

## Environmental data – Reykjavik Energy Group 2015-2017

The following table provides an overview of Reykjavik Energy Group's (OR Group) greenhouse gas emissions in 2015 to 2017, as well as other information on environmental data like energy consumption, waste and other performance figures.

KEY PERFORMANCE INDICATOR	UNIT	2015	2016	2017
<b>Greenhouse gas emissions</b>				
Scope 1 <sup>1</sup>	t CO <sub>2</sub> e	52,045	43,866	40,320
Scope 2 (market-based) <sup>2,3,7</sup>	-	18,794	0	0
Scope 2 (location-based)	-	3,310	2,896	2,766
Scope 3 <sup>4</sup>	-	646	837	992
<b>CARBON FOOTPRINT</b>	<b>t CO<sub>2</sub>e</b>	<b>71,485</b>	<b>47,599</b>	<b>44,079</b>
Mitigation by land restoration	t CO <sub>2</sub> e	-4,768	-4,815	-4,874
Carbon footprint reduced by mitigation projects	t CO <sub>2</sub> e	66,717	42,784	39,205
<b>Carbon intensity</b>				
Carbon intensity per unit of revenue	tCO <sub>2</sub> e/ISK billion	1,774	1,150	1,002
Carbon intensity per unit of premises	tCO <sub>2</sub> e/thous.m <sup>3</sup>	92	61	57
Carbon intensity per unit of produced electricity and distributed electricity	g CO <sub>2</sub> e/kWh	10.4	8.9	8.1
Carbon intensity per unit of produced hot water	g CO <sub>2</sub> e/kWh	3.7	3.1	2.8
Resulting pollutants of the electricity system (Indexes from Orkustofnun) <sup>5</sup>	g CO <sub>2</sub> e/kWh	157.73	460.27	460.27
<b>Energy use</b>				
Total energy consumption	kWh	355,718,949	356,365,291	387,841,246
There of fossil fuel	kWh	2,594,769	2,703,691	2,633,346
There of electricity	kWh	310,743,000	319,432,000	332,416,800
There of hot water	kWh	42,381,180	34,229,600	52,791,100
Percentage of renewable energy	%	99	99	99
Electrical Guaranties of origin (GoOs) own use	kWh	119,152,610	0	0
There of ON Power (cancelled GoOs)	-	0	0	0
There of OR's waterworks and wastewater	-	18,598,000	0	0
There of Veitur Utilities	-	56,928,000	0	0
There of Reykjavik Fibre Networks	-	835,000	0	0
There of losses in distribution system (DSOs)	-	42,791,610	0	0
<b>Hot and cold water</b>				
Total hot and cold water consumption	m <sup>3</sup>	38,853,421	36,650,707	40,940,908
There of cold water	-	38,116,357	36,059,524	40,569,453
There of hot water	-	737,064	591,183	371,455
<b>Waste</b>				
Total waste generated annually	kg	1,028,761	1,415,386	1,777,413
There of waste for landfill diversion	-	815,240	1,141,450	1,472,340
There of recycled waste	-	204,370	261,990	280,639
Rate of recycled waste	%	20	18	16
Rate of hazardous waste	%	1	1	1
Rate of waste for landfill diversion	%	79	81	83
<b>Office paper consumption</b>				
Total paper consumption (offices))	#sheets	588,213	631,379	457,203
There of colour printing	-	-	-	268,750
There of black/white printing	-	-	-	188,453
There of double-sided printing	-	-	-	-
Total paper consumption (bills)	#sheets	998,248	717,698	614,885
Envelopes (bills)	#envelopes	512,439	362,754	305,536
<b>More information from operations</b>				
Fuel carbon tax paid annually	ISK	1,202,332	1,300,643	1,841,388

