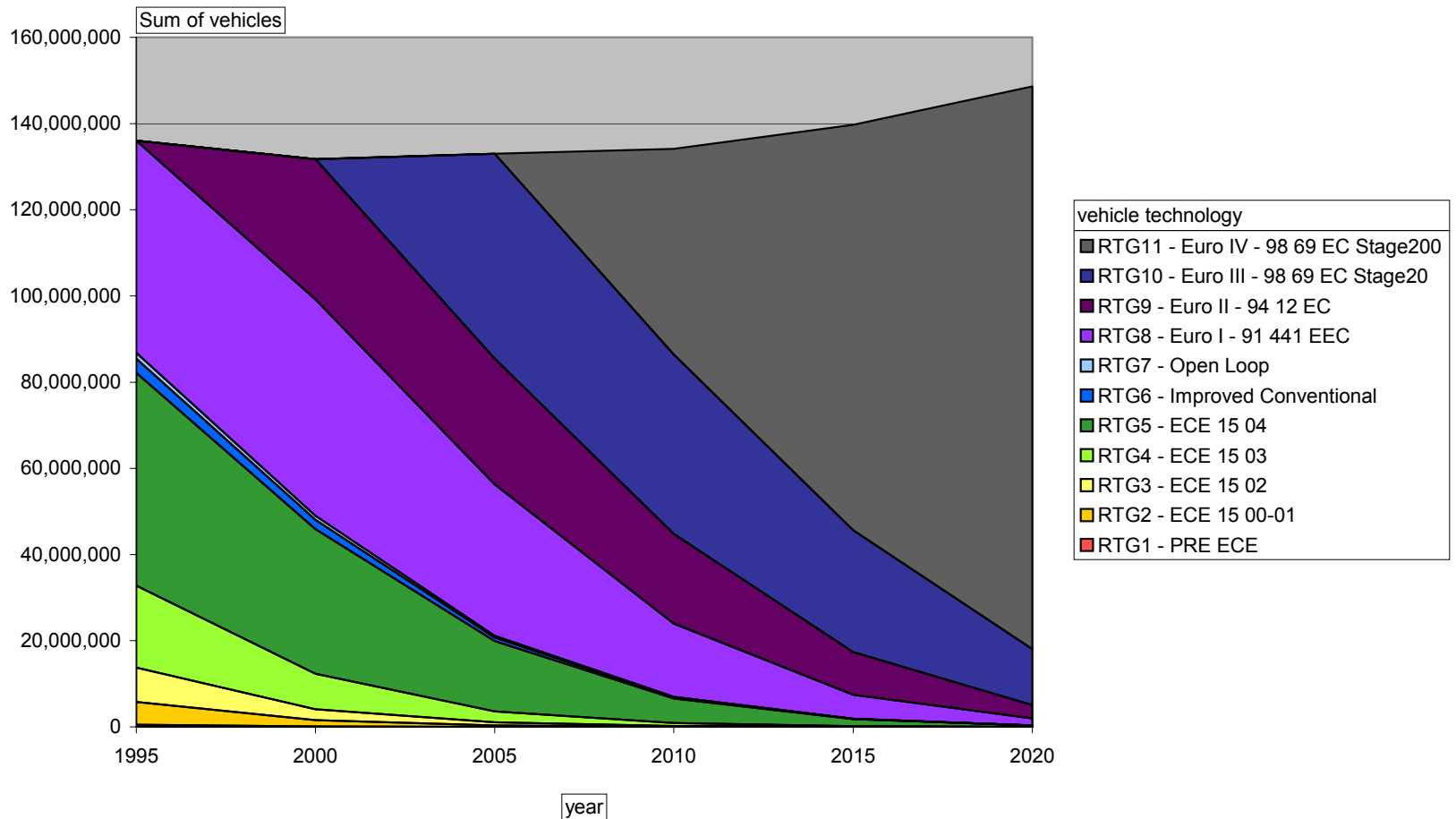
Results – EU15 2-wheeler vkm

country (All) run BC vehicle category (All)



Results – EU 15 petrol cars by emission technology

country|(All)|fuel type|gasoline|run|BC|vehicle category|(All)





