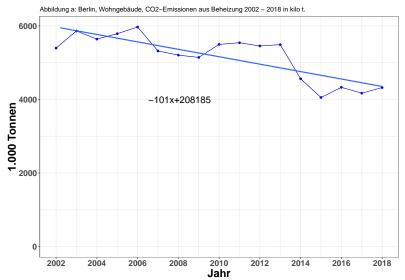
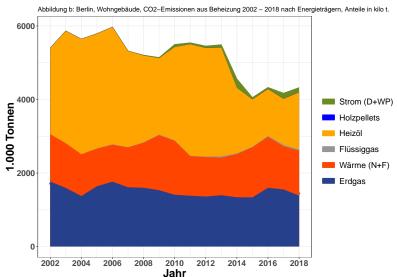
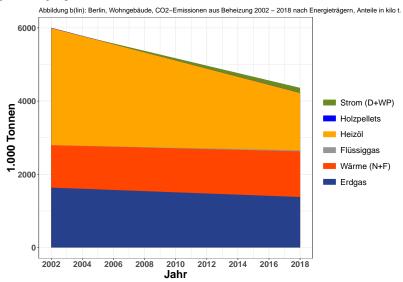
# Berlin CO<sub>2</sub> Emissionen in Berlin von Gebäude Heizung

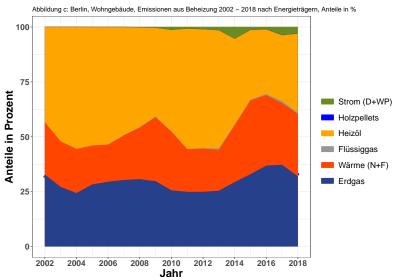
Bhaskar Kamble

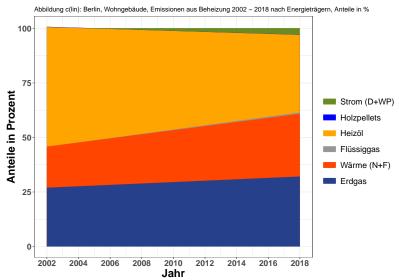
25 März 2019

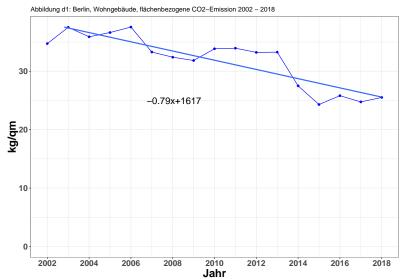


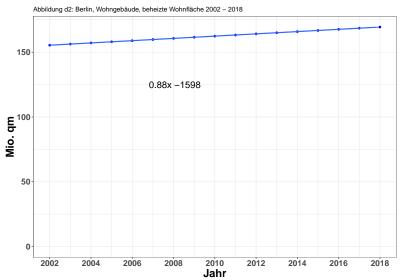












https://stackoverflow.com/questions/33214671/merging-table-header-cells-using-tablegrob

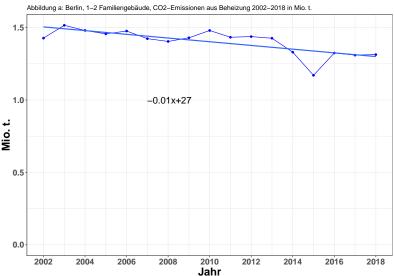
Tabelle: Berlin, Wohngebäude,flächenbezogene CO2-Emission und beheizte Wohnfläche 2002 – 2018								
Jahr	CO2-Emissionen je qm (kg/qm)	Fläche (Mio. qm)	Co2-Emissionen (Mio. t.)					
2002	34.73	155.44	5.4					
2003	37.51	156.32	5.86					
2004	35.89	157.19	5.64					
2005	36.63	158.07	5.79					
2006	37.56	158.94	5.97					
2007	33.28	159.82	5.32					
2008	32.4	160.69	5.21					
2009	31.84	161.57	5.14					
2010	33.85	162.45	5.5					
2011	33.94	163.32	5.54					
2012	33.22	164.2	5.46					
2013	33.27	165.07	5.49					
2014	27.49	165.95	4.56					
2015	24.3	166.82	4.05					
2016	25.82	167.7	4.33					
2017	24.75	168.58	4.17					
2018	25.52	169.45	4.32					

