

# Reykjavík Energy

## 2023 Annual Report

### Appendices



Emissions of carbon dioxide & hydrogen sulphide and emission intensity from Hellisheidi and Nesjavellir



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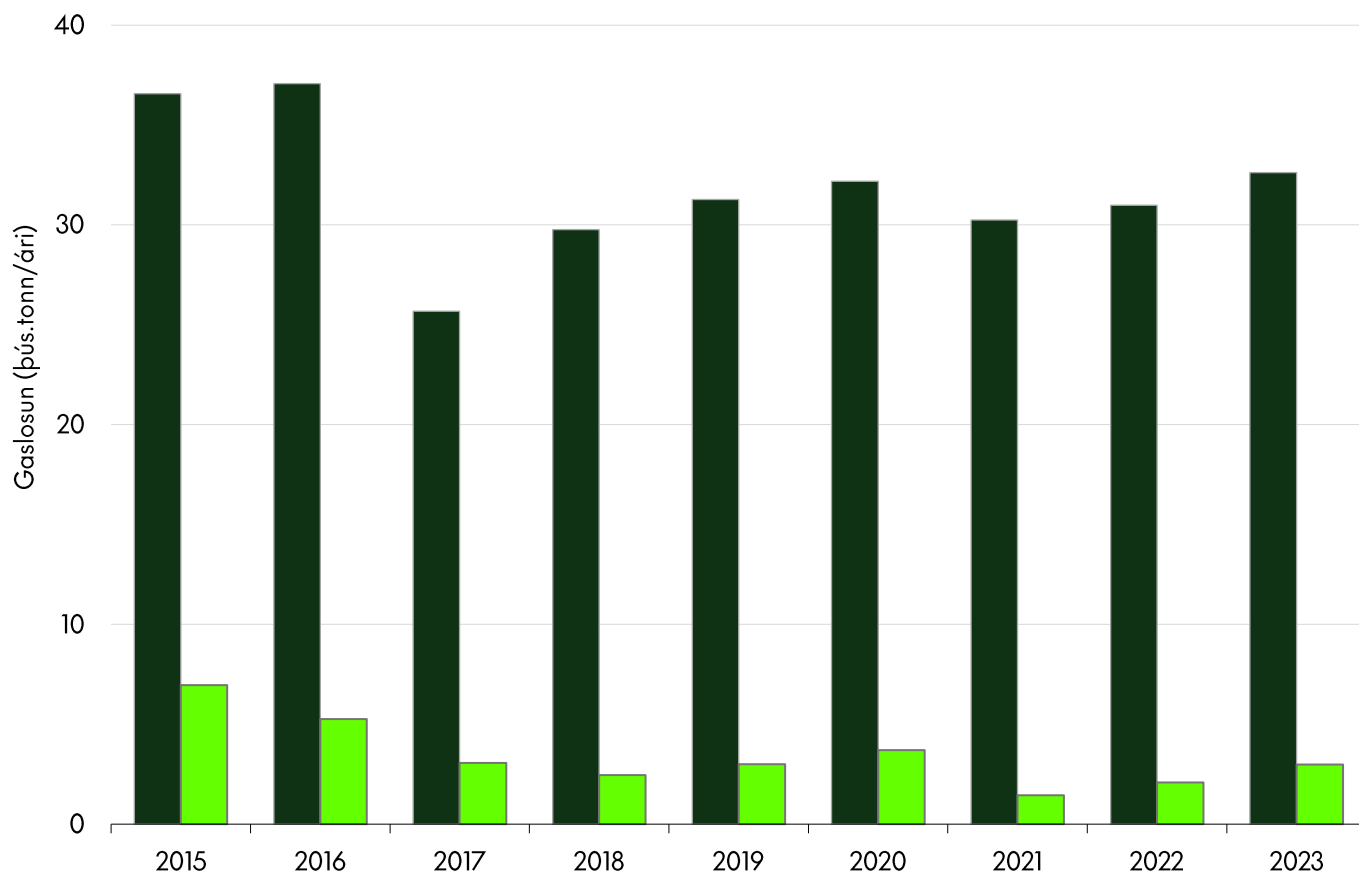
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Cover photo: Íris Eva Einarsdóttir

# Emissions of carbon dioxide (CO<sub>2</sub>), hydrogen sulphide (H<sub>2</sub>S), methane (CH<sub>4</sub>) and hydrogen (H<sub>2</sub>) from Hellisheidi & Nesjavellir 2015-2023

The emissions uncertainty is +/- 12% compared to the 95% uncertainty range.

