

## Important information

Emissions figures reported are estimations at the time of publication, and any restatements in prior years are made to report actual results after the date of publication.

Information relating to FY2018 performance does not include Lattice Energy, due to completing the sale of Lattice Energy to Beach Energy on 31 January 2019, with an economic effective date of 1 July 2017.

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# FY2020 Sustainability performance data



## Generation portfolio

Year ended 30 June 2020	Nameplate plant capacity (MWh)	Type <sup>1</sup>	Electricity output (GWh) <sup>2</sup>	Pool revenue (\$m)	Pool revenue (\$/MWh)
Earing					
Units 1-4	2,880	Black coal	13,634	1,065	79
GT	42	OCGT	-	-	-
Darling Downs					
Osborne <sup>3</sup>	180	CCGT	703	58	93
Uranquinty	664	OCGT	422	75	125
Mortlake	566	OCGT	932	91	106
Mount Stuart	423	OCGT	4	-	103
Quarantine	230	OCGT	188	29	153
Ladbroke Grove	80	OCGT	155	19	123
Roma	80	OCGT	17	2	109
Shoalhaven	240	Pump/Hydro	156	26	135
<b>Internal generation</b>	<b>6,029</b>		<b>18,279</b>	<b>1,495</b>	<b>82</b>
Pelican Point					
	240	CCGT	1,317		
Renewable PPAs					
	1,207	Solar/Wind	2,871		
<b>Owned and contracted generation</b>	<b>7,476</b>		<b>22,467</b>		

1 OCGT = Open cycle gas turbine; CCGT = Combined cycle gas turbine.

2 Electricity output is measured at the node.

3 Origin has 50 per cent interest in the 180 MW Osborne plant and contracts 100 per cent of the output.

## People and culture

	FY2020			FY2019			FY2018		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
<b>Employee information<sup>4</sup></b>									
<b>GRI 102-8</b>									
Employees	1,851	3,362	<b>5,232</b>	1,965	3,379	<b>5,360</b>	2,088	3,477	<b>5,565</b>
Employees (%)	35%	64%		37%	63%		38%	62%	
Contractors	111	249	<b>397</b>	124	278	<b>430</b>	181	352	<b>533</b>
Contractors (%)	28%	63%		29%	65%		34%	66%	
<b>Employees by employment contract and gender</b>									
Ongoing	1,748	3,256	<b>5,020</b>	1,865	3,271	<b>5,150</b>	1,976	3,373	<b>5,349</b>
Ongoing (%)	35%	65%		36%	64%		37%	63%	
Limited term	103	103	<b>209</b>	98	104	<b>204</b>	107	98	<b>205</b>
Limited term (%)	49%	49%		48%	51%		52%	48%	
Casual	0	3	<b>3</b>	2	4	<b>6</b>	5	6	<b>11</b>
Casual (%)	-	100%		33%	67%		45%	55%	
<b>Total</b>	<b>1,851</b>	<b>3,362</b>	<b>5,232</b>	<b>1,965</b>	<b>3,379</b>	<b>5,360</b>	<b>2,088</b>	<b>3,477</b>	<b>5,565</b>
<b>Employees by employment type and gender (ongoing)</b>									
Full time	1,418	3,121	<b>4,554</b>	1,516	3,197	<b>4,725</b>	1,637	3,298	<b>4,935</b>
Full time (%)	31%	69%		32%	68%		33%	67%	
Part time	330	135	<b>466</b>	349	74	<b>425</b>	339	75	<b>414</b>
Part time (%)	71%	29%		82%	17%		82%	18%	
<b>Total</b>	<b>1,748</b>	<b>3,256</b>	<b>5,020</b>	<b>1,865</b>	<b>3,271</b>	<b>5,150</b>	<b>1,976</b>	<b>3,373</b>	<b>5,349</b>
<b>Employees by region and gender</b>									
Australian Capital Territory	1	2	<b>4</b>	1	5	<b>6</b>	1	4	<b>5</b>
Australian Capital Territory (%)	25%	50%		17%	83%		20%	80%	
New South Wales	215	646	<b>867</b>	210	639	<b>852</b>	226	649	<b>875</b>
New South Wales (%)	25%	75%		25%	75%		26%	74%	
Northern Territory	0	11	<b>12</b>	1	11	<b>12</b>	1	8	<b>9</b>
Northern Territory (%)	-	92%		8%	92%		11%	89%	
Queensland	478	1,187	<b>1,667</b>	422	1,163	<b>1,586</b>	440	1,204	<b>1,644</b>
Queensland (%)	29%	71%		27%	73%		27%	73%	
South Australia	287	268	<b>557</b>	438	334	<b>773</b>	477	349	<b>826</b>
South Australia (%)	52%	48%		57%	43%		58%	42%	
Tasmania	14	23	<b>37</b>	15	23	<b>38</b>	14	26	<b>40</b>
Tasmania (%)	38%	62%		39%	61%		35%	65%	
Victoria	771	883	<b>1,661</b>	800	871	<b>1,682</b>	854	923	<b>1,777</b>
Victoria (%)	46%	53%		48%	52%		48%	52%	
Western Australia	4	19	<b>23</b>	2	21	<b>23</b>	3	21	<b>24</b>
Western Australia (%)	17%	83%		9%	91%		13%	88%	
LPG Pacific	80	322	<b>403</b>	75	312	<b>387</b>	71	292	<b>363</b>
LPG Pacific (%)	20%	80%		19%	81%		20%	80%	
Other International	1	0	<b>1</b>	1	0	<b>1</b>	1	1	<b>2</b>
Other International (%)	100%	-		100%	-		50%	50%	
<b>Total</b>	<b>1,851</b>	<b>3,362</b>	<b>5,232</b>	<b>1,965</b>	<b>3,379</b>	<b>5,360</b>	<b>2,088</b>	<b>3,477</b>	<b>5,565</b>

