Vinsamlegast vísið í heimild: Talnaefni Orkustofnunar OS-2019-T004-01
Please reference: Orkustofnun Data Repository OS-2019-T004-01

ORKUSTOFNUN
National Energy Authority

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Tafla 1. Heildarlosun gastegunda út í andrúmsloftið frá jarðvarmavirkjunum og hitaveitum 1969-2018.
Table 1. Total gas emissions into the atmosphere from geothermal power plants and heat plants 1969-2018.

Virkjun eða svæði / Plant or area	Reykjanes (CHP Plant)			Svartsengi (CHP Plant)			Hellisheiði (CHP Plant)			Nesjavellir (CHP Plant)			Hveragerði (Heat Plant)			Bjarnarflag (CHP Plant)			Krafla (Power Plant)			Þeistareykir (Power Plant)			Samtals / Total		
X	318910			331640			384646			389713			392903			599411			602545			592992					
Y	374281			379650			395223			402461			390530			572753			580265			599039					
Gastegund / Gas Type	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4
	[tonnes/annum]			[tonnes/annum]			[tonnes/annum]			[tonnes/annum]			[tonnes/annum]			[tonnes/annum]			[tonnes/annum]			[tonnes/annum]			[tonnes/annum]		
2018	22.684	801	3	51.444	983	5	27.500	2.800	50	14.000	7.000	30	160	10	-	171	146	3	32.636	5.044	7	7.862	3.304	3	156.457	20.088	101
2017	16.391	546	3	55.602	1.036	5	23.555	2.866	49	14.020	6.829	31	160	10	-	427	551	4	33.397	4.780	11	2.922	787	2	146.474	17.405	104
2016	18.800	581	2	57.300	932	5	26.102	3.893	48	14.655	8.076	44	160	10	-	367	521	4	30.802	4.689	11	770	150	-	148.956	18.852	114
2015	23.791	865	3	56.212	969	5	33.077	6.384	80	14.726	8.350	54	160	10	-	337	477	4	32.483	4.483	11	2.345	971	1	163.131	22.509	158
2014	26.677	941	3	65.087	1.136	6	38.861	8.484	81	16.579	9.275	55	160	10	-	296	447	4	34.395	4.520	11	895	391	1	182.950	25.204	161
2013	21.255	779	2	58.712	1.106	5	44.934	12.374	72	14.794	8.709	46	160	10	-	300	539	7	32.307	4.392	7	672	136	-	173.134	28.045	139
2012	21.190	800	2	47.503	848	4	43.158	16.881	51	18.612	11.349	28	160	10	-	956	826	11	38.604	5.151	14	1.863	246	1	172.046	36.111	111
2011	22.114	819	2	61.153	1.128	5	39.479	16.110	57	14.800	9.414	47	160	10	-	1.292	1.603	17	39.683	5.180	12	827	570	-	179.508	34.834	140
2010	26.102	880	2	47.974	903	4	41.722	13.340	46	28.396	9.384	111	160	10	-	530	813	7	44.100	5.321	13	656	523	-	189.640	31.174	183
2009	24.651	766	2	43.427	844	4	35.325	8.581	36	19.918	12.175	24	160	10	-	826	930	8	44.145	4.773	18	1.654	462	-	170.107	28.541	92
2008	24.310	879	2	61.182	1.126	4	32.937	10.323	30	20.904	12.114	24	160	10	-	962	1.176	23	44.515	5.424	19	964	613	-	185.934	31.665	102
2007	27.021	925	3	34.985	663	3	24.210	6.902	20	15.412	10.275	26	160	10	-	1.973	1.189		43.607	4.681					147.368	24.646	52
2006	19.710	651	1	46.537	802	3				12.673	8.650		160	10	-	2.830	1.231		45.514	4.915					127.423	16.259	4
2005	1.276	19		48.707	700		4.581	819		13.259	8.918	29				1.053	619		48.964	4.987					117.839	16.061	29
2004	1.880	46		54.606	772		1.943	748	-	11.551	5.084	21				1.839	974		50.280	4.985					122.099	12.608	21
2003	2.856	106		56.922	811		3.602	1.283	-	11.058	5.941	14				2.406	1.543		59.023	5.384					135.867	15.068	14
2002	1.135	40		64.400	1.003					15.577	8.636					2.111	1.508		63.009	5.257					146.232	16.443	-
2001	1.295	46		55.124	921					15.408	7.990					1.922	934		69.877	5.703					143.626	15.594	-
2000	2.042	72		55.615	837					13.241	5.544					1.910	1.064		80.175	6.298					152.982	13.815	-
1999	1.290	42		38.106	503					11.584	3.403					1.973	1.253		58.158	5.100					111.111	10.301	-
1998	1.035	36		30.451	342					4.484	1.317					2.641	1.254		44.885	3.543					83.495	6.492	-
1997	1.109	38		28.642	345					9.200	2.703					2.761	1.386		24.856	1.989					66.568	6.460	-
1996	1.054	33		46.410	538					8.948	2.629					2.274	1.760		22.298	1.789					80.985	6.749	-
1995	975	33		49.351	383					8.361	2.456					2.033	1.268		21.233	1.669					81.953	5.809	-
1994	1.915	59		30.883	338											2.166	1.420		19.523	1.528					54.487	3.345	-
1993	3.135	100		43.787	599											1.574	1.330		21.247	1.804					69.744	3.833	-
1992	2.541	86		27.558	326											1.774	2.134		20.110	1.781					51.983	4.327	-
1991	2.234	77		24.459	300											2.091	1.701		25.533	1.688					54.316	3.766	-
1990	2.546	87		16.793	189											2.086	1.681		24.300	1.837					45.724	3.793	-
1989	2.546	87		9.704	111											1.697	1.852		23.399	1.833					37.346	3.883	-
1988	2.671	92		9.545	123											1.438	1.901		25.216	2.226					38.870	4.342	-
1987	2.707	92		10.135	112											1.210	1.871		24.590	1.586					38.642	3.661	-
1986	2.808	98		5.936	87											1.180	1.880		22.550	1.708					32.474	3.774	-
1985	2.561	102		6.913	94											1.249	1.945		29.078	1.960					39.802	4.101	-
1984	2.900	101		8.767	109											1.519	1.863		34.521	1.957					47.706	4.029	-
1983	1.623	49		4.355	54											1.146	1.666		32.578	1.662					39.701	3.431	-
1982	1.320	28		5.111	35											1.394	2.132		26.032	1.318					33.856	3.513	-
1981	528	11		3.949	37											944	1.632		24.464	943					29.885	2.623	-
1980	2.789	36		1.404	20											1.362	1.451		9.011	444					14.567	1.951	-
1979	1.350	45		994	15											788	804		7.726	248					10.859	1.112	-
1978	1.866	45		462	8											1.034	1.125		14.762	643					18.124	1.821	-
1977	609	12		504	6											1.034	1.125		25.645	369					27.792	1.512	-
1976	-	-		42	-																				42	-	-
1975	-	-																							-	-	-
1974	1.623	30																							1.623	30	-
1973	2.462	46																							2.462	46	-
1972	2.750	60																							2.750	60	-
1971	3.044	74																							3.044	74	-
1970	590	14																							590	14	-
1969	-	-																							-	-	-