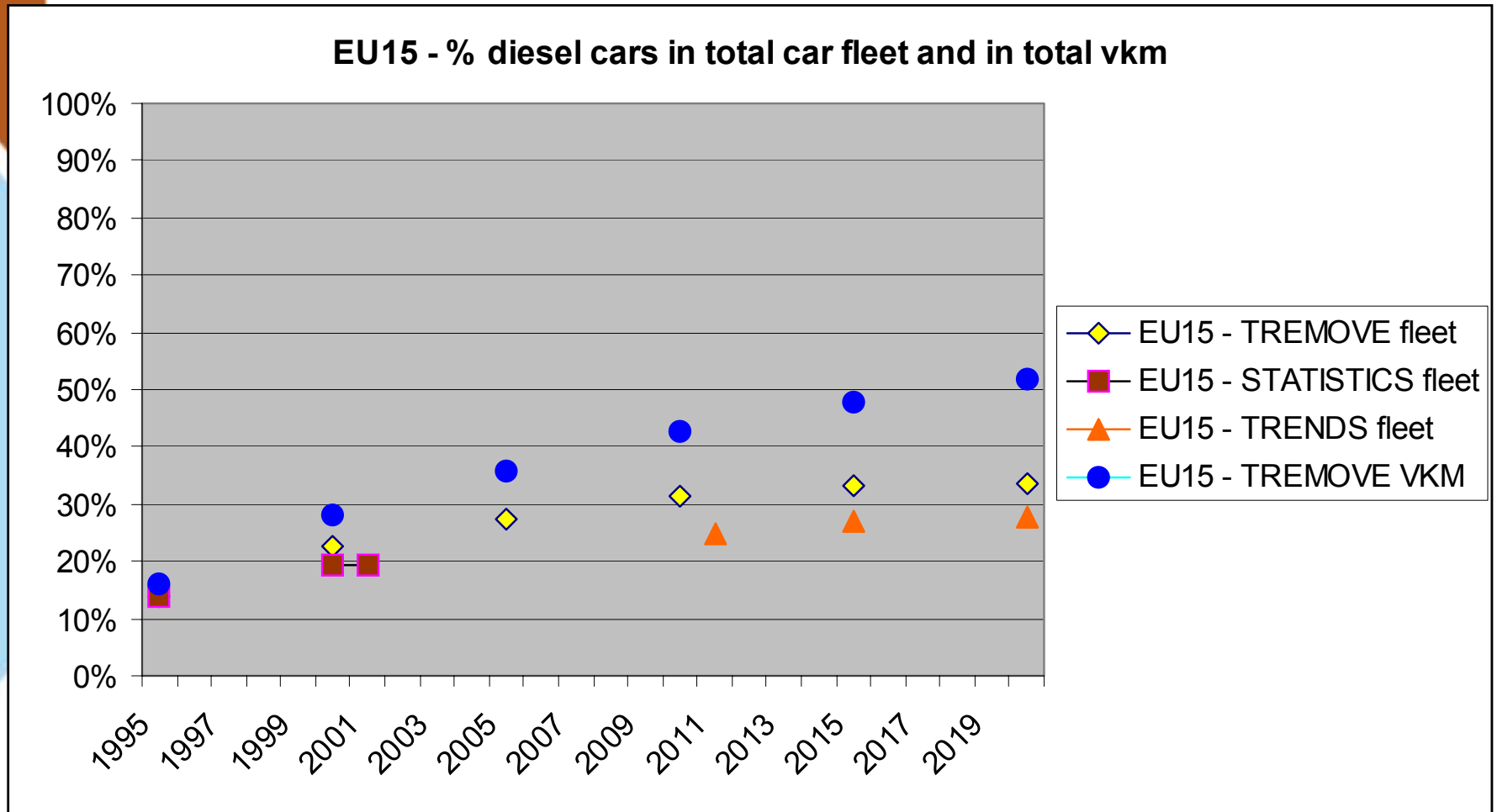
Results

Included biofuel introduction

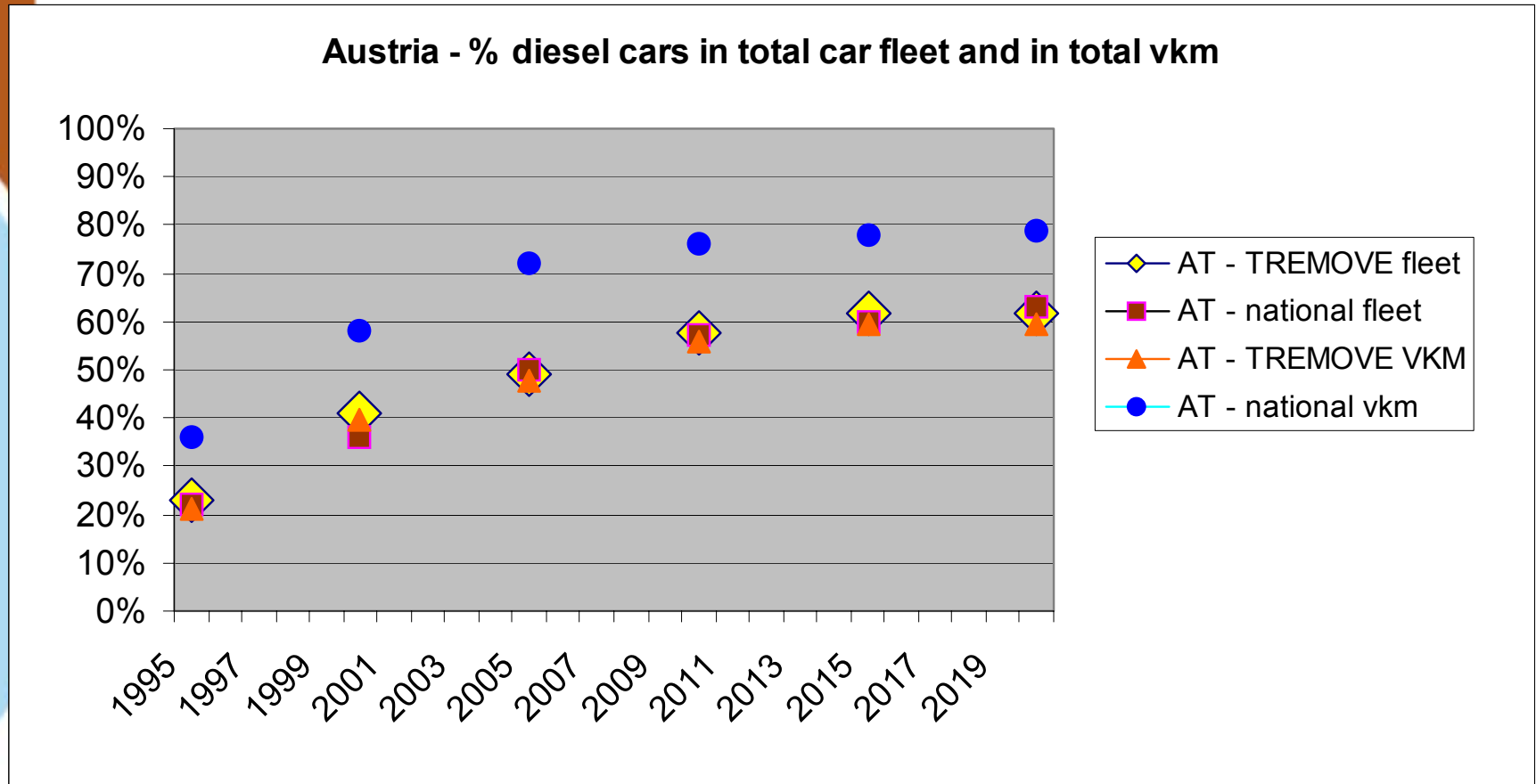
Introduction of biofuel in road transport