4 The difference between our employment number and the gender split is represented by unspecified gender.

## People and culture (continued)

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Employ local</b>					
Total number of employees from the local community	180	162	155	192	168
<b>Gender diversity</b>					
<b>GRI 405-2</b>					
Overall gap between average female and male fixed remuneration within each Job Grade (percentage points) <sup>5</sup>	1.3	0.8	1.4	0.8	0.7
Rate of appointment of women to senior roles (%)	51.7%	31.5%	31.5%	38.7%	28.6%
Rate of turnover of women in senior roles <sup>6</sup> (%)	13.0%	20.7%	16.6%	17.0%	31.0%
Overall gap between female and male turnover in senior roles (percentage points) <sup>7</sup>	5.3	-6.3	0.2	6.6	2.4
<b>Indigenous employees</b>					
Number of Aboriginal and Torres Strait Islander people (voluntarily self-identified) in our workforce	46	41	35	17	0
<b>Employee engagement</b>					
Employee engagement score <sup>8</sup> (%)	75%	61%	61%	58%	53%
Employee participation in employee engagement survey (%)	91%	86%	88%	85%	87%
<b>Ethical business</b>					
<b>GRI 205-2</b>					
Completion rate for compliance with Code of Conduct training (%)	99%	99%	98%	99%	98%
Completion rate for required employees in high-risk roles completed Code of Conduct training (%)	98%	99%	98%	99%	98%
<b>GRI 205-3</b>					
Reported incidents of bribery or corruption <sup>9</sup>	-	1	-	-	-
<b>Industrial relations</b>					
<b>GRI 102-41</b>					
Number of Collective Bargaining Agreements across the business as at the end of the period	27	27	27	29	27
Hours of lost time due to industrial disputes	-	-	-	-	-

5 Based on the population-weighted average fixed remuneration for each gender at each job grade, where grade represents a proxy for equal work. Figures may vary with those quoted previously which were measured on a preliminary basis prior to the annual review process.

6 12-month rolling average as at 30 June 2020.

7 The gap is the percentage point difference between male and female turnover, measured as percentage over the previous 12 months. A negative gap is favourable to female. Please note that these figures may be at variance with those quoted elsewhere in which turnover represents monthly June figures annualised, rather than a 12-month average for the financial year.

8 Kincentric's methodology.

9 FY2019 incident has been included in our reporting due to the broad definition of 'corruption' in the GRI Standards that includes fraud, in this case fraud by an individual employee.