Tafla 2. Gaslosun á hverja framleidda kilóvattstund (kWst) af rafmagni eftir virkjunum.
Table 2. Emissions per produced kilowatthour (kWh) of electricity by power plant.

Virkjun eða svæði / Plant or area	Reykjanes (CHP Plant)			Svartsengi (CHP Plant)			Hellisheiði (CHP Plant)			Nesjavellir (CHP Plant)			Bjarnarflag* (CHP Plant)			Krafla (Power Plant)			Þeistareykir (Power Plant)			Meðaltal / Average		
X	318910			331640			384646			389713			599411			602545			592992					
Y	374281			379650			395223			402461			572753			580265			599039					
Gastegund / Gas Type	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4	CO_2	H_2S	CH_4
	[g/kWh]			[g/kWh]			[g/kWh]			[g/kWh]			[g/kWh]			[g/kWh]			[g/kWh]			[g/kWh]		
2018	11,241	0,989	0,004	87,62	1,67	0,01	10,99	1,12	0,02	14,43	7,21	0,03	855,00	730,00	15,00	70,73	10,93	0,02	11,44	4,81	0,00	25,99	3,34	0,017
2017	8,126	0,898	0,004	100,59	1,87	0,01	9,60	1,17	0,02	14,16	6,90	0,03	65,75	84,85	0,62	68,43	9,79	0,02	41,40	11,15	0,03	28,33	3,37	0,020
2016	9,321	0,923	0,003	102,34	1,66	0,01	11,03	1,64	0,02	14,46	7,97	0,04	53,80	76,37	0,59	62,74	9,55	0,02				29,40	3,72	0,022
2015	11,801	1,135	0,003	105,72	1,82	0,01	14,85	2,87	0,04	14,97	8,49	0,05	33,37	47,24	0,40	66,64	9,20	0,02				32,61	4,50	0,032
2014	13,239	1,197	0,004	118,02	2,06	0,01	16,27	3,55	0,03	16,12	9,02	0,05	21,71	32,79	0,29	73,08	9,60	0,02				34,93	4,81	0,031
2013	10,554	0,953	0,002	110,34	2,08	0,01	18,80	5,18	0,03	14,73	8,67	0,05	16,92	30,40	0,39	66,95	9,10	0,01				33,01	5,35	0,027
2012	10,527	1,014	0,003	93,79	1,67	0,01	17,88	6,99	0,02	18,42	11,23	0,03	54,72	47,28	0,63	81,70	10,90	0,03				33,03	6,93	0,021
2011	10,991	0,999	0,002	120,49	2,22	0,01	21,23	8,66	0,03	14,63	9,30	0,05	72,71	90,21	0,96	81,81	10,68	0,02				38,18	7,41	0,030
2010	12,980	1,013	0,002	99,91	1,88	0,01	25,63	8,19	0,03	29,19	9,65	0,11	30,99	47,53	0,41	88,54	10,68	0,03				42,47	6,98	0,041
2009	12,264	0,881	0,002	83,02	1,61	0,01	21,25	5,16	0,02	19,83	12,12	0,02	53,13	59,81	0,51	92,27	9,98	0,04				37,36	6,27	0,030
2008	12,101	1,017	0,002	108,01	1,99	0,01	29,22	9,16	0,03	21,43	12,42	0,02	60,68	74,14	1,45	91,33	11,13	0,04				46,06	7,84	0,025
2007	13,457	1,089	0,004	96,15	1,82	0,01	31,03	8,85	0,03	14,99	9,99	0,03	104,61	63,06	-	82,89	8,90	-				41,32	6,91	0,015
2006	9,821	1,281	0,002	124,97	2,15	0,01	-	-	-	12,29	8,39		158,75	69,08	-	87,72	9,47	-				48,65	6,21	0,002
2005	0,636			132,43	1,90	-				16,98	11,42	0,04	107,87	63,39	-	101,40	10,33	-				71,79	9,78	0,018
2004	0,938			146,18	2,07	-				17,15	7,55	0,03	329,15	174,24	-	120,63	11,96	-				83,09	8,58	0,014
2003	1,425			154,48	2,20	-				17,97	9,65	0,02	206,84	132,62	-	147,31	13,44	-				97,32	10,79	0,010
2002	0,567			175,66	2,74	-				25,80	14,31	-	159,00	113,59	-	144,16	12,03	-				102,93	11,57	-
