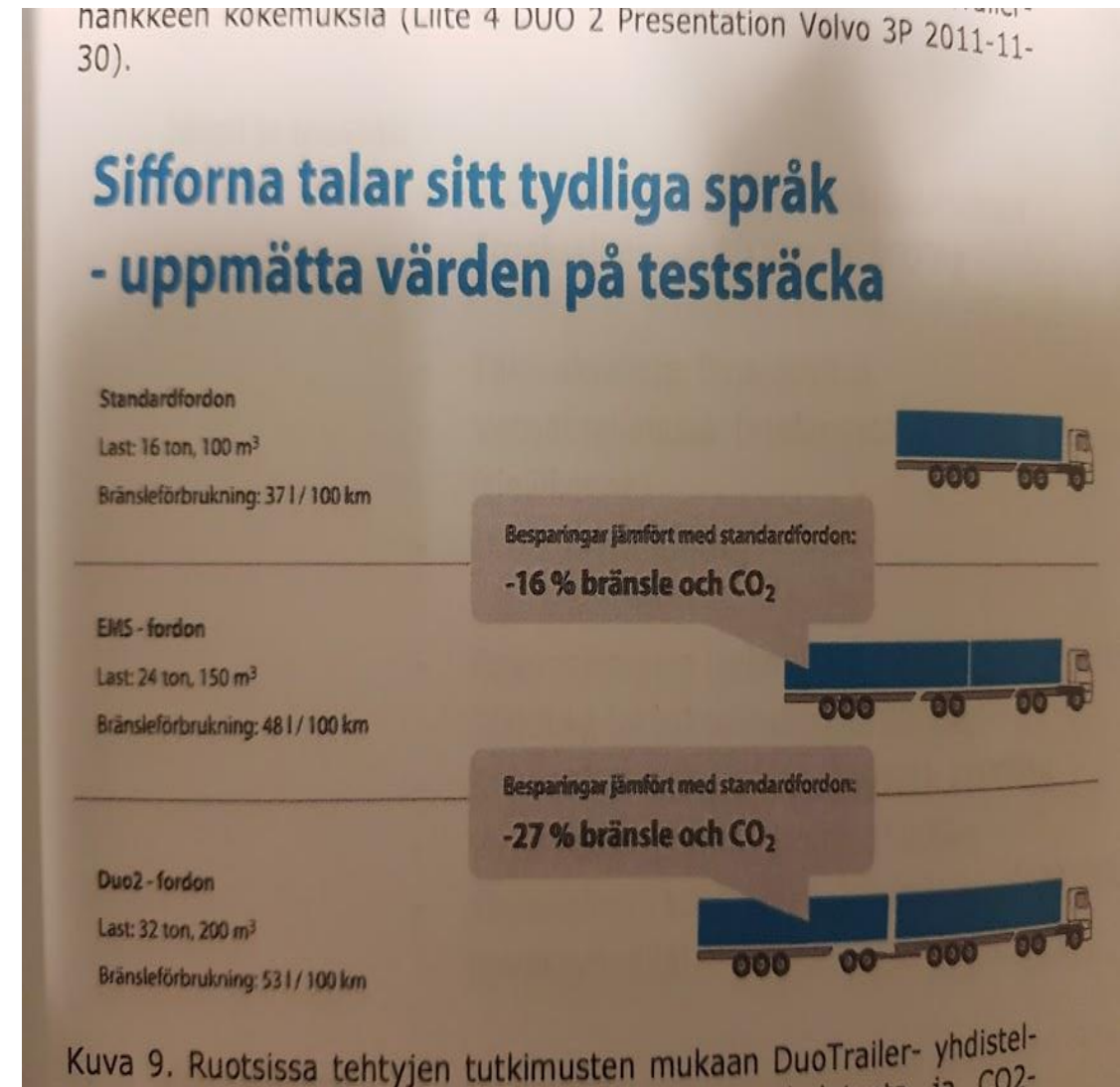


Fuel economy
16,5 semitreiler
25,25 EMS
32 EMS2

Otto Lahti
21.1.2020

Motivation for EMS2 trucks in 2013

- ▶ In old research the l/100 km values are high
- ▶ Relationship between truck sizes are right