## Hellisheidi



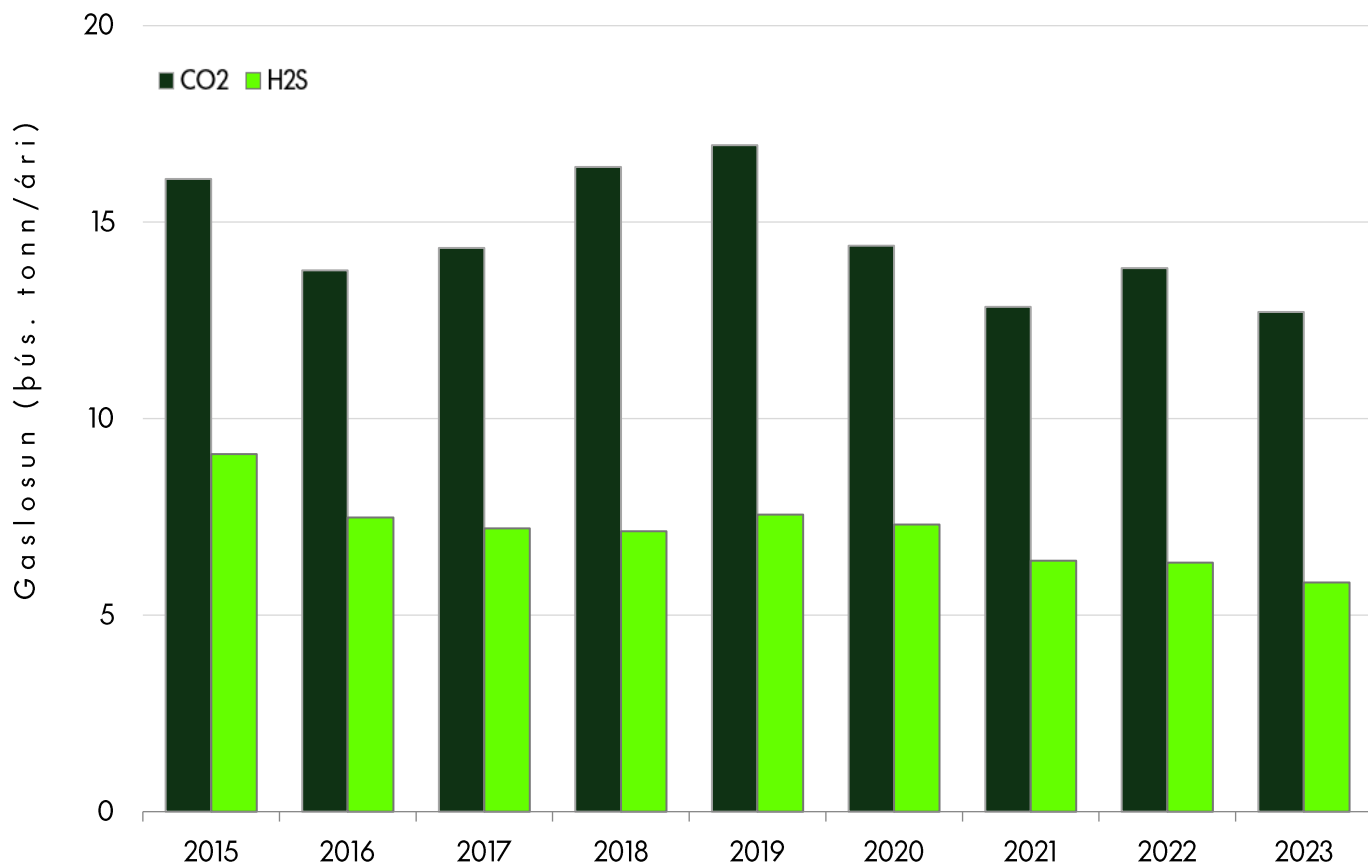
Year	CO <sub>2</sub> tons/yr	H <sub>2</sub> S tons/yr	H <sub>2</sub> tons/yr	CH <sub>4</sub> tons/yr
2015	36,600	7,000	380	70
2016	37,100	5,300	380	80
2017	25,700	3,100	330	50
2018	29,800	2,500	360	60
2019	31,300	3,000	340	50
2020	32,200	3,700	340	70
2021	30,300	1,400	340	70
2022	31,000	2,100	330	70
2023	32,600	3,000	340	80

Commentary 2023:

1) CO<sub>2</sub> and H<sub>2</sub>S dissolved and reinjected in condensate water subtracted. First done in 2015.