2001	0,647			145,56	2,43	-				27,95	14,49	-	355,28	172,65	-	138,22	11,28	-				99,67	10,82	-
2000	1,020			150,12	2,26	-				27,65	11,58	-	211,21	117,65	-	173,83	13,65	-				115,93	10,47	-
1999	0,645			258,49	3,41	-				23,82	7,00	-	109,21	69,37	-	120,19	10,54	-				97,84	9,07	-
1998	0,518			247,10	2,78	-				44,59	13,10	-	117,41	55,74	-	110,45	8,72	-				127,93	9,95	-
1997	0,555			233,80	2,82	-							124,31	62,39	-	108,85	8,71	-				178,43	17,32	-
1996	0,528			405,90	4,71	-							99,88	77,31	-	108,23	8,68	-				236,01	19,67	-
1995	0,488			460,26	3,57	-							177,26	110,56	-	125,28	9,85	-				284,39	20,16	-
1994	0,960			296,75	3,25	-							199,98	131,10	-	136,09	10,65	-				210,89	12,95	-
1993	1,572			438,05	5,99	-							176,88	149,42	-	146,12	12,41	-				274,29	15,07	-
1992	1,275			309,40	3,66	-							258,60	311,05	-	150,26	13,31	-				226,24	18,83	-
1991	1,121			273,55	3,36	-							196,00	159,49	-	152,94	10,11	-				203,41	14,10	-
1990	1,279			191,69	2,16	-							165,72	133,54	-	132,99	10,05	-				161,62	13,41	-
1989	1,279			149,52	1,71	-							179,41	195,78	-	127,76	10,01	-				145,03	15,08	-
1988	1,343			155,69	2,01	-							296,15	391,55	-	140,52	12,40	-				158,26	17,68	-
1987	1,362			165,37	1,83	-							-	-		142,26	9,17	-				165,04	15,64	-
1986	1,413			96,58	1,42	-							-	-		149,46	11,32	-				152,93	17,77	-
1985	1,290			222,59	3,03	-										207,44	13,98	-				232,44	23,95	-
1984	1,461			288,03	3,58	-							218,20	267,58	-	254,14	14,41	-				275,39	23,26	-
1983	0,818			144,82	1,80	-							99,01	143,98	-	250,46	12,77	-				231,21	19,98	-
1982	0,666			127,67	0,87	-							235,63	360,38	-	230,33	11,66	-				212,98	22,10	-
1981	0,266			123,89	1,16	-							107,50	185,81	-	296,62	11,44	-				242,71	21,30	-
1980	1,408			290,92	4,14	-							569,32	606,56	-	240,60	11,84	-				326,08	43,68	-
1979	0,682			271,07	4,09	-								-	-	184,12	5,90	-				237,97	24,37	-
1978	0,943												177,51	193,11	-	1.184,85	51,64	-				991,21	99,61	-
1977	0,308												64,13	69,77	-							1.723,45	93,74	-
1976	-																					2,21	-	-
1975	-																					-	-	-
1974	0,822																					282,21	5,22	-
1973	1,247																					101,74	1,90	-
1972	1,394																					126,94	2,77	-
1971	1,544																					252,97	6,15	-
1970	0,299																					48,80	1,16	-
1969	-																					-	-	-

*Mikil minnkun var á framleiðslu árið 2018 í Gufustöðinni í Bjarnarflagi vegna viðhalds vélbúnaðar, því er losun á framleidda kWst mun hærri en fyrri ár/Due to maintenance, the production at Bjarnarflag was much lower in 2018 than previous years, hence the high values per kWh.

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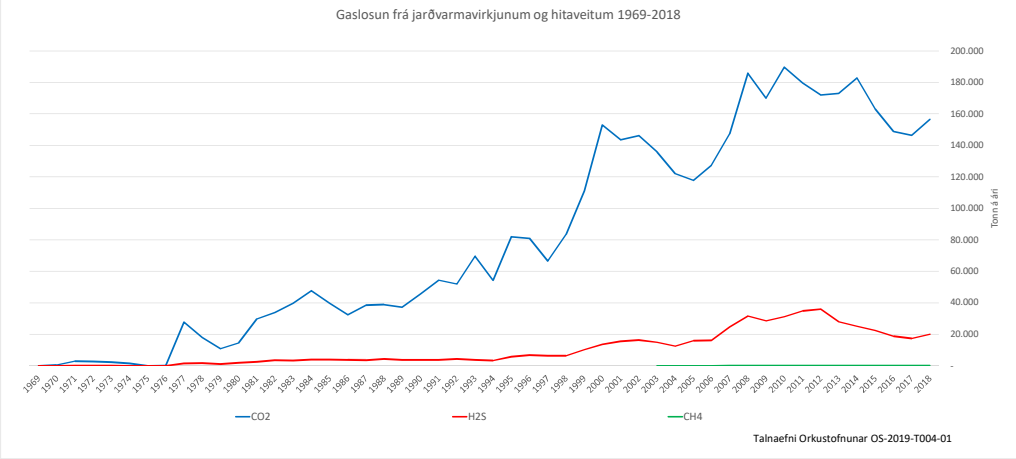