Fuel consumption in 2019 summer

- ▶ Semitrailer 16 t load
 - ▶ 32 l/100km 2 l/t
- ▶ 25,25 m EMS 24 t load
 - ▶ 38 l/100km 1,58 l/t -21%
- ▶ 32 m EMS2 32 t load
 - ▶ 45 l/100km 1,41 l/t -30%

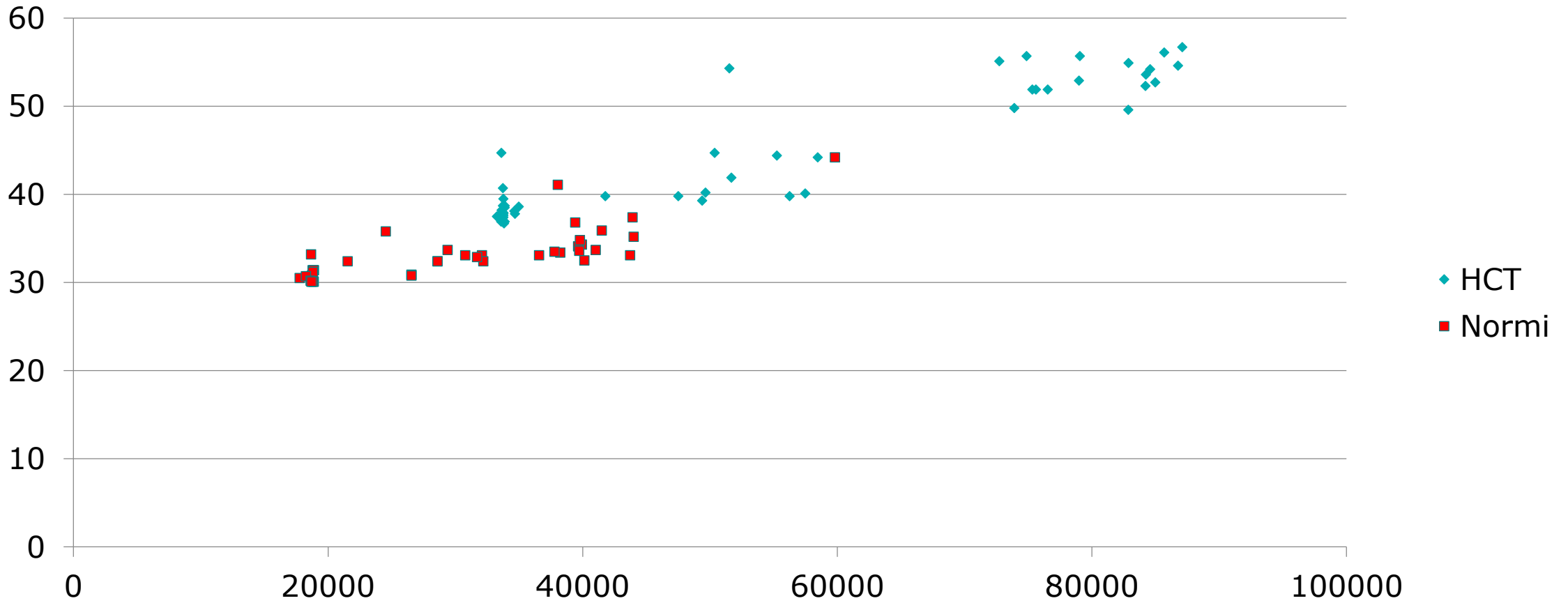
Volvo, Scania, Mercedes...