## Safety

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Managing personal safety</b>					
<b>GRI 403-9</b>					
Actual Serious (or above) Incidents <sup>10</sup>	3	9	N/A	N/A	N/A
Potential Serious (or above) Incidents <sup>11</sup>	69	38	N/A	N/A	N/A
Total Recordable Injury Frequency Rate (TRIFR) <sup>12</sup>	2.6	4.4	2.2	3.2	4.2
TRIFR – employees	1.8	2.9	2.1	N/A	N/A
TRIFR – contractors	3.5	6.4	2.4	N/A	N/A
Lost Time Injury Frequency Rate (LTIFR)	0.8	1.1	0.5	0.8	0.8
Significant Incidents	15	16	18	N/A	N/A
Number of fatalities <sup>13</sup>	-	-	-	-	-
<b>Environment</b>					
Number of environmental incidents that resulted in an actual consequence of a moderate short-term impact to the environment (or above)	2	-	-	-	-
<b>Land and air transport</b>					
Land transport incidents	2	1	3	2	-
Significant aviation incidents	-	-	-	-	-

## Process safety

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Process safety</b>					
Process safety events <sup>14</sup> with potential consequence of significant or above, of which:	12	8	12	10	9
Tier 1	3	-	3	1	4
Tier 2	9	8	9	9	5

10 Metric introduced in FY2019 and includes incidents with a risk consequence outcome of 3-Serious Actual (or above) on the Origin Risk Matrix.

11 Metric introduced in FY2019 and includes incidents with a risk consequence outcome of 4-Major Potential (or above) on the Origin Risk Matrix. Note: Excludes incidents meeting the Actual Serious Consequence metric definition.

12 Rolling 12-month average.

13 Includes contractors.

14 FY2018 results onwards include all incidents that resulted in Tier 1 or Tier 2 events as per the IOGP Process Safety Recommended Practice on Key Performance Indicators, Report No. 456. Disclosures for prior years only include Tier 1 and 2 events that resulted in an outcome of serious and above.

## Emissions

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Greenhouse gas (GHG) emissions</b>					
<b>GRI 305-1</b>					
<b>Direct GHG emissions (Scope 1) (kt CO<sub>2</sub>-e)</b>					
<b>Total Scope 1 emissions operational control basis</b>	<b>16,065</b>	<b>17,976</b>	<b>18,162</b>	<b>17,293</b>	<b>16,977</b>
Energy Markets, of which:	15,321	17,067	17,189	15,717	15,593
Eraring	13,220	15,444	14,898	12,896	12,913
Generation (excluding Eraring)	2,032	1,563	2,234	2,767	2,617
LPG	58	49	44	40	48
Cogent	11	12	12	14	14
Integrated Gas, of which:	743	908	973	1,577	1,382
Australia Pacific LNG <sup>14</sup>	740	908	972	1,040	763
Exploration and production	3	0	1	536	620
Corporate	0	0	0	-	2
<b>Total Scope 1 emissions equity basis</b>	<b>16,600</b>	<b>18,430</b>	<b>18,681</b>	<b>17,792</b>	<b>17,667</b>
Energy Markets, of which:	15,470	17,227	17,460	15,914	16,079
Eraring	13,220	15,444	14,898	12,896	12,913
Generation (excluding Eraring)	2,032	1,562	2,234	2,767	2,617
JV Generation	149	160	271	197	486
LPG	58	49	44	40	48
Cogent	11	12	12	14	14
Integrated Gas, of which:	1,130	1,203	1,221	1,877	1,478
Australia Pacific LNG <sup>16</sup>	1,127	1,203	1,220	1,149	686
Exploration and production (Australia)	3	0	1	661	718
Exploration and production (New Zealand)	-	-	-	67	74
Corporate	0	0	0	-	2
<b>GRI 305-2</b>					
<b>Indirect GHG emissions (Scope 2) (kt CO<sub>2</sub>-e)</b>					
<b>Total Scope 2 emissions operational control basis</b>	<b>2,403</b>	<b>2,289</b>	<b>2,090</b>	<b>1,818</b>	<b>1,265</b>
Energy Markets	277	289	160	184	239
Integrated Gas	2,121	1,994	1,922	1,634	1,026
Corporate	5	6	7	-	-
<b>Total Scope 2 emissions equity basis</b>	<b>1,212</b>	<b>1,188</b>	<b>1,028</b>	<b>945</b>	<b>777</b>
Energy Markets	277	289	160	184	239
Integrated Gas	930	893	861	743	537
Corporate	5	6	7	-	-
<b>GRI 305-3</b>					
<b>Other indirect GHG emissions (Scope 3) (kt CO<sub>2</sub>-e)<sup>16</sup></b>					
<b>Total Scope 3 emissions</b>					
Energy Markets	17,295	20,090	20,805	23,323	N/A
Integrated Gas	3,615	3,768	3,946	4,128	N/A

15 Australia Pacific LNG facilities where Origin is the operator.

16 Includes Origin's 37.5% share of Australia Pacific LNG's emissions in both upstream and downstream operations.

17 Other indirect GHG emissions (Scope 3) numbers are based on equity basis. Does not include Australia Pacific LNG's exported LNG volumes, LPG or corporate emissions.