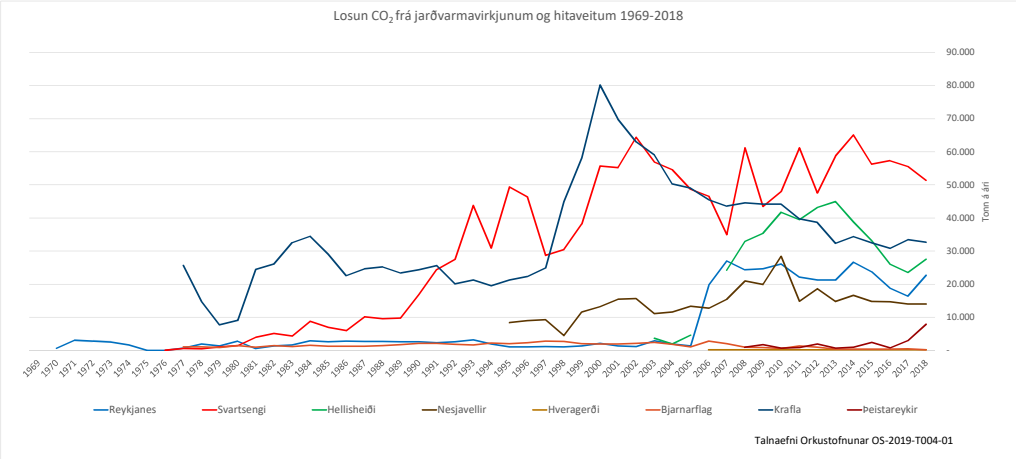

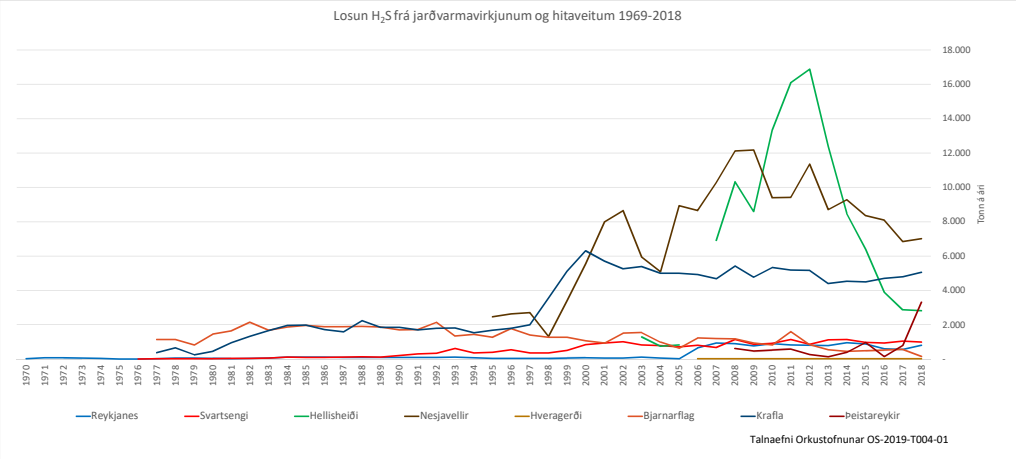

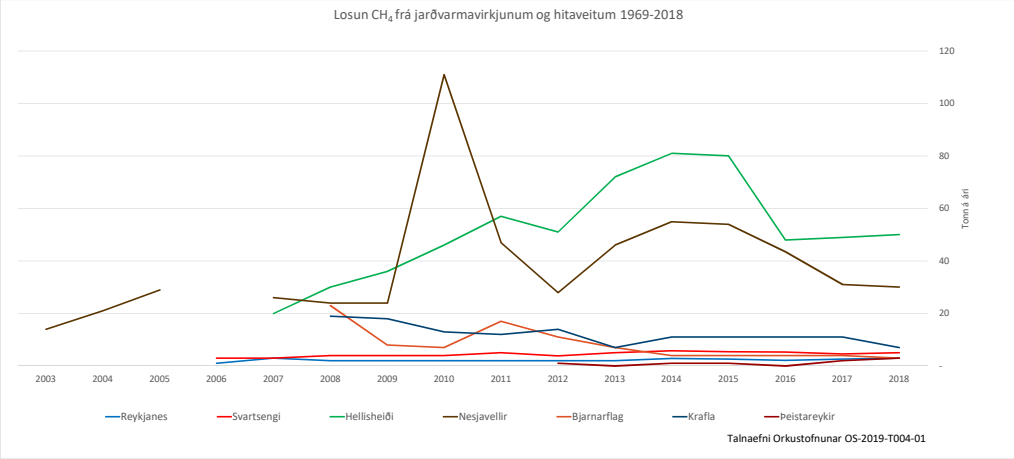

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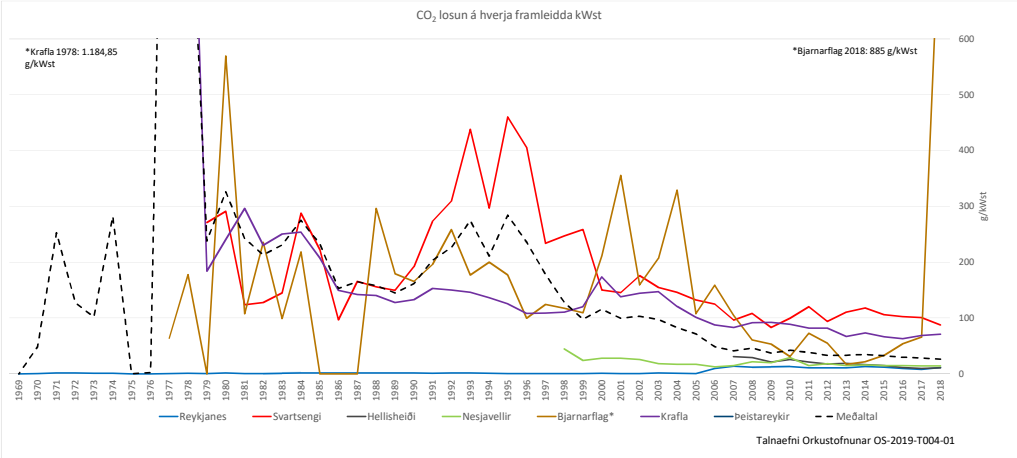