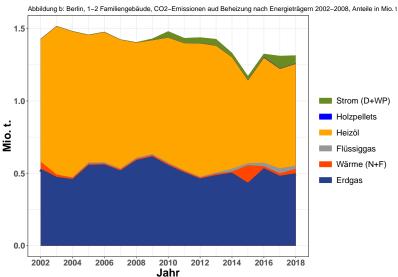
Tabelle: Berlin, Wohngebäude, CO2-Emissionen aus Beheizung 2002 - 2018 nach Energieträgern, Anteile in Mio. t.

Jahr	Erdgas	Wärme (N+F)	Flussiggas	Heizöl	Holzpellets	Strom (D+WP)	Gesamt
2002	1.77	1.29	0	2.34	0	0	5.4
2003	1.59	1.22	0	3.05	0	0	5.86
2004	1.37	1.13	0	3.13	0	0	5.64
2005	1.64	1.02	0.01	3.12	0	0	5.79
2006	1.76	1.01	0.01	3.19	0	0	5.97
2007	1.61	1.08	0.01	2.62	0	0	5.32
2008	1.6	1.22	0.01	2.36	0	0.01	5.21
2009	1.53	1.5	0.02	2.08	0	0.02	5.14
2010	1.41	1.47	0.01	2.54	0	0.07	5.5
2011	1.38	1.08	0.01	3.04	0	0.04	5.54
2012	1.36	1.07	0.02	2.95	0	0.05	5.46
2013	1.4	1.02	0.03	2.95	0	0.08	5.49
2014	1.34	1.18	0.02	1.78	0	0.24	4.56
2015	1.34	1.36	0.01	1.28	0	0.05	4.05
2016	1.6	1.39	0.02	1.27	0	0.04	4.33
2017	1.55	1.17	0.03	1.25	0	0.15	4.17
2018	1.38	1.23	0.03	1.56	0	0.13	4.32

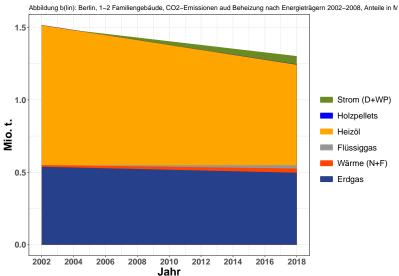
Tabelle: Berlin, Wohngebäude, CO2-Emissionen aus Beheizung 2002 - 2018 nach Energieträgern, Anteile in %

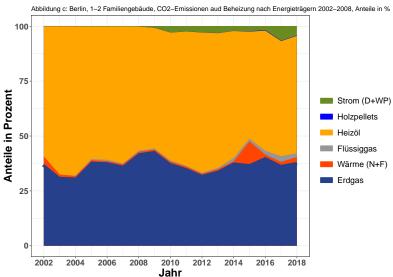
Jahr	Erdgas	Wärme (N+F)	Flussiggas	Heizöl	Holzpellets	Strom (D+WP)	Gesamt
2002	32.78	23.81	0	43.4	0	0	100
2003	27.16	20.74	0	52.1	0	0	100
2004	24.37	20.09	0.04	55.5	0	0	100
2005	28.3	17.66	0.16	53.87	0	0.01	100
2006	29.54	16.85	0.21	53.37	0	0.02	100
2007	30.31	20.38	0.1	49.2	0	0.01	100
2008	30.7	23.5	0.24	45.33	0.01	0.21	100
2009	29.78	29.14	0.35	40.39	0.02	0.32	100
2010	25.61	26.7	0.22	46.15	0.03	1.28	100
2011	24.92	19.42	0.14	54.76	0.02	0.74	100
2012	24.92	19.69	0.3	54.07	0.04	0.98	100
2013	25.41	18.65	0.63	53.81	0.03	1.47	100
2014	29.37	25.76	0.44	39.07	0.01	5.35	100
2015	32.97	33.63	0.35	31.69	0.04	1.31	100
2016	36.87	32.09	0.54	29.44	0.09	0.97	100
2017	37.27	28.14	0.83	30.06	0.08	3.63	100
2018	32.01	28.36	0.66	35.96	0.07	2.94	100