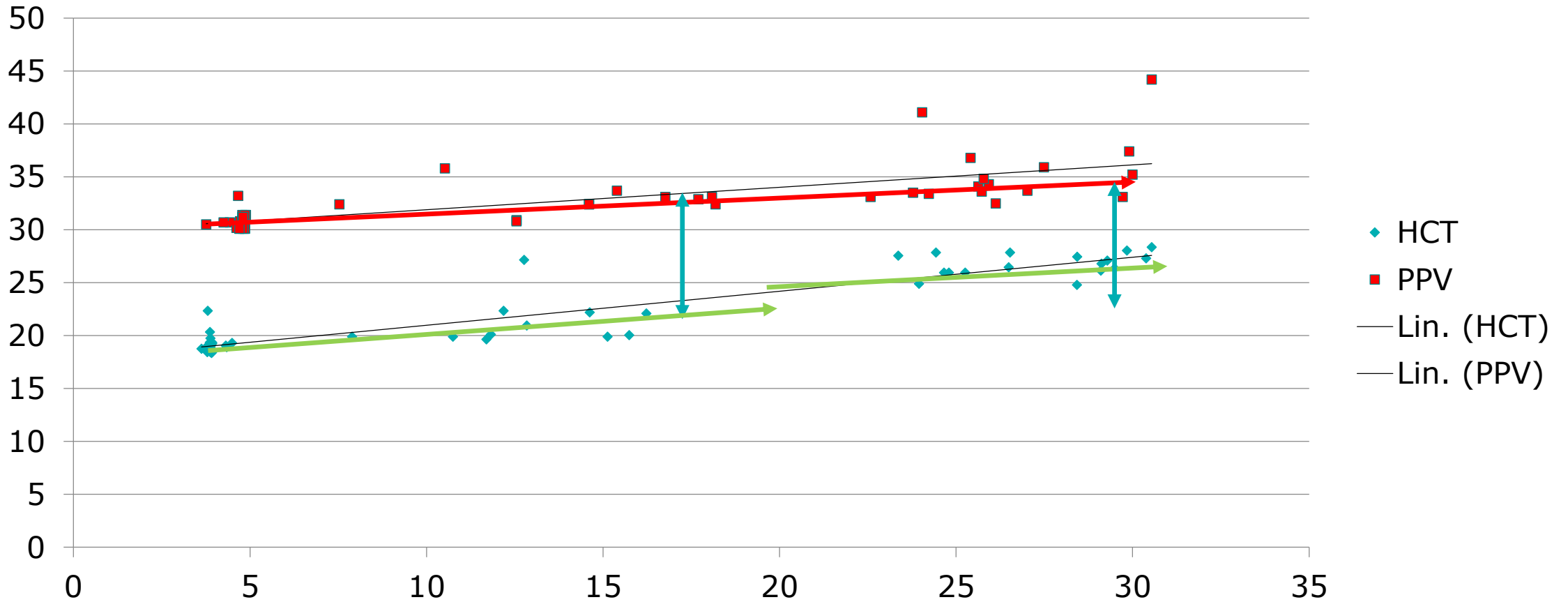
CUT FUEL COSTS BY UP TO 7%

By combining the highly efficient D13TC engine and fuel-saving features, like map-based I-See, Volvo FH with I-Save cuts fuel costs by up to 7%* in long haul operations.

L/100 km vs. GRW



L/100 km vs 40 ft container weight



Two similar 74 t trucks, good data sample

Week	Truck	Driver points	kmh	l/100km	difference	l total
Viikko A, 2019	single 6	83	5344,3100:17	49,61	0	2651,22
Viikko A, 2019	Twin 5	77	5490,46100:46	48,73	-0,88	2675,42
Viikko B, 2019	single 6	88	5823,46108:24	48,2	0	2807,08
Viikko B, 2019	Twin 5	77	6140105:29	48,36	0,16	2969,29
Viikko C, 2019	single 6	90	4038,1270:39	46,87	0	1892,82
Viikko C, 2019	Twin 5	82	3567,6766:59	47,43	0,56	1691,97
Viikko D, 2019	single 6	84	6172,24116:30	50,35	0	3107,97
Viikko D, 2019	Twin 5	75	7203,29125:04	51,01	0,66	3674,25
Viikko E, 2019	single 6	75	8064,05124:03	46,44	0	3745,18
Viikko E, 2019	Twin 5	83	7300,83125:13	49,51	3,07	3614,74
Yhteensä	single 6	79	245049	43,85	0,00	107445,93
Yhteensä	Twin 5	78	215416	45,80	1,95	98658,43

+4,4 %



Finnish Transport and Communications Agency