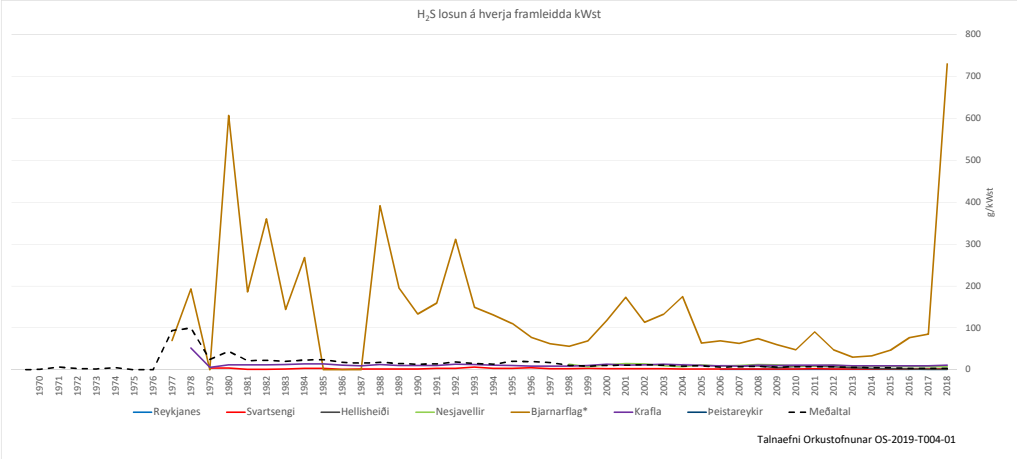

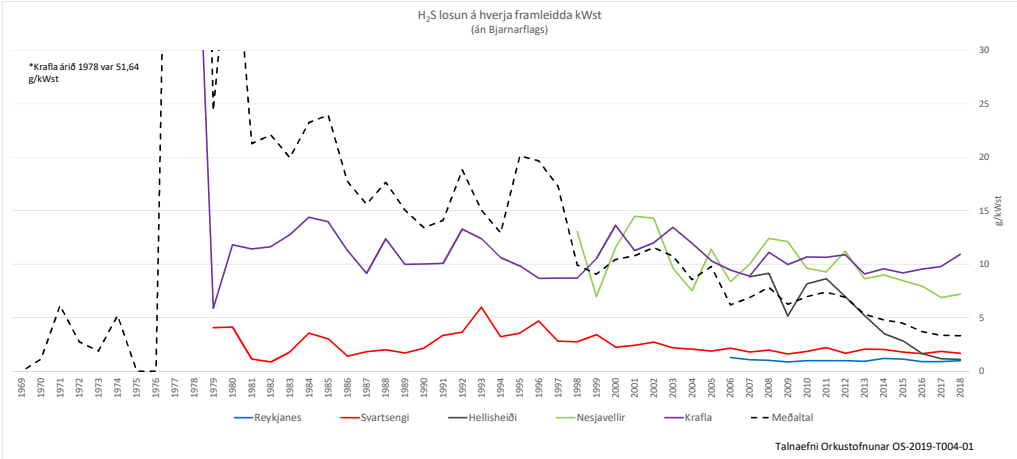

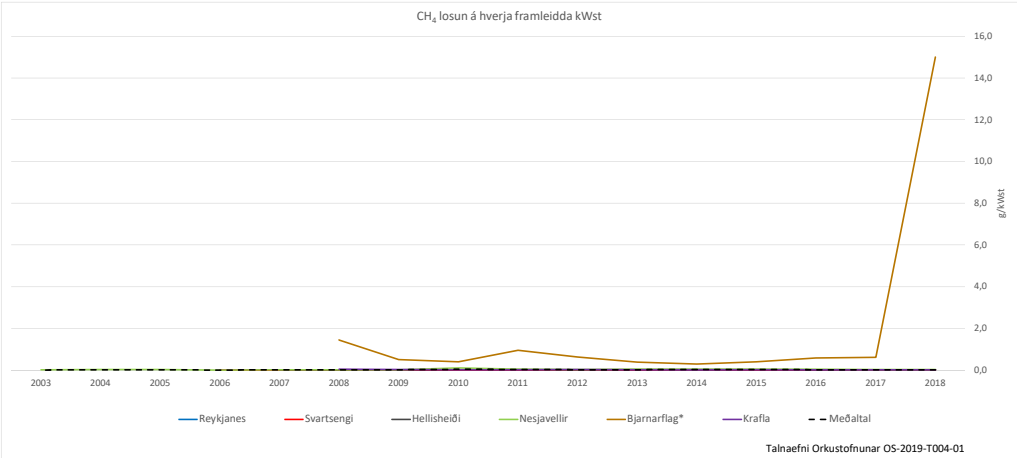

Vinsamlegast vísið í heimild: Talnaefni Orkustofnunar OS-2019-T004-01
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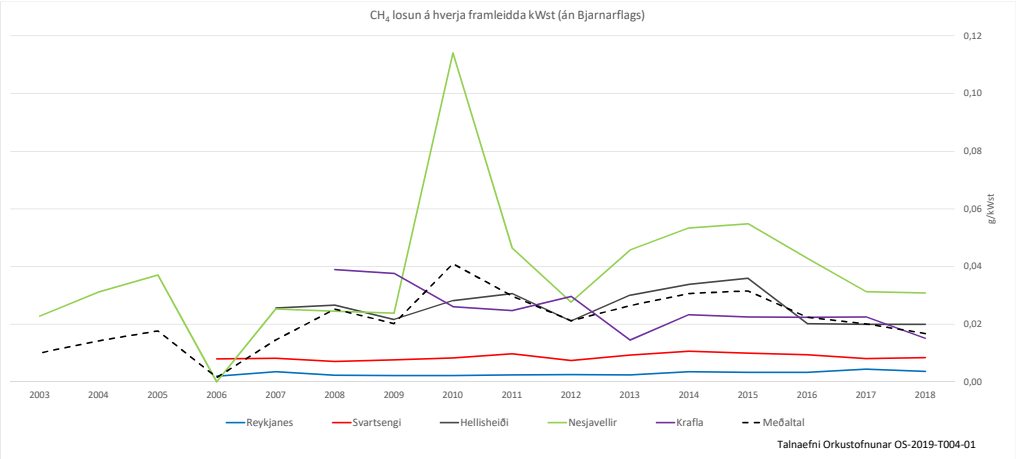