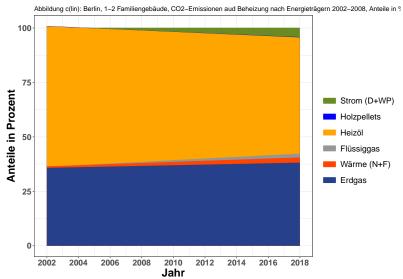


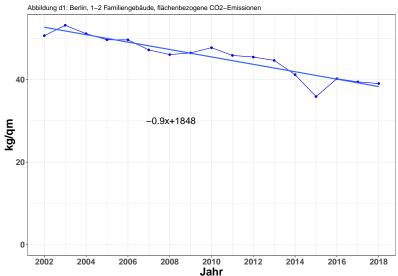


# 2. Berlin, 1-2 Familiengeb $\tilde{A} \, \mathbb{m} \, ude$ , CO2-Emissionen aus Beheizung 2002 - 2018









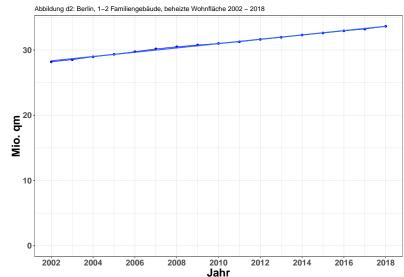


Tabelle: Berlin, 1-2 Familiengebäude, flächenbezogene CO2-Emission und beheizte Wohnfläche 2002 - 2018

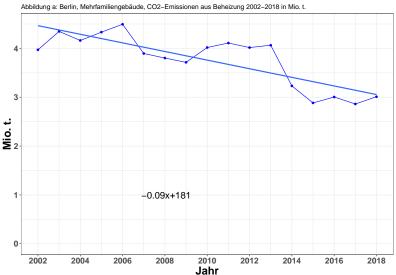
Jahr	CO2-Emissionen	Fläche	Co2-Emissionen
	je qm (kg/qm)	(Mio. qm)	(Mio. t.)
2002	50.63	28.19	1.43
2003	53.15	28.52	1.52
2004	51.11	28.96	1.48
2005	49.64	29.34	1.46
2006	49.62	29.75	1.48
2007	47.19	30.17	1.42
2008	46.06	30.49	1.4
2009	46.46	30.77	1.43
2010	47.73	31.01	1.48
2011	45.85	31.26	1.43
2012	45.46	31.63	1.44
2013	44.65	31.95	1.43
2014	41.18	32.31	1.33
2015	35.89	32.61	1.17
2016	40.22	32.94	1.32
2017	39.44	33.22	1.31
2018	39.05	33.64	1.31

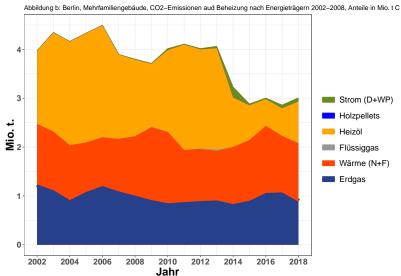
Tabelle: Berlin, 1-2 Familiengebäude, CO2-Emissionen aus Beheizung 2002 - 2018 nach Energieträgern, Anteile in Mio. t.