**Emissions (continued)**

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>GRI 305-4</b>					
<b>GHG emissions intensity (Scope 1 and Scope 2)</b>					
GHG emissions intensity operational control basis					
Owned generation (t CO <sub>2</sub> -e/MWh)	0.86	0.87	0.84	0.79	0.82
Owned and contracted generation (t CO <sub>2</sub> -e/MWh)	0.69	0.72	0.71	0.70	0.73
Upstream oil, gas and LNG (t CO <sub>2</sub> -e/TJ)	4.86	5.10	5.17	5.61	6.17
GHG emissions intensity equity basis					
Owned generation (t CO <sub>2</sub> -e/MWh)	0.85	0.86	0.83	0.78	0.78
Owned and contracted generation (t CO <sub>2</sub> -e/MWh)	0.72	0.74	0.74	0.70	0.72
Upstream oil, gas and LNG (t CO <sub>2</sub> -e/TJ)	7.76	8.1	8.1	8.8	9.1
<b>GHG emissions intensity (Scope 1 and Scope 3) – Energy Markets</b>					
Origin's emissions intensity from owned electricity generation (S1 + S3) operational control basis (t CO <sub>2</sub> -e/MWh)	0.90	0.90	0.89	0.84	0.86
Origin emissions intensity from owned and contracted electricity generation (S1 + S3) operational control basis (t CO <sub>2</sub> -e/MWh)	0.75	0.78	0.76	0.74	0.77
NEM average intensity during the period (t CO <sub>2</sub> -e/MWh)	0.72	0.77	0.82	0.88	0.90
<b>Fugitive emissions<sup>18</sup></b>					
<b>Fugitive emissions from gas operations (kt CO<sub>2</sub>-e)</b>					
Flaring	74	171	283	489	280
Venting	203	266	206	427	493
Leaks	22	21	16	28	22
<b>Other air emissions</b>					
<b>GRI 305-7</b>					
<b>NOx, SOx, and other significant air emissions (tonnes)</b>					
<b>Total oxides of nitrogen (NOx) emissions</b>					
Energy Markets	21,461	24,751	23,497	21,093	20,213
Integrated Gas	2,873	3,038	3,267	3,892	3,619
<b>Total sulphur oxides (SOx) emissions</b>					
Energy Markets	39,092	45,084	39,326	30,558	28,396
Integrated Gas	3	3	3	16	21
<b>Volatile organic compounds (VOC) emissions</b>					
Energy Markets	223	252	253	252	243
Integrated Gas	478	770	660	1,440	2,730
<b>Particulate matter (PM<sub>10</sub>) emissions</b>					
Eraring	177	225	245	340	350
<b>Particulate matter (PM<sub>2.5</sub>) emissions</b>					
	105	121	131	150	180

<sup>18</sup> Includes emissions from flaring, venting and leaks calculated using regulatory methods outlined for the National Greenhouse Emissions Reporting Scheme and New Zealand Emissions Trading Scheme (NGERS). These emissions are included in Origin's Scope 1 emissions.