- 2010 : 5.75 % of total fuels
- 2020 : 8% of total fuels

Comparisons – EU15

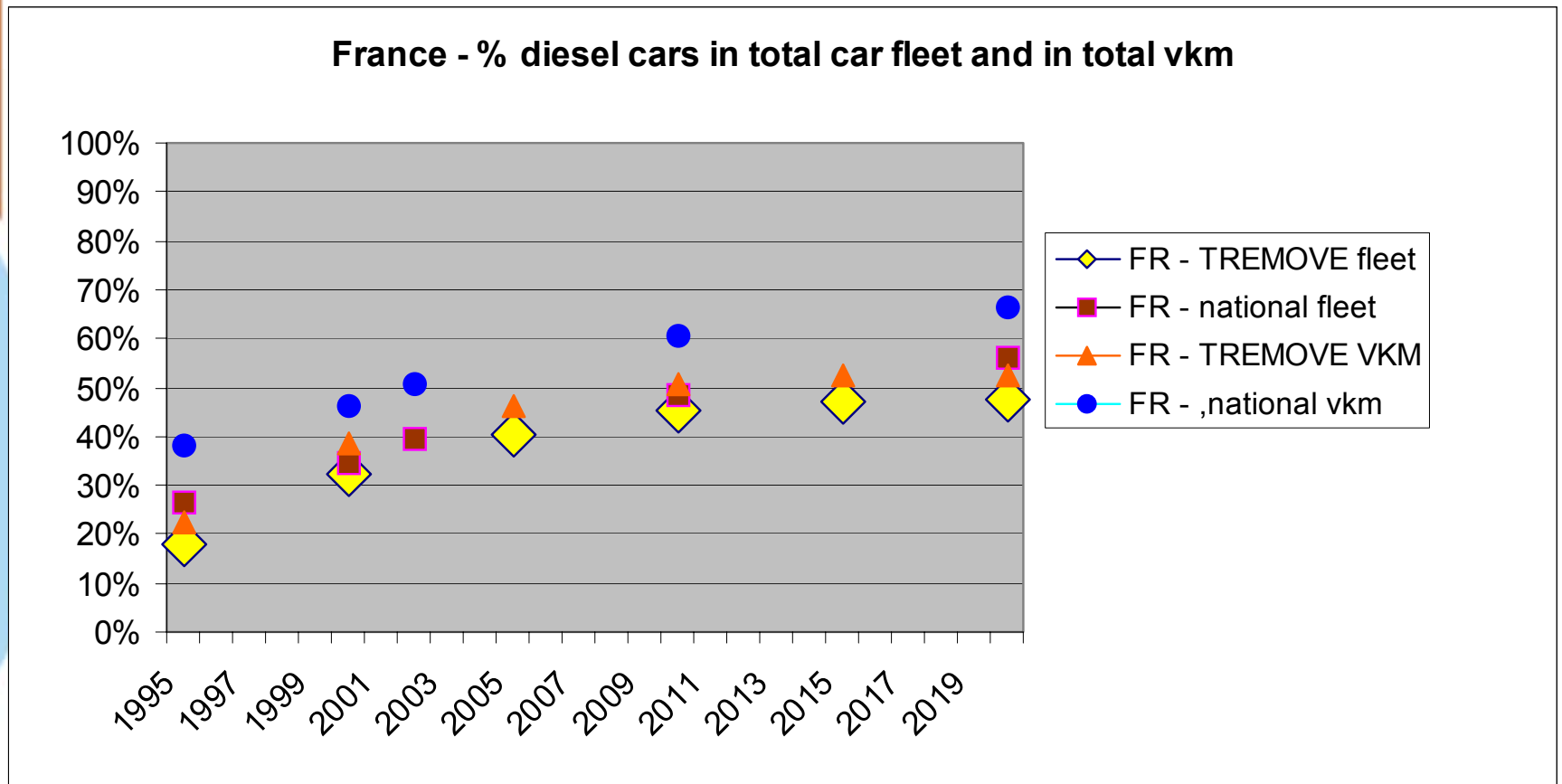


Comparisons - Austria