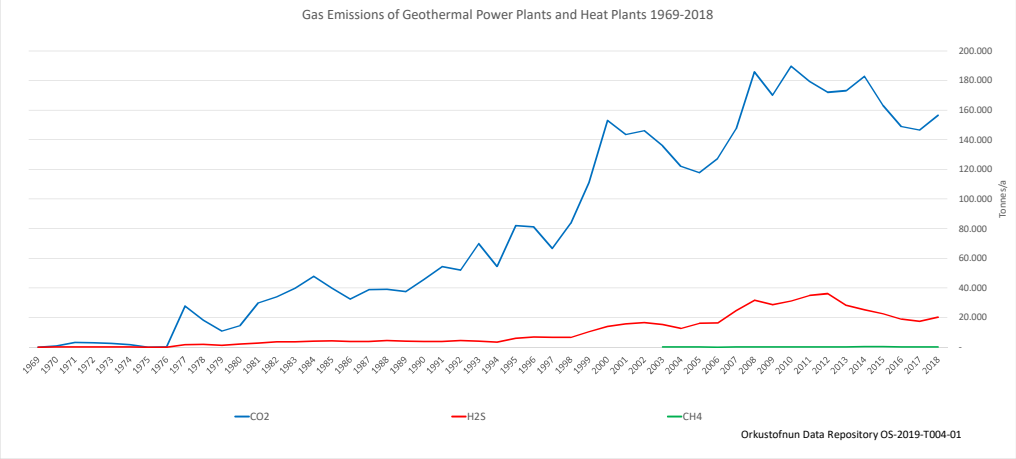

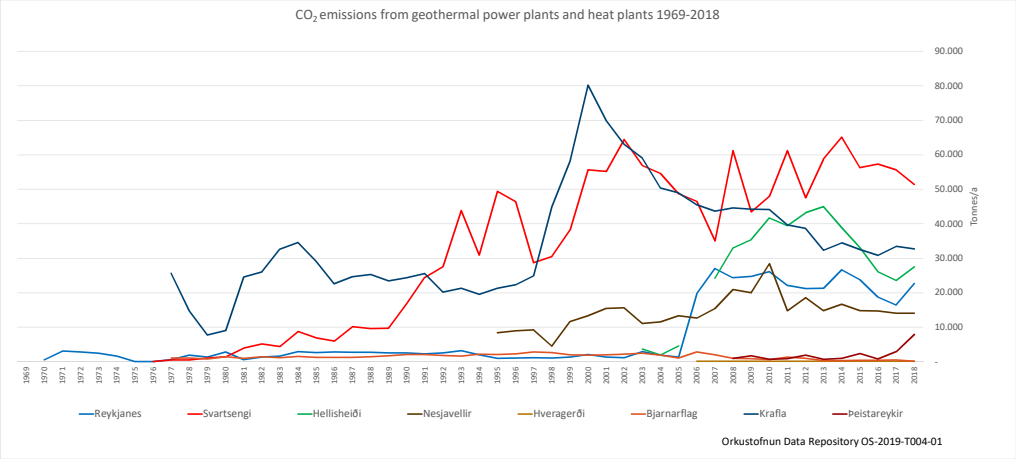

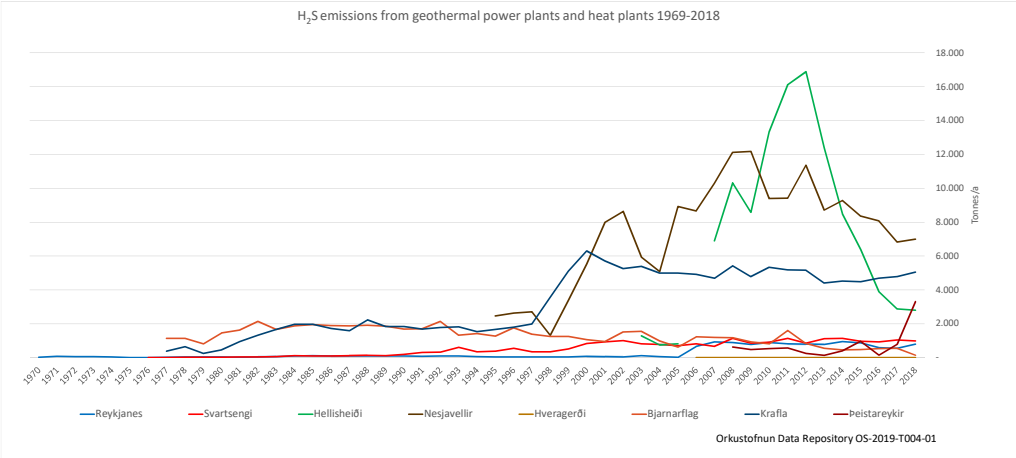

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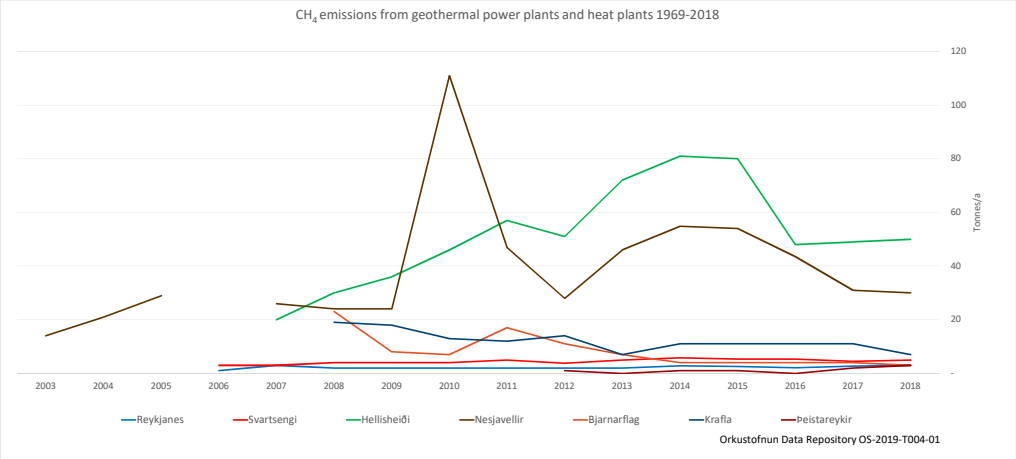