## Water

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Water withdrawals</b>					
<b>GRI 303-3</b>					
<b>Water withdrawn by source (ML)<sup>19</sup></b>					
<b>Total water withdrawn</b>	<b>2,592,868</b>	<b>2,782,705</b>	<b>2,871,451</b>	<b>2,625,688</b>	<b>2,741,895</b>
Energy Markets, of which:	<b>2,571,219</b>	<b>2,760,807</b>	<b>2,848,852</b>	<b>2,600,363</b>	<b>2,717,621</b>
Eraring	2,571,087	2,760,732	2,848,748	2,594,661	2,711,933
Shoalhaven	-	-	-	5,556	5,543
Energy Markets (ex. Eraring and Shoalhaven)	132	75	104	146	145
Integrated Gas, of which:	<b>21,628</b>	<b>21,885</b>	<b>22,549</b>	<b>25,257</b>	<b>24,202</b>
LNG	21,628	21,885	22,432	25,118	23,859
Exploration and production	-	-	117	139	343
Corporate	21	13	50	69	72
<b>Surface water withdrawn</b>	<b>2,569,213</b>	<b>2,758,868</b>	<b>2,846,595</b>	<b>2,599,510</b>	<b>2,716,662</b>
Energy Markets, of which:	<b>2,569,083</b>	<b>2,758,795</b>	<b>2,846,491</b>	<b>2,599,392</b>	<b>2,716,559</b>
Eraring	2,569,083	2,758,795	2,846,491	2,593,836	2,711,016
Shoalhaven	-	-	-	5,556	5,543
Integrated Gas, of which:	<b>130</b>	<b>73</b>	<b>104</b>	<b>118</b>	<b>103</b>
LNG	130	73	104	118	103
Exploration and production	-	-	-	-	-
<b>Groundwater withdrawn</b>	<b>21,646</b>	<b>21,851</b>	<b>22,377</b>	<b>25,195</b>	<b>23,898</b>
Energy Markets, of which:	<b>97</b>	<b>47</b>	<b>49</b>	<b>84</b>	<b>87</b>
Eraring	-	-	-	-	-
Energy Markets (ex. Eraring)	97	47	49	84	87
Integrated Gas, of which:	<b>21,549</b>	<b>21,804</b>	<b>22,328</b>	<b>25,111</b>	<b>23,811</b>
LNG	21,508	21,804	22,328	24,999	23,691
Exploration and production	41	-	-	112	120
<b>Municipal water withdrawn</b>	<b>1,048</b>	<b>1,092</b>	<b>1,709</b>	<b>257</b>	<b>312</b>
Energy Markets, of which:	<b>1,027</b>	<b>1,071</b>	<b>1,656</b>	<b>169</b>	<b>161</b>
Eraring	999	1,044	1,609	107	107
Energy Markets (ex. Eraring)	29	27	47	62	54
Integrated Gas, of which:	<b>0</b>	<b>8</b>	<b>3</b>	<b>19</b>	<b>79</b>
LNG	0	8	-	1	65
Exploration and production	-	-	3	18	14
Corporate	21	13	50	69	72
<b>Rainwater withdrawn</b>	<b>0</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>2</b>
Energy Markets, of which:	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0</b>
Eraring	-	-	-	-	-
Energy Markets (ex. Eraring)	0	-	-	-	0
Integrated Gas, of which:	<b>0</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>2</b>
LNG	0	-	-	-	0
Exploration and production	-	-	2	2	2

<sup>19</sup> Shoalhaven is excluded from above water table as pumped storage is not considered a water withdrawal as the water circulates in a closed loop.

**Water (continued)**

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Waste water withdrawn</b>	<b>1,012</b>	<b>893</b>	<b>656</b>	<b>718</b>	<b>813</b>
Energy Markets, of which:	1,012	893	656	718	813
Eraring	1,006	893	648	718	810
Energy Markets (ex. Eraring)	6	-	8	-	3
<b>Cooling water</b>					
Volume of water returned to Lake Macquarie	2,569,083	2,758,795	2,846,491	2,593,836	2,711,016
Reportable non-compliances with Eraring water licence conditions	-	-	-	1	1
<b>Protection of water resources</b>					
Reported incidents of aquifer connection	-	-	1	-	1
<b>Hydraulic fracture stimulation (HFS) (LNG)</b>					
Total number of wells drilled by the Australia Pacific LNG project during the period	271	251	290	238	300
Completed wells requiring HFS	76	91	79	12	1
Reportable groundwater related incidents caused by Origin's HFS activities	-	-	-	-	-
<b>Making good on water impacts</b>					
Groundwater monitoring bores installed by Australia Pacific LNG as at the end of the period	206	216	211	211	141
<b>Contributing to water availability to other users (LNG)</b>					
Volume of produced CSG water (ML)	21,246	21,649	22,216	24,919	23,544
<b>Total volume of CSG water treated during the period to specified quality standards</b>	<b>17,477</b>	<b>17,169</b>	<b>17,929</b>	<b>20,171</b>	<b>19,344</b>
Volume applied to irrigation	12,444	13,044	11,967	12,889	12,379
Volume applied to aquifer injection	4,800	3,973	4,929	6,869	6,319
Volume applied to river releases	-	-	524	69	226
Volume applied to other	233	146	509	343	342
<b>Volume of untreated produced water</b>	<b>1,245</b>	<b>1,785</b>	<b>1,213</b>	<b>1,648</b>	<b>1,193</b>
<b>Total volume of brine (ML) during the period</b>	<b>2,524</b>	<b>2,695</b>	<b>3,074</b>	<b>3,099</b>	<b>2,997</b>