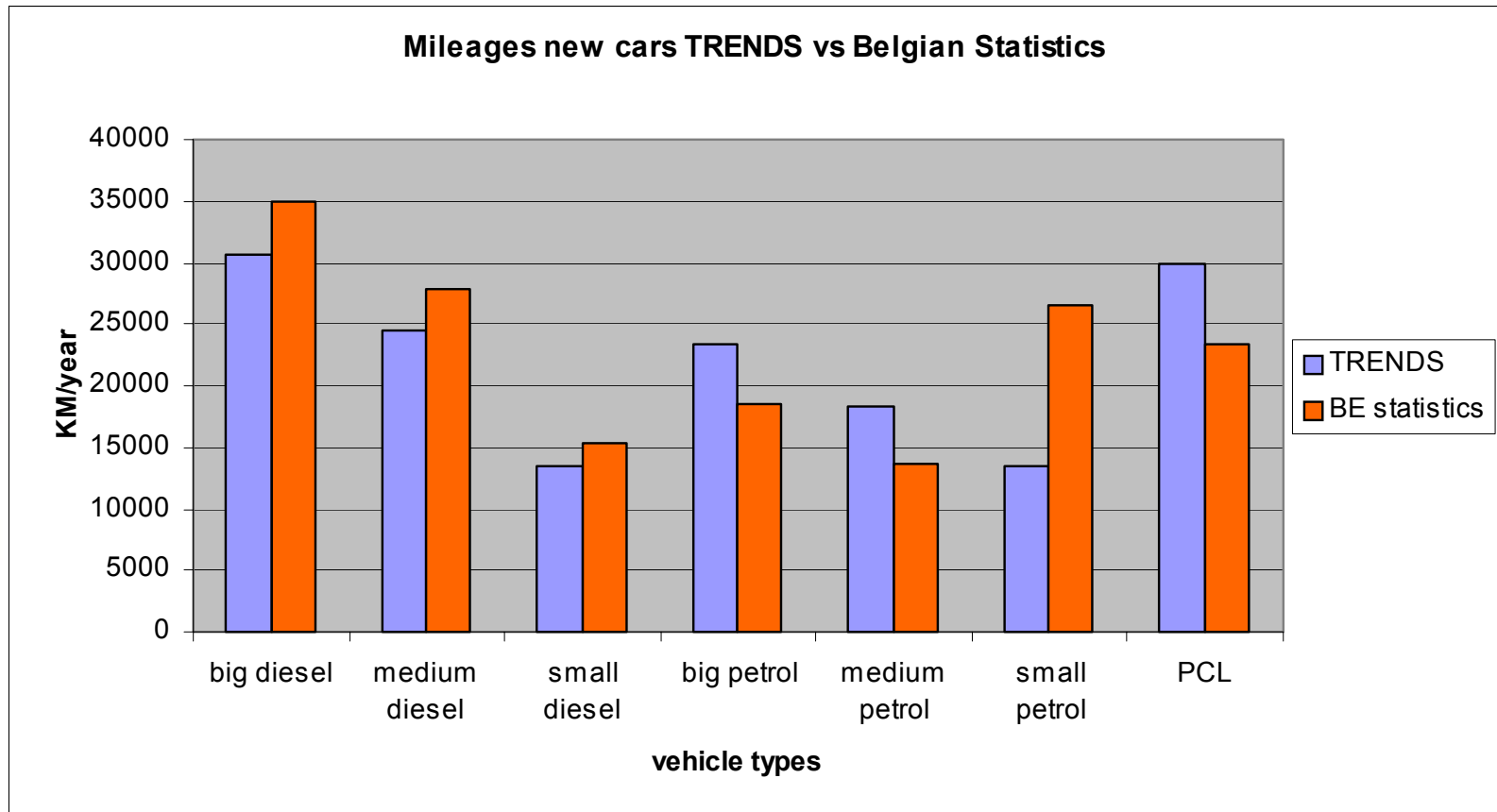


In TRENDS : AT mileage diesel ~ petrol <- > in nat. model diesel > petrol

Comparisons - France

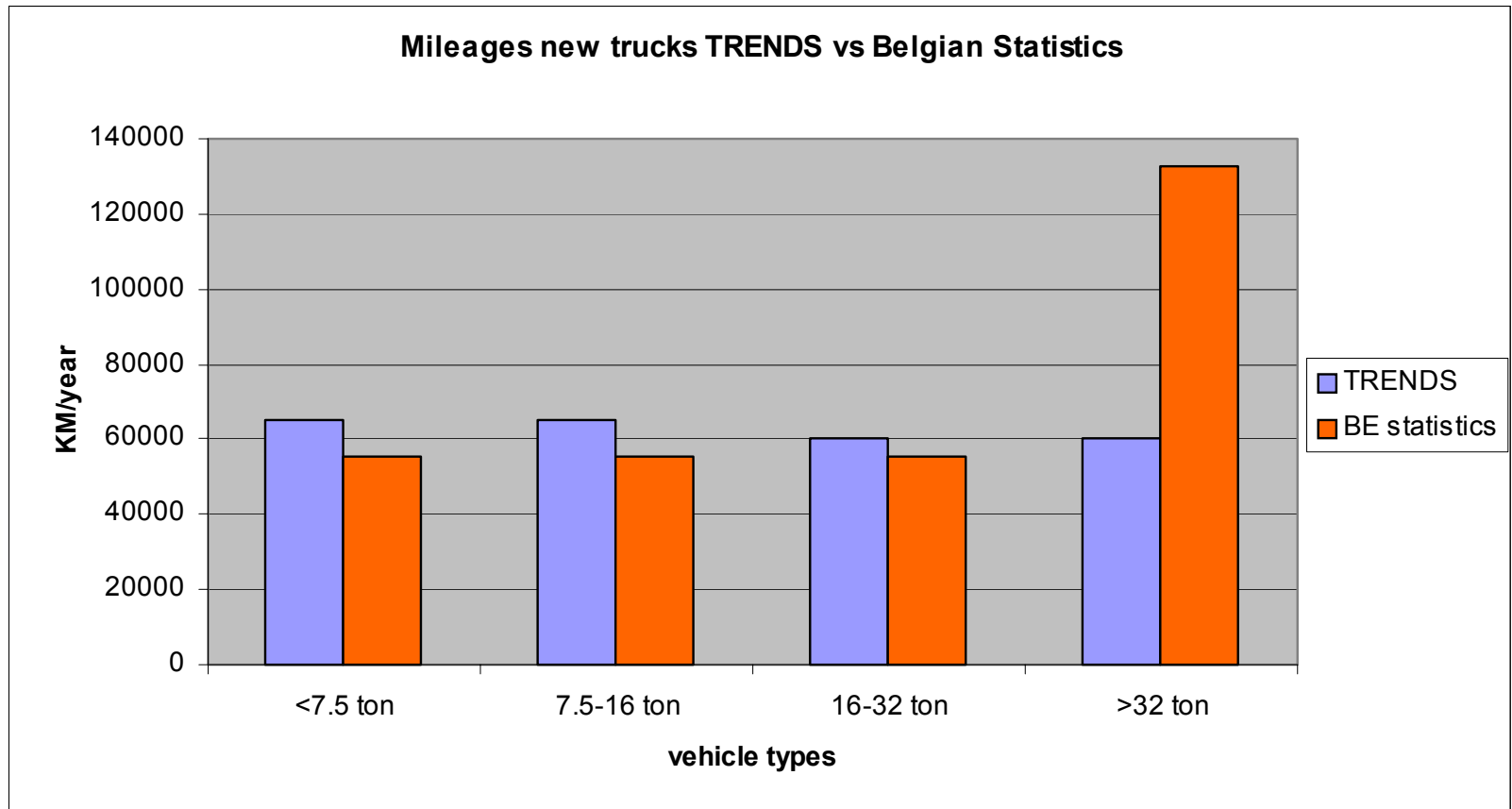