KEY PERFORMANCE INDICATOR	UNIT	2015	2016	2017
Revenue	ISK billion	40.3	41.4	44.0
Full-time employee	#	458	495	509
Premises	thousand m <sup>3</sup>	780	780	780
There of space with LED	%	-	12	23
Total production of water	m <sup>3</sup>	113,913,000	112,151,000	113,662,000
There of cold water	-	26,914,000	27,803,000	27,129,000
There of hot water from geothermal power plants	-	38,042,000	35,893,000	37,293,000
There of hot water from low temperature fields	-	48,957,000	48,455,000	49,240,000
Total production of energy	kWh	8,251,692,500	8,294,859,200	8,492,034,000
There of electricity production	-	3,249,250,000	3,411,110,000	3,473,120,000
There of hot water from geothermal power plants	-	2,187,415,000	2,078,204,700	2,162,994,000
There of hot water from low temperature fields	-	2,815,027,500	2,805,544,500	2,855,920,000
Electrical guarantees of origin (GoOs) <sup>5,7</sup>	kWh	2,984,168,000	2,468,524,000	2,457,897,000
There of issued GoOs	-	3,004,820,000	3,152,754,000	3,142,127,000
There of cancelled GoOs (i) <sup>6</sup>	-	-20,652,000	-141,962,000	-141,962,000
There of cancelled GoOs (ii) <sup>6</sup>	-	0	-542,268,000	-542,268,000
Own cars and rented vehicles	#cars	169	177	192
There of electricity	-	12	21	23
There of plug-in hybrid	-	2	2	4
There of hybrid	-	19	19	13
There of methane	-	17	19	25

## BREAKDOWN OF DATA

### Scope 1

Scope 1, total emissions	t CO <sub>2</sub> e	52,045	43,866	40,320
Emissions from production	-	51,556	43,360	39,834
Emissions from fuel consumption	-	489	506	486
Fuel consumption of automobiles	l	212,686	221,614	215,848
There of methane	m <sup>3</sup>	8,968	12,282	18,934
There of petrol	l	26,635	22,686	16,192
There of diesel	l	177,083	186,646	180,720

### Scope 2

Scope 2. Emissions from electrical guarantees of origin	t CO <sub>2</sub> e	18,794	0	0
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### Scope 3

Scope 3, total emissions	t CO <sub>2</sub> e	646	837	992
There emissions from waste	-	473	666	818
There of emissions due to employee's air travel	-	70	64	69
There of emissions due to employee commuting to and from work <sup>8</sup>	-	103	107	105

### Mitigation projects<sup>9</sup>

CO <sub>2</sub> sequestration by land restoration	t CO <sub>2</sub> e	-4,768	-4,815	-4,874
There of land reclamation	-	-1,202	-1,249	-1,268
There of forestry	-	-3,626	-3,626	-3,626
There of reclamation of wetlands	-	60	60	20

<sup>1</sup>Scope 1 or direct emissions from the Reykjavik Energy Group's operations. The emissions are from the geothermal power plants of ON Power, Reykjavik Energy's subsidiary, due to the production of electricity and hot water, the production of hot water in the low-temperature fields of Veitur Utilities for space heating, as well as Veitur Utilities' pipeline system and from the car fleet and premises of the Group.

<sup>2</sup>Scope 2, indirect emissions from purchased electricity and heating for own use.

<sup>3</sup>Cancelled GoOs for Reykjavik Energy Group in 2016 and 2017, but not for Veitur Utilities, OR Group and Reykjavik Fibre Networks 2015.

<sup>4</sup>Scope 3, indirect emissions from waste as well as emission from employees commuting to and from work and their air travel.

<sup>5</sup>Electrical Guaranties of origin (GoOs) in Iceland on Orkustofnun's web, <https://orkustofnun.is/yfirflokkur/raforkunotandinn/uppruni-raforku/>.

<sup>6</sup>Electrical Guaranties of origin (GoOs) in Iceland for 2017 will be published in mid-2018, the same number is therefore used for 2016 and 2017.

<sup>7</sup>European Energy Certificate System – Guarantee of Origin,

<sup>8</sup>Based on 223 working days per year, and that employee's passenger cars emit on average 128 g CO<sub>2</sub>/km.

<sup>9</sup>Landreclamation: Sequestration of 2.75 t CO<sub>2</sub>e per hectare per year. Forestry: Sequestration of 4.4 t CO<sub>2</sub>e per hectare per year and 2,000 trees per hectare. Reclaimed wetlands: As a result of reclaiming wetlands emissions is reduced by 20 t CO<sub>2</sub>e per hectare per year.