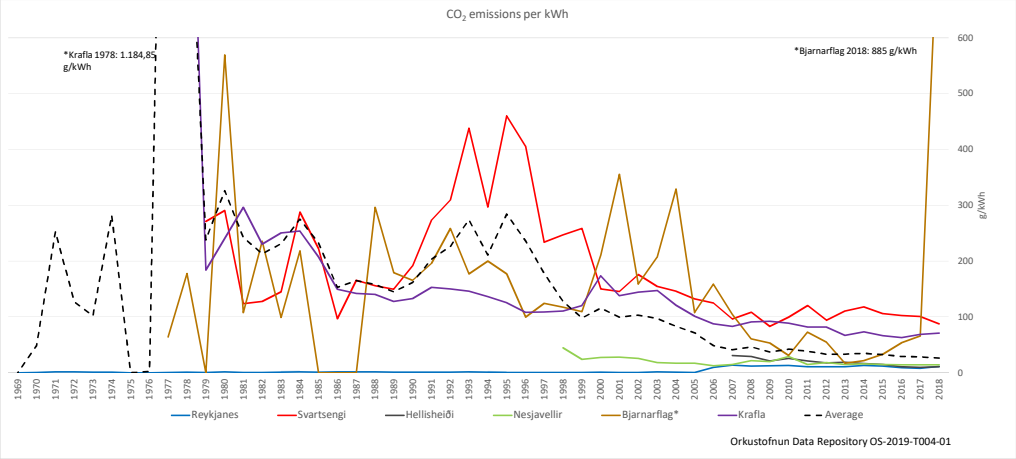

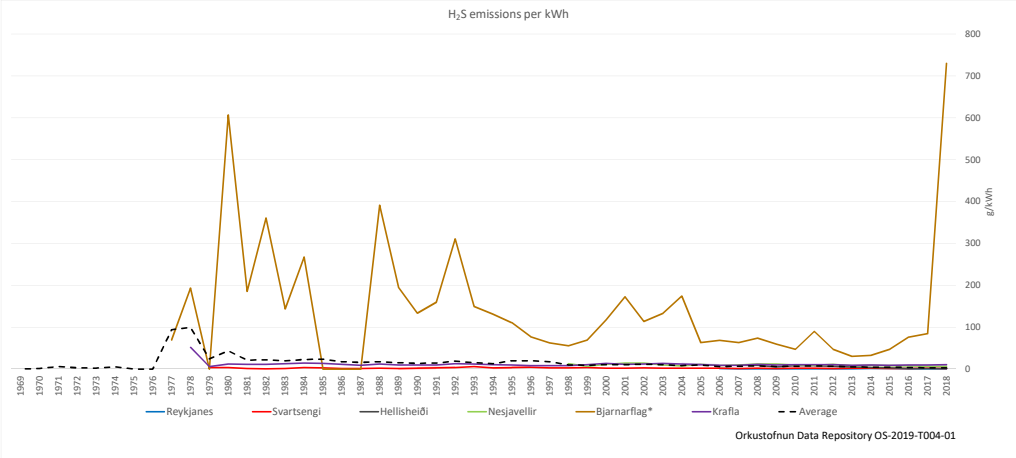

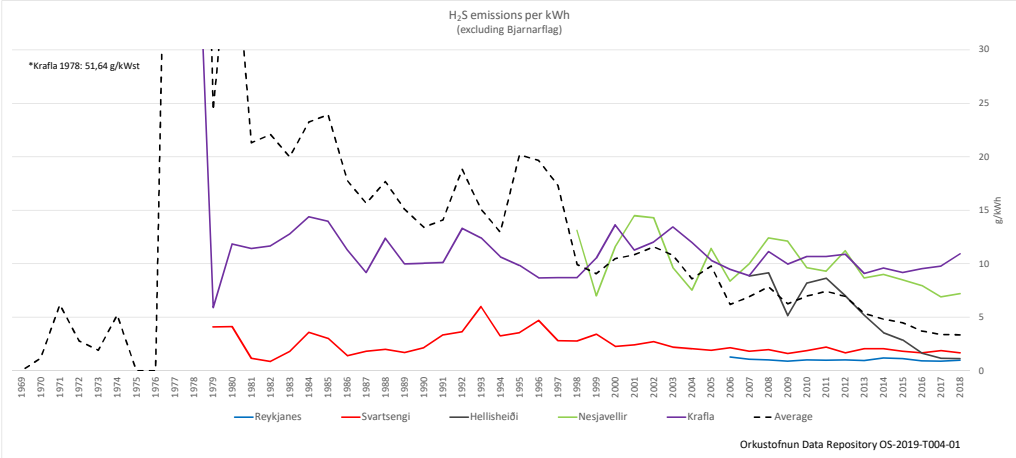