Comparisons - Belgium

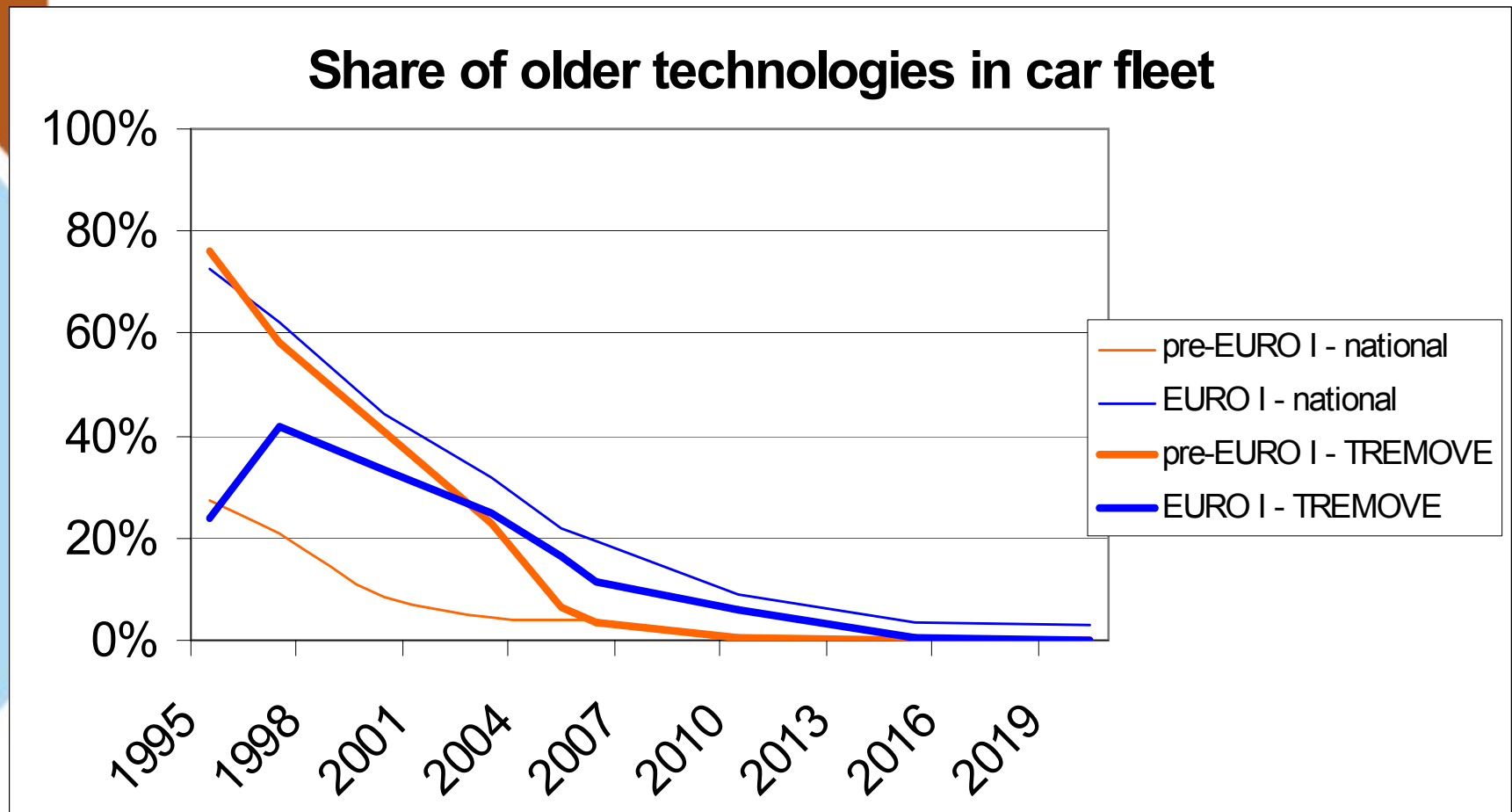


Belgium data is considered to be very reliable (odometer readings)

