

Supplementary material

Table S1. Emission model input (COPERT): comparison between the existing fleet of buses (left) and the newly replaced buses (right), featuring fundamental factors such as euro standard, manufacturing year, and curb weight.

Former Bus Model	Manufacturing Year	Standard	Curb Weight (t)	Substituted New Bus Model	Manufacturing Year	Standard	Curb Weight (t)
1	1996	-	10.5	7	2018	EURO VI	10.6
1	2000	-	10.5	7	2018	EURO VI	10.6
1	2000	-	10.5	7	2018	EURO VI	10.6
1	2000	-	10.5	7	2018	EURO VI	10.6
1	2000	-	10.5	7	2018	EURO VI	10.6
1	1997	-	10.5	7	2018	EURO VI	10.6
1	1995	-	10.5	7	2018	EURO VI	10.6
1	1995	-	10.5	7	2018	EURO VI	10.6
1	2000	-	10.5	7	2018	EURO VI	10.6
1	2000	-	10.5	7	2018	EURO VI	10.6
1	1997	-	10.5	7	2018	EURO VI	10.6
1	2001	-	10.5	7	2018	EURO VI	10.6
1	2001	-	10.5	7	2018	EURO VI	10.6
1	1997	-	10.5	7	2018	EURO VI	10.6
1	1999	-	10.5	7	2018	EURO VI	10.6
1	1998	-	10.5	7	2018	EURO VI	10.6
1	2001	-	10.5	7	2018	EURO VI	10.6
1	1998	-	10.5	7	2018	EURO VI	10.6
1	2001	-	10.5	7	2018	EURO VI	10.6
1	1995	-	10.5	7	2018	EURO VI	10.6
1	1998	-	10.5	7	2018	EURO VI	10.6
1	1999	-	10.5	7	2018	EURO VI	10.6
1	1998	-	10.5	7	2018	EURO VI	10.6
1	1998	-	10.5	7	2018	EURO VI	10.6
1	2001	-	10.5	7	2019	EURO VI	10.6
1	2002	-	10.5	7	2019	EURO VI	10.6
1	2002	-	10.5	7	2019	EURO VI	10.6
1	2002	-	10.5	7	2019	EURO VI	10.6
1	2002	-	10.5	7	2019	EURO VI	10.6
2	1999	EURO II	7.7	7	2019	EURO VI	10.6
2	1999	EURO II	7.7	7	2019	EURO VI	10.6
2	1999	EURO II	7.7	7	2019	EURO VI	10.6
2	1999	EURO II	7.7	7	2019	EURO VI	10.6
2	1999	EURO II	7.7	7	2019	EURO VI	10.6
3	1999	EURO II	11.8	7	2019	EURO VI	10.6
3	2000	EURO II	11.8	7	2019	EURO VI	10.6
3	1999	EURO II	11.8	7	2019	EURO VI	10.6
3	1999	EURO II	11.8	7	2019	EURO VI	10.6
3	2000	EURO II	11.8	7	2019	EURO VI	10.7
3	1999	EURO II	11.8	7	2019	EURO VI	10.7
3	2000	EURO II	11.8	7	2019	EURO VI	10.7
3	2000	EURO II	11.8	7	2019	EURO VI	10.7
3	1999	EURO II	11.8	7	2019	EURO VI	10.7
3	2000	EURO II	11.8	7	2019	EURO VI	10.7

4	2001	EURO II	8.5	7	2019	EURO VI	10.7
4	2001	EURO II	8.5	7	2019	EURO VI	10.7
4	2001	EURO II	8.5	7	2019	EURO VI	10.7
4	2001	EURO II	8.5	7	2019	EURO VI	10.7
4	2001	EURO II	8.5	7	2019	EURO VI	10.7
5	2000	EURO II	10.9	7	2019	EURO VI	10.7
6	2000	EURO II	10.9	7	2019	EURO VI	10.7
6	2000	EURO II	10.9	7	2019	EURO VI	10.7