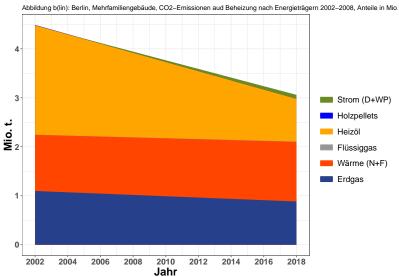
Jahr	Erdgas	Wärme (N+F)	Flussiggas	Heizöl	Holzpellets	Strom (D+WP)	Gesamt
2002	0.53	0.05	0	0.85	0	0	1.43
2003	0.48	0.02	0	1.02	0	0	1.52
2004	0.46	0.01	0	1.01	0	0	1.48
2005	0.56	0.01	0.01	0.88	0	0	1.46
2006	0.56	0.01	0.01	0.9	0	0	1.48
2007	0.52	0.01	0	0.89	0	0	1.42
2008	0.59	0.01	0.01	0.79	0	0	1.4
2009	0.62	0.01	0.01	0.79	0	0.01	1.43
2010	0.56	0.01	0.01	0.86	0	0.04	1.48
2011	0.51	0.01	0	0.88	0	0.03	1.43
2012	0.47	0.01	0.01	0.92	0	0.04	1.44
2013	0.49	0.01	0.01	0.88	0	0.04	1.43
2014	0.51	0.01	0.02	0.77	0	0.03	1.33
2015	0.44	0.12	0.01	0.57	0	0.03	1.17
2016	0.54	0.01	0.02	0.73	0	0.02	1.32
2017	0.48	0.02	0.03	0.69	0	0.09	1.31
2018	0.5	0.03	0.02	0.7	0	0.05	1.31

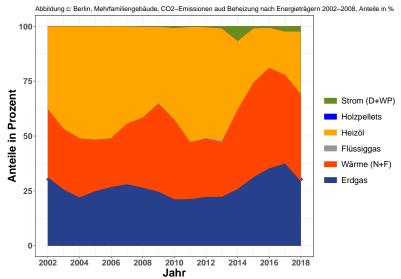
Tabelle: Berlin, 1-2 Familiengebäude, CO2-Emissionen aus Beheizung 2002 - 2018 nach Energieträgern, Anteile in %

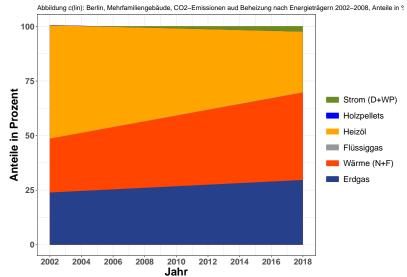
Jahr	Erdgas	Wärme (N+F)	Flussiggas	Heizöl	Holzpellets	Strom (D+WP)	Gesamt
2002	37.28	3.39	0	59.32	0	0	100
2003	31.4	1.03	0	67.56	0	0	100
2004	31.13	0.67	0.14	68.04	0.01	0	100
2005	38.36	0.65	0.52	60.42	0.01	0.04	100
2006	38.08	0.52	0.58	60.73	0.01	0.08	100
2007	36.54	0.66	0.34	62.41	0	0.05	100
2008	42.18	0.65	0.55	56.5	0.02	0.1	100
2009	43.22	0.66	0.44	54.97	0.04	0.67	100
2010	37.71	0.67	0.52	58.25	0.05	2.81	100
2011	35.45	0.7	0.27	61.19	0.02	2.37	100
2012	32.34	0.5	0.39	63.95	0.08	2.74	100
2013	34.23	0.7	0.55	61.37	0.06	3.09	100
2014	37.98	0.54	1.49	57.84	0.04	2.11	100
2015	37.24	10.31	1.23	48.78	0.15	2.29	100
2016	40.48	1.06	1.76	54.73	0.24	1.73	100
2017	36.89	1.32	2.65	52.4	0.17	6.57	100
2018	38.17	2.27	1.75	53.47	0.16	4.19	100

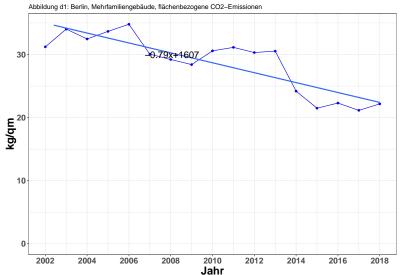












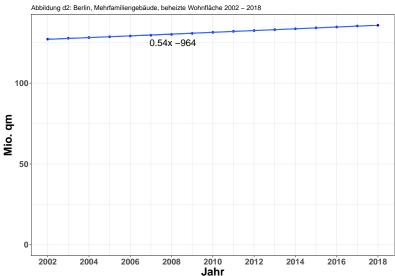


Tabelle: Berlin, Mehrfamiliengebäude, flächenbezogene CO2-Emission und beheizte Wohnfläche 2002 - 2018