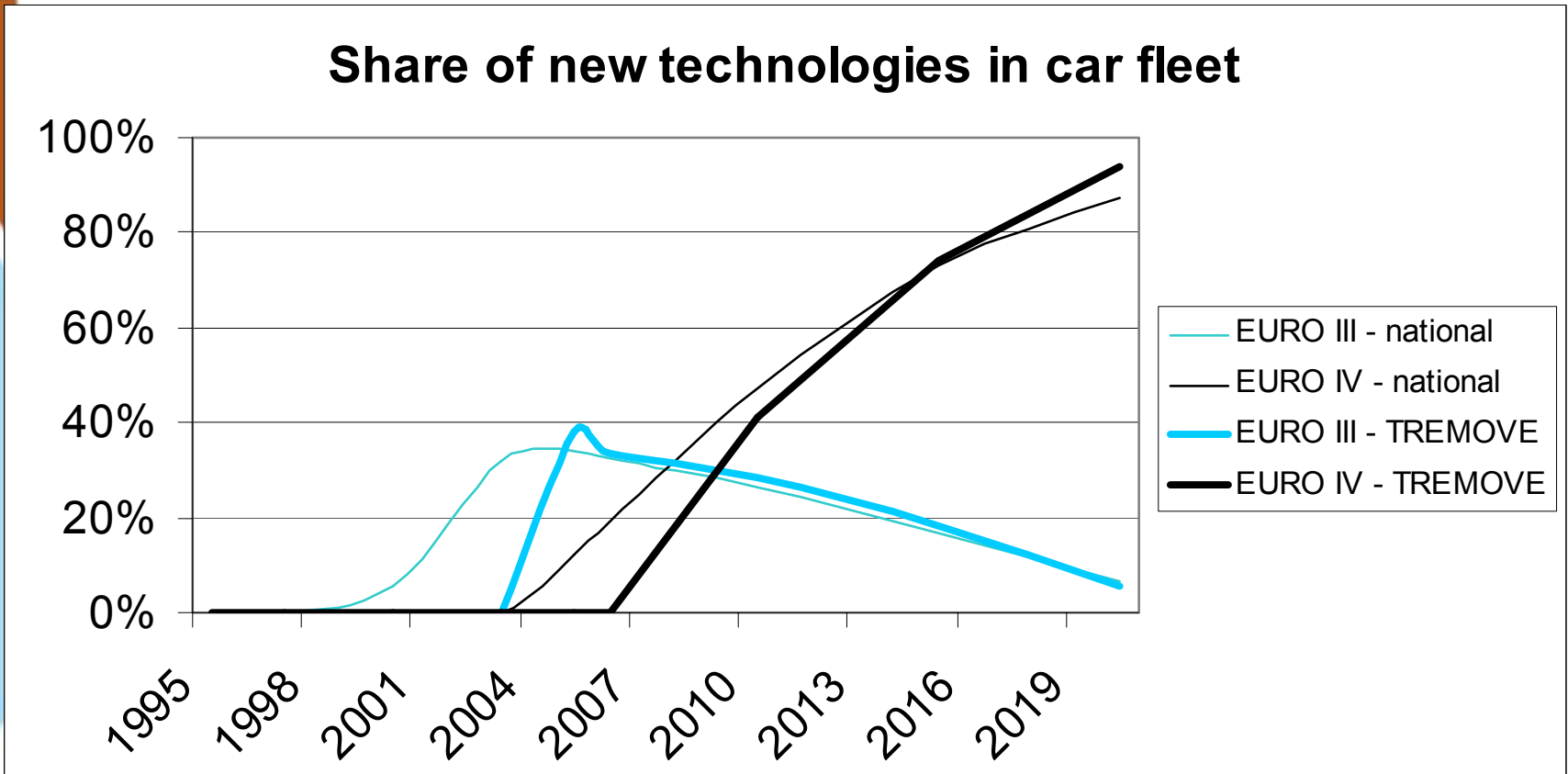
Comparisons - Belgium



Comparisons - Austria

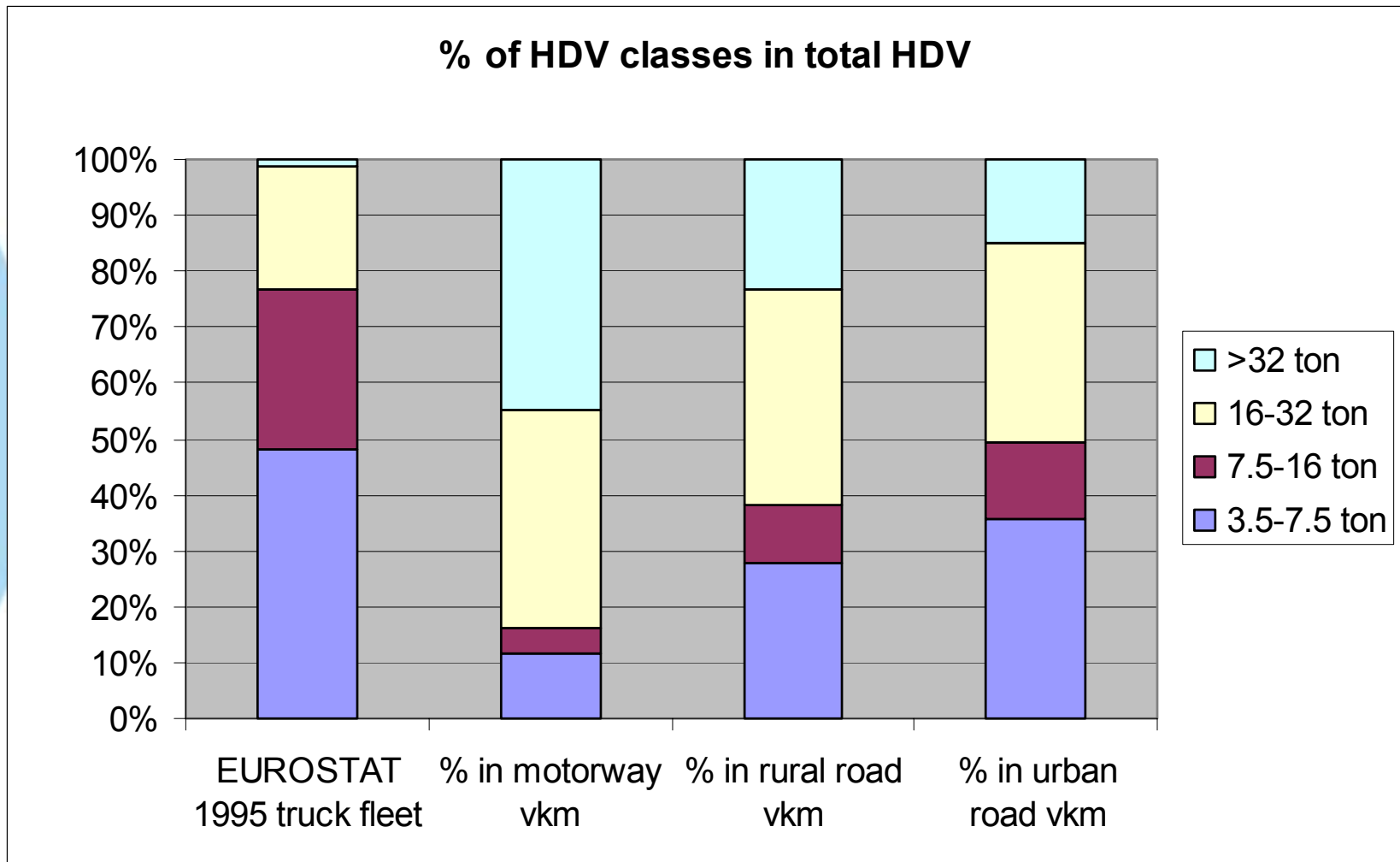


Comparisons - Austria



Overall good correlation, Austria considers early penetration of new standards This information is not available in TRENDS-EUROSTAT dB

Comparisons - Germany



Rail – input data

Historic data 1995-2000

- Fleets by train type
- Vehicle-kilometres by train type
- Occupancy / Load factors
- Source UIC = TRENDS

