



New road and fuel data

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NTMcalc: up-date for road transport

1. New vehicle emission and fuel consumption data
2. International truck data
3. Fuel WTTdata
4. Vehicle size and types



NTM^{CALC}

New vehicle data

To be implemented in
NTMcalc 3.0 soon!



NTMcalc offers combinations of the following parameters

Vehicle types	Fuel	EuroClass	Road Type	Gradient	LCU
Pick-up	Petrol E0 - Swe	Euro 0	Average Road	0%	0%
Van	Petrol E5 - Swe	Euro 1	Motorway	±2%	50%
Rigid Truck <7.5 t	Petrol E10 - Swe	Euro 2	Rural Road	±4%	100%
Rigid Truck <7.5-12 t	Petrol E0 - EU	Euro 3	Urban Road	±6%	
Rigid Truck 12-14 t	Petrol E5 - EU	Euro 4 - EGR			
Rigid Truck 14-20 t	Petrol E10 - EU	Euro 4 - SCR			
Rigid Truck 20-26 t	Diesel B0 - Swe	Euro 4			
Truck with Trailer 14-20 t	Diesel B5 - Swe	Euro 5 - EGR			
Truck with Trailer 20-28 t	Diesel B7 - Swe	Euro 5 - SCR			
Truck with Trailer 28-34 t	Diesel B0 - EU	Euro 5			
Truck with Trailer 34-40 t	Diesel B5 - EU	Euro 6			
Truck with Trailer 40-50 t	Diesel B7 - EU				
Truck with Trailer 50-60 t	Ethanol E85 - Swe				
	Ethanol E100 - Swe				
	Ethanol E85 - EU				
	Ethanol E100 - EU				
	Natural gas (CNG) - EU				
	Biogas - Swe mix				

HBEFA
nomenclature

Swedish and
European fuel
mixes

Updated data for
Euro 5
New data for
Euro 6 vehicles

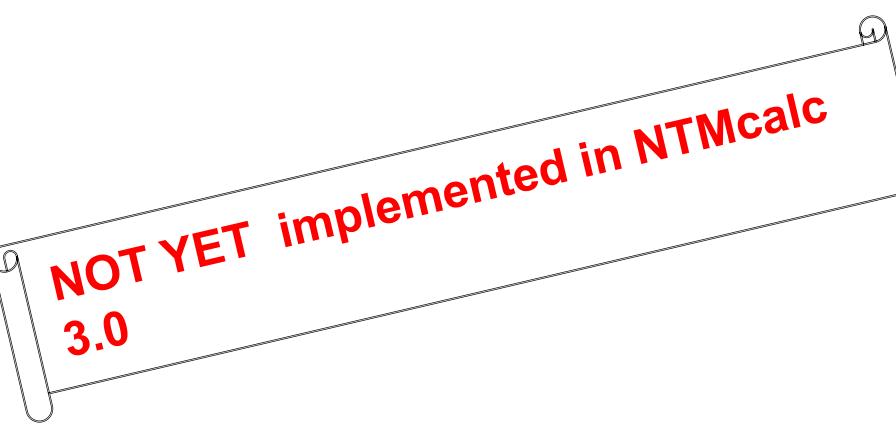
Example of data output from HBEFA

Rigid Truck 14-20 t

Fuel	Road type	EuroClass	Cargo load factor	Gradient	Fuel consumption	CO	HC	CH4	NOx	N2O	PM
Diesel B0 - EU	Average Road	Euro 1	0%	0%	0,192	5,8	2,24	0,054	27,4	0,04	1,04
Diesel B0 - EU	Average Road	Euro 1	50%	0%	0,217	5,4	1,93	0,046	27,5	0,04	0,98
Diesel B0 - EU	Average Road	Euro 1	100%	0%	0,240	5,4	1,71	0,041	27,4	0,03	0,96
Diesel B0 - EU	Average Road	Euro 1	0%	±2%	0,198	5,4	2,06	0,049	28,0	0,04	1,08
Diesel B0 - EU	Average Road	Euro 1	50%	±2%	0,227	5,2	1,71	0,041	27,8	0,04	1,05
Diesel B0 - EU	Average Road	Euro 1	100%	±2%	0,261	4,9	1,47	0,035	27,2	0,03	0,97
Diesel B0 - EU	Average Road	Euro 1	0%	±4%	0,220	4,6	1,55	0,037	28,4	0,04	0,94
Diesel B0 - EU	Average Road	Euro 1	50%	±4%	0,285	4,3	1,30	0,031	27,5	0,03	0,91
Diesel B0 - EU	Average Road	Euro 1	100%	±4%	0,345	4,0	1,18	0,028	27,2	0,02	0,91
Diesel B0 - EU	Average Road	Euro 1	0%	±6%	0,271	4,2	1,32	0,032	27,9	0,03	0,90
Diesel B0 - EU	Average Road	Euro 1	50%	±6%	0,355	4,1	1,13	0,027	27,8	0,02	0,90
Diesel B0 - EU	Average Road	Euro 1	100%	±6%	0,435	4,4	1,03	0,025	28,0	0,02	0,89
Diesel B0 - EU	Average Road	Euro 2	0%	0%	0,186	4,8	1,56	0,038	31,3	0,04	0,53
Diesel B0 - EU	Average Road	Euro 2	50%	0%	0,210	4,8	1,34	0,032	30,7	0,04	0,54
Diesel B0 - EU	Average Road	Euro 2	100%	0%	0,234	4,8	1,18	0,028	30,1	0,03	0,55
Diesel B0 - EU	Average Road	Euro 2	0%	±2%	0,191	4,8	1,43	0,034	31,3	0,04	0,53
Diesel B0 - EU	Average Road	Euro 2	50%	±2%	0,221	4,6	1,15	0,028	30,3	0,03	0,52
Diesel B0 - EU	Average Road	Euro 2	100%	±2%	0,256	4,0	0,99	0,024	28,9	0,03	0,49

Total 2594 rows per vehicle type

International truck data



Fuel Well to Tank (WTT) data

Implemented in NTMcalc 3.0



Data sources

Vehicle emissions and fuel consumption

- HBEFA 3.2 (<http://www.hbefa.net/Tools/EN/MainSite.asp>)
- National legislation for Japan, Brazil, China, India, Russia
- US emission factors and fuel consumptions are from the MOVES model (<http://www.epa.gov/otaq/models/moves/>)

Fuel WTT data

- European reference Life-Cycle Database (ELCD 3.0) PE International
- Data for distribution calculated by NTM

On the 'to-do-list'

1. more alternative fuels and fuel mixes (such as HVO-fuels)
2. more national specific data on truck emissions, sizes, consumption, fuel quality etc.
3. system for capture of (continuously up-dated) fuel WTT-data

Other suggestions:

- New set of global names for trucks

Vehicle size and types

NOT YET DISCUSSED within NTM



Questions?

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