Jahr	CO2-Emissionen	Fläche	Co2-Emissionen
	je qm (kg/qm)	(Mio. qm)	(Mio. t.)
2002	31.21	127.25	3.97
2003	34.02	127.79	4.35
2004	32.46	128.23	4.16
2005	33.66	128.72	4.33
2006	34.78	129.19	4.49
2007	30.05	129.65	3.9
2008	29.2	130.2	3.8
2009	28.4	130.8	3.71
2010	30.57	131.44	4.02
2011	31.12	132.06	4.11
2012	30.3	132.57	4.02
2013	30.53	133.12	4.06
2014	24.19	133.64	3.23
2015	21.49	134.21	2.88
2016	22.3	134.76	3
2017	21.14	135.36	2.86
2018	22.17	135.81	3.01

Tabelle: Berlin, Mehrfamiliengebäude, CO2-Emissionen aus Beheizung 2002 - 2018 nach Energieträgern, Anteile in Mio. t.

Jahr	Erdgas	Wärme (N+F)	Flussiggas	Heizöl	Holzpellets	Strom (D+WP)	Gesamt
2002	1.24	1.24	0	1.5	0	0	3.97
2003	1.12	1.2	0	2.03	0	0	4.35
2004	0.91	1.12	0	2.12	0	0	4.16
2005	1.08	1.01	0	2.24	0	0	4.33
2006	1.2	1	0	2.29	0	0	4.49
2007	1.09	1.07	0	1.73	0	0	3.9
2008	1.01	1.21	0	1.57	0	0.01	3.8
2009	0.91	1.49	0.01	1.29	0	0.01	3.71
2010	0.85	1.46	0	1.68	0	0.03	4.02
2011	0.87	1.07	0	2.16	0	0.01	4.11
2012	0.89	1.07	0.01	2.03	0	0.01	4.02
2013	0.91	1.01	0.03	2.08	0	0.04	4.06
2014	0.83	1.17	0	1.01	0	0.22	3.23
2015	0.9	1.24	0	0.71	0	0.03	2.88
2016	1.06	1.38	0	0.55	0	0.02	3
2017	1.07	1.16	0	0.57	0	0.07	2.86
2018	0.88	1.2	0.01	0.85	0	0.07	3.01

Tabelle: Berlin, Mehrfamiliengebäude, CO2-Emissionen aus Beheizung 2002 - 2018 nach Energieträgern, Anteile in %

Jahr	Erdgas	Wärme (N+F)	Flussiggas	Heizöl	Holzpellets	Strom (D+WP)	Gesamt
2002	31.17	31.15	0	37.68	0	(D+WF)	100
2003	25.68	27.61	0	46.7	0	0	100
2004	21.96	27	0.01	51.03	0	0	100
2005	24.92	23.38	0.04	51.67	0	0	100
2006	26.74	22.22	0.09	50.95	0	0	100
2007	28.03	27.58	0.01	44.38	0	0	100
2008	26.46	31.94	0.13	41.2	0.01	0.26	100
2009	24.61	40.1	0.32	34.78	0.01	0.18	100
2010	21.16	36.29	0.11	41.7	0.03	0.72	100
2011	21.24	25.95	0.09	52.52	0.02	0.17	100
2012	22.26	26.56	0.27	50.53	0.03	0.35	100
2013	22.31	24.95	0.66	51.16	0.02	0.9	100
2014	25.82	36.14	0	31.35	0	6.68	100
2015	31.24	43.09	0	24.76	0	0.91	100
2016	35.27	45.78	0	18.29	0.03	0.63	100
2017	37.44	40.41	0	19.83	0.03	2.29	100
2018	29.32	39.74	0.19	28.33	0.03	2.4	100