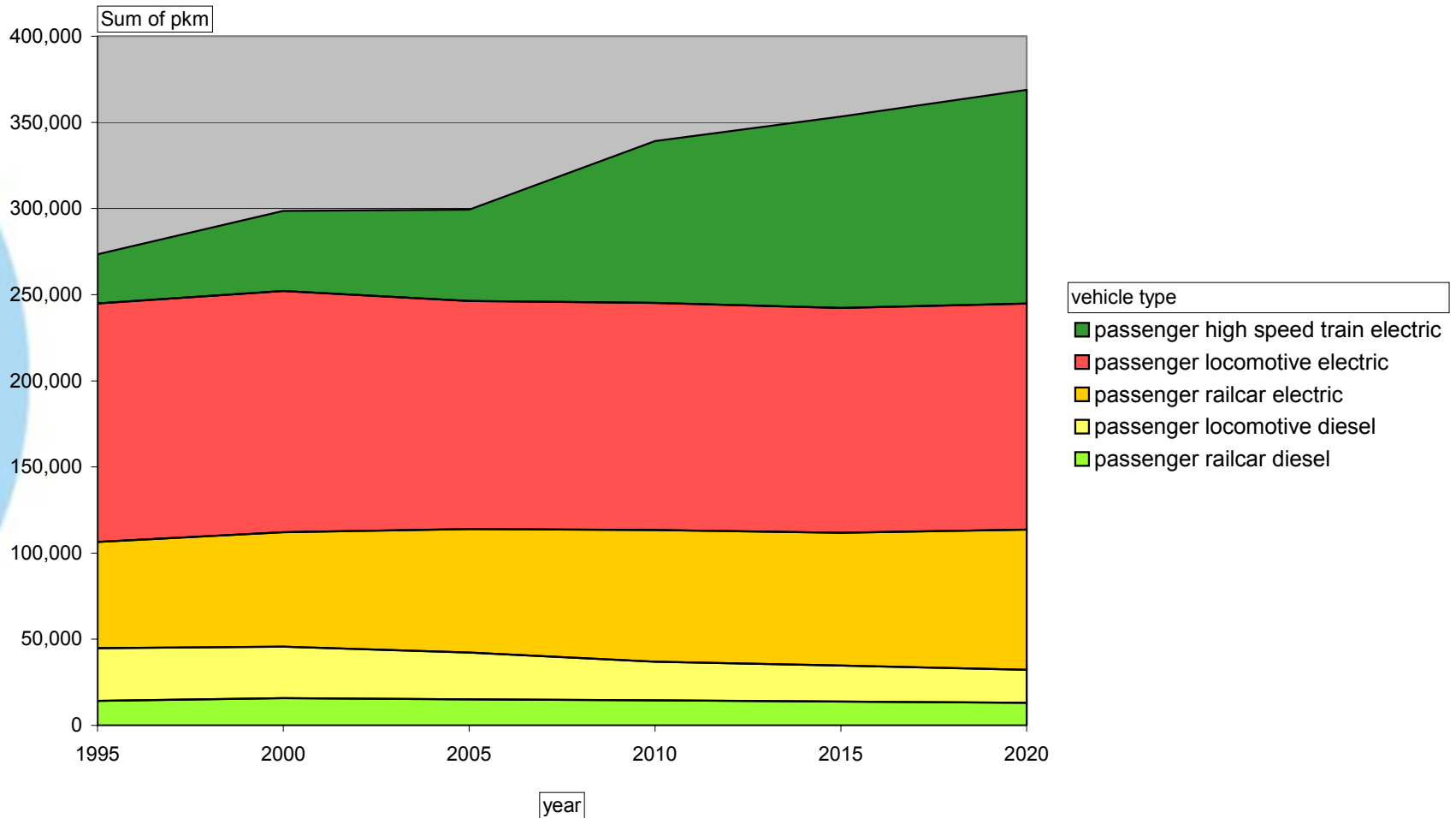
Forecast share of train types

- Same assumptions as TRENDS
- Except HST, based on SCENES (network development)

No national model data received for comparisons

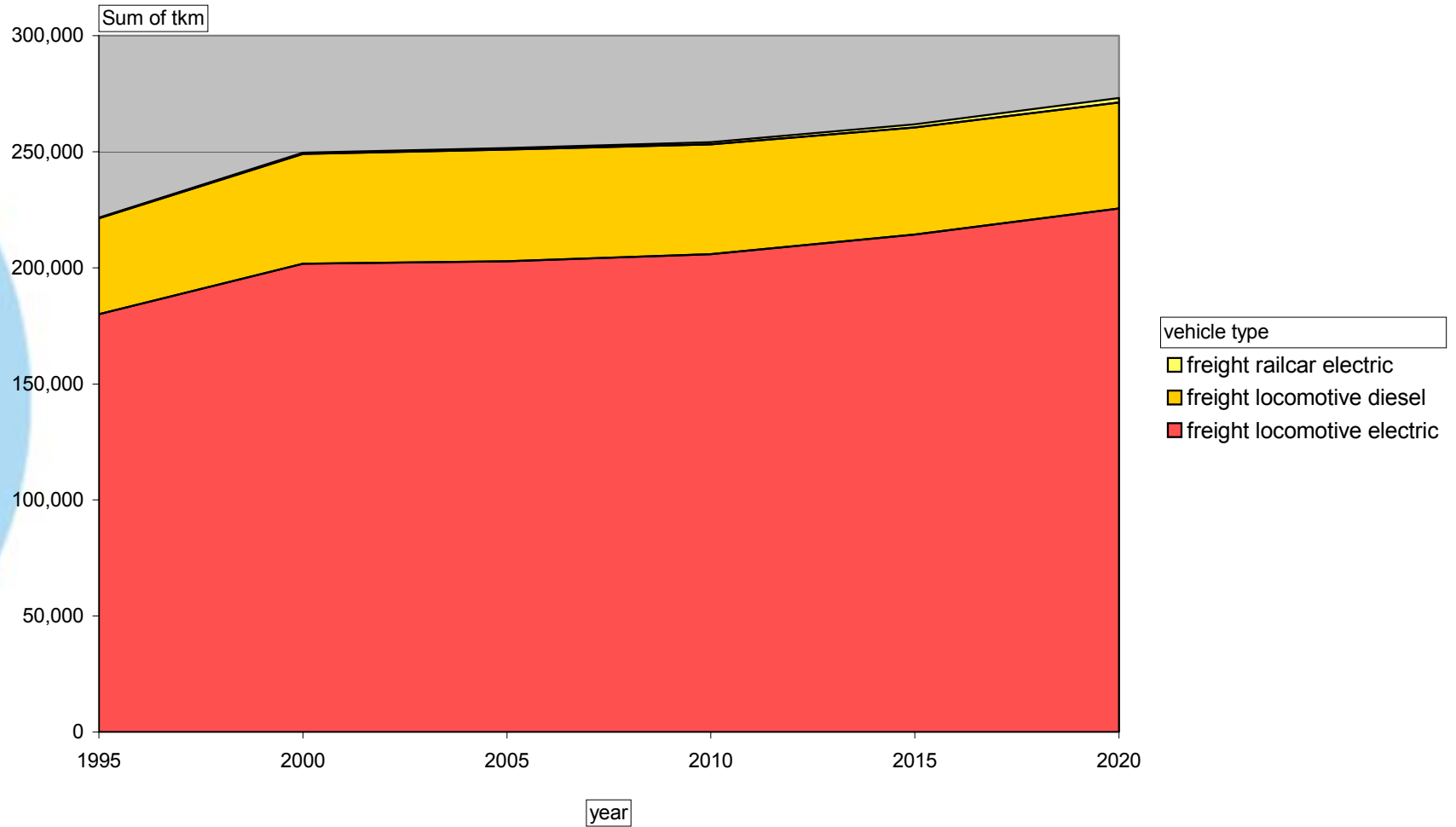
Results : EU15 Pkm by train type

country (All) vehicle category (All) run (All)



Results : EU15 Tkm by train type

country (All) vehicle category (All) run (All)



Inland waterways – input data

Netherlands dB (CBS) - 1995 & 2000

- Short Distance : NL domestic trips
 - Tkm by commodity and ship type
 - Load factor by commodity and ship type
- Long Distance : International trips through NL
 - Tkm by commodity and ship type
 - Load factor by commodity and ship type
 - *dB represents 70% of all international trips in EU*



Inland waterways – forecast

- future vessel fleet derived from NL forecast for 2000 – 2015
- Additional info on changes in network 1995-2020 has been taken into account (~ SCENES)

Results – EU15 tkm by ship type

country (All) run BC vehicle category inland ship