**Waste**

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Eraring ash dam</b>					
<b>GRI 306-3, 306-4, 306-5</b>					
<b>Eraring coal combustion products (CCP)</b>					
<b>CCP produced (tonnes)</b>	<b>1,424,333</b>	<b>1,733,399</b>	<b>1,604,300</b>	<b>1,312,990</b>	<b>1,382,320</b>
CCP recycled (tonnes)	559,710	602,580	477,292	361,839	505,622
CCP deposited (tonnes)	864,623	1,130,819	1,127,000	951,148	876,693
Ratio of CCP recycled (%)	39%	35%	30%	28%	37%
Complaints received regarding waste management	5	2	-	1	1
<b>Australia Pacific LNG loss of containment</b>					
Loss of containment incidents	197	202	278	294	372
Significant loss of containment incidents <sup>20</sup>	-	-	-	-	-

20 Significant loss of containment means incidents with actual environmental consequence of serious or above, as defined in the Glossary.



## Biodiversity impacts

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Biodiversity impacts</b>					
<b>GRI 304-1</b>					
Number of operating sites with a level of biodiversity risk rated as high or above <sup>21</sup>	2	2	4	4	4
Number of biodiversity management plans in place for operating sites with a level of biodiversity risk rated as high or above <sup>21</sup>	1	1	3	3	3
<b>GRI 304-2</b>					
Incidents that materially impacted biodiversity in areas of biodiversity significance <sup>22</sup>	-	-	-	-	-

## Environmental compliance

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Environmental compliance</b>					
<b>Reportable non-compliances, including voluntary notifications, of which:</b>					
Integrated Gas, of which:	31	37	36	134	25
Integrated Gas (excluding Australia Pacific LNG)	22	32	34	129	25
Australia Pacific LNG (Australia Pacific LNG notifiable incidents)	1	2	-	99	-
Energy Markets	8	8	20	30	25
	9	5	2	5	-
<b>GRI 307-1</b>					
<b>Monetary value of significant fines for non-compliances with environmental laws and regulations (\$), of which:</b>					
Integrated Gas, of which:	15,431	15,000	12,615	46,964	11,780
Australia Pacific LNG	-	-	12,615	31,964	11,780
Integrated Gas (excluding Australia Pacific LNG)	-	-	-	7,584	-
Energy Markets	-	-	12,615	24,380	-
	15,431	15,000	-	15,000	-

## Land access and co-existence<sup>23</sup>

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>CSG land agreements</b>					
<b>Land access and compensation agreements concluded during the period, of which:</b>					
Number concluded through negotiation	101	137	144	85	91
Number conducted through alternative dispute resolution	101	137	144	85	91
Number concluded through court resolution	-	-	-	-	-
<b>CSG landholder feedback<sup>24</sup></b>					
Landholder complaints received	33	25	51	32	41
Landholder complaints resolved	20	26	37	24	32
<b>CSG cultural heritage management</b>					
Cultural Heritage Management Plan non-compliances	-	-	-	-	-
Native Title/Indigenous Land Use Agreement non-compliances	-	-	-	-	-

21 Includes operating sites in which biodiversity risk is rated high or above, defined as serious consequence (or above) weighed against level of likelihood. See Glossary for definition of Incident rating serious and above (environmental).

22 Incidents that have resulted in medium to long-term reversible impacts to low risk or listed species, habitats, ecosystems, i.e. consequence rated as serious or above. See Glossary for definition of Incident rating serious and above (environmental).

23 All figures reported under the Land access and co-existence section relate to Australia Pacific LNG operations.

24 Landholders with whom we have negotiated, or are negotiating, a land access and compensation agreement as at the end of the period.