2) Approx. 10,600 tons of CO<sub>2</sub> and 5,400 tons of H<sub>2</sub>S were reinjected to the geothermal reservoir.

# Nesjavellir



Year	CO2 tons/yr	H2S tons/yr	H2 tons/yr	CH4 tons/yr
2015	16,100	9,100	490	50
2016	13,800	7,500	380	40
2017	14,300	7,200	370	30
2018	16,400	7,100	380	40
2019	17,000	7,600	390	40
2020	14,400	7,300	390	40
2021	12,800	6,400	360	40
2022	13,800	6,300	360	50
2023	12,700	5,800	380	50

Commentary 2023:

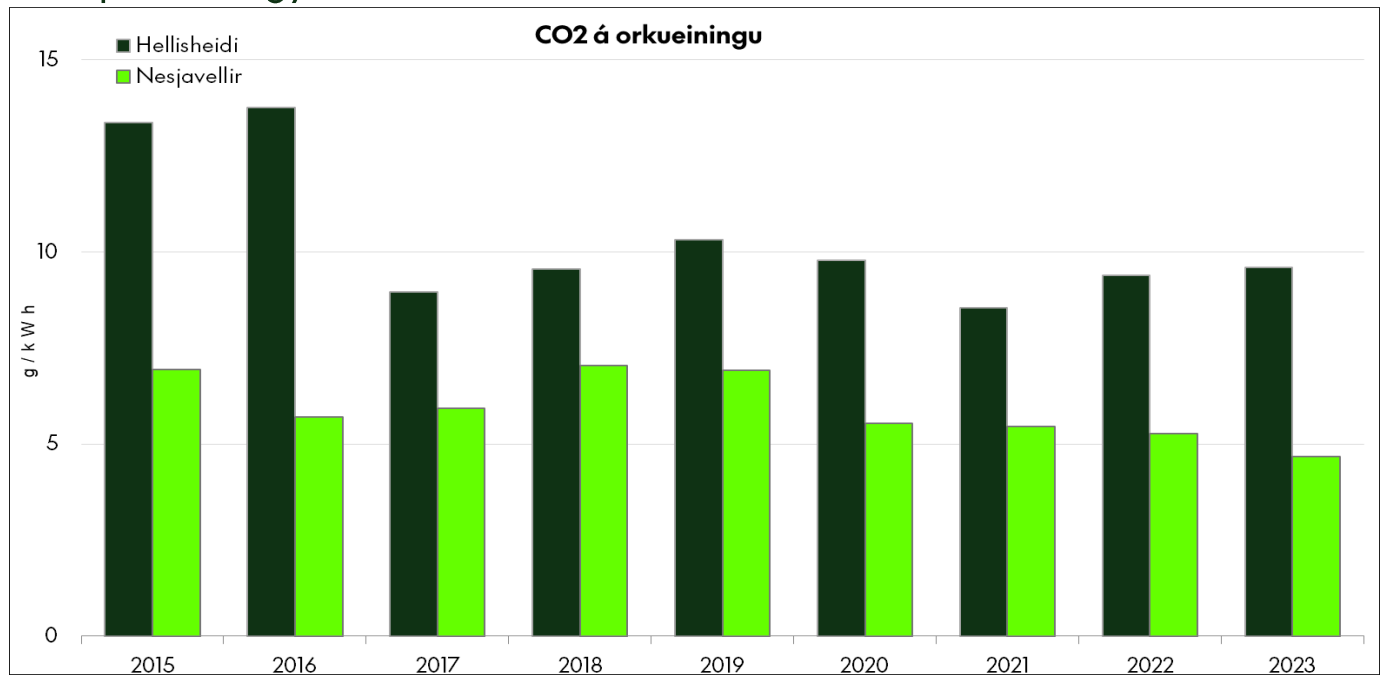
1) CO<sub>2</sub> and H<sub>2</sub>S dissolved and reinjected in condensate water subtracted. First done in 2023.

2) Approx. 1,300 tons of CO<sub>2</sub> and 500 tons of H<sub>2</sub>S were reinjected to the geothermal reservoir.

# Emissions of hydrogen sulphide and carbon dioxide per unit of energy from Hellisheidi and Nesjavellir power plants 2015-2023

There are substantial differences in emissions from the power plants, which can be attributed to, among other things, variable gas quantities and concentrations between fields and years.

## CO<sub>2</sub> per energy unit



## H<sub>2</sub>S per energy unit