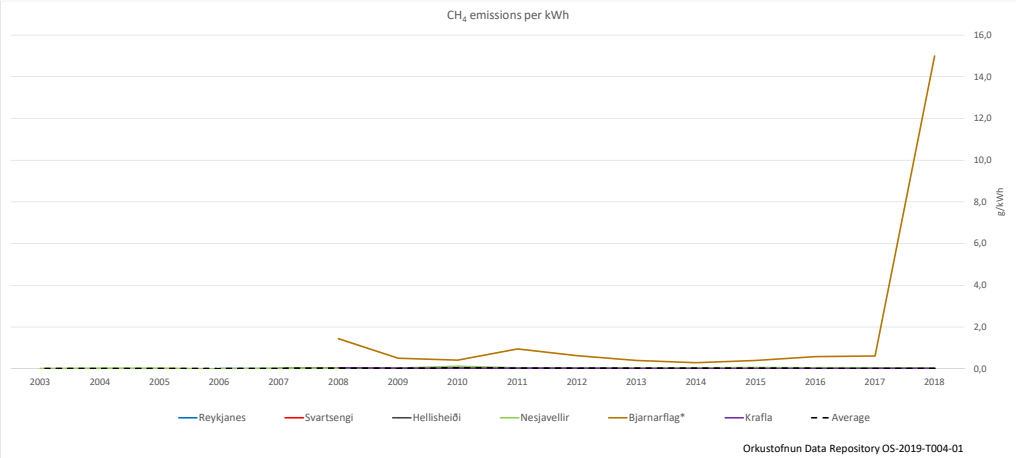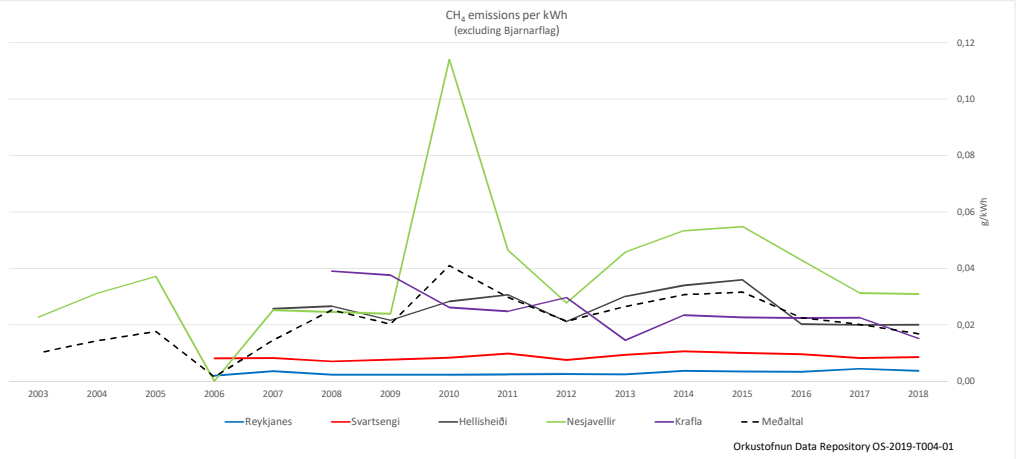
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