## Communities

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Community Complaints</b>					
<b>Community complaints received, of which:</b>	<b>14</b>	<b>12</b>	<b>86</b>	<b>71</b>	<b>91</b>
Energy Markets	12	10	16	20	8
Integrated Gas, of which:	2	2	70	51	83
LNG	2	2	70	35	48
Exploration and production	-	-	-	16	35
<b>Community complaints resolved, of which:</b>	<b>13</b>	<b>10</b>	<b>71</b>	<b>62</b>	<b>83</b>
Energy Markets	12	8	16	20	8
Integrated Gas, of which:	1	2	55	42	75
LNG	1	2	55	26	44
Exploration and production	-	-	-	16	31

## Procurement

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Increasing Indigenous participation</b>					
Monetary value of total expenditure by Origin as upstream operator of Australia Pacific LNG on goods and services provided by Indigenous businesses (\$)	1,538,426	3,133,084	626,366	574,604	7,817,320

## Customers

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Customer accounts</b>					
<b>Total customer accounts, of which:</b>	<b>4,232,631</b>	<b>4,199,294</b>	<b>4,178,174</b>	<b>4,210,000</b>	<b>4,217,000</b>
Electricity	2,630,582	2,638,738	2,666,468	2,716,000	2,741,000
Natural gas	1,220,050	1,190,835	1,145,206	1,112,000	1,089,000
LPG	362,565	361,937	366,500	382,000	387,000
Broadband customers	20,062	7,784	-	-	-
MyAccount registered users (#)	1,414,143	1,356,096	1,251,626	N/A	N/A
MyAccount registered users (% of total customers)	53.7%	36.0%	32.8%	N/A	N/A
MyAccount active users (% of registered)	59.0%	60.0%	61.9%	N/A	N/A
MyAccount active users (% of total customers)	31.6%	22.0%	20.5%	N/A	N/A
<b>Customer satisfaction</b>					
Strategic NPS	2	-6	-13	-16	-16
Interaction NPS	26.4	24.7	21.7	16.1	12.3
Ombudsman complaints per 1,000 customers	2.7	2.7	2.8	2.5	3.4
Grade of Service (service – care & universal) (%)	66%	78%	68%	N/A	N/A
Digital service interactions (#)	27,873,193	11,228,364	5,758,135	N/A	N/A
Digital service interactions (%)	93%	82%	70%	N/A	N/A
<b>Innovative and low carbon products</b>					
<b>Green energy customer accounts, of which:</b> <sup>25</sup>	<b>117,668</b>	<b>134,734</b>	<b>152,115</b>	<b>184,388</b>	<b>228,840</b>
GreenPower customer accounts	73,899	80,353	84,887	107,204	140,468
Green Gas customer accounts, of which:	43,769	54,381	67,228	77,184	88,372
Natural gas customer accounts	30,167	33,191	40,501	45,935	55,217
LPG customer accounts	13,602	21,190	26,727	31,249	33,155
Capacity of solar PV systems installed during the period (MW)	61	48	43	30	13
Capacity of solar PV systems sold during the period (MW)	68	50	45	39	21
Solar PV systems installed as at the end of the period	106,315	98,446	92,129	87,065	82,765
Electricity customer accounts with solar installations as at the end of the period	491,557	440,828	425,383	422,795	411,266
<b>Energy affordability and hardship</b>					
Customer accounts in <i>Power On</i> hardship program	34,709	44,017	52,807	32,277	23,526
Successful <i>Power On</i> program completions <sup>26</sup>	33,102	48,659	42,107	N/A	N/A
Customers on payment plans	214,824	231,023	36,396	N/A	N/A
<b>Privacy and compliance</b>					
Reportable non-compliance incidents with the Australian Energy Regulator (AER) and Essential Services Commission of Victoria (ESCV)	18	14	6	6	6
Monetary value of penalties relating to non-compliances with the AER and ESCV (\$)	120,000	-	40,000	20,000	-
Wrongful disconnections (reportable) <sup>27</sup>	450	135	139	N/A	N/A

<sup>25</sup> FY2019 Green energy customers have been restated.

<sup>26</sup> *Power On* completion data prior to FY2018 is not available due to a change in Origin's regulatory performance indicator reporting process.

<sup>27</sup> New metric from FY2018.

## Political contributions

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Political contributions</b>					
<b>GRI 415-1</b>					
Total monetary value of payments to political parties as reported to the Australian Electoral Commission (\$)	4,290	110,595	103,574	42,703	133,280

Recipient	Type	Monetary value (\$)	Payment date
<b>FY2020 detailed breakdown of payments to political parties</b>			
Australian Labor Party	Function	800	11/3/2020
Liberal Party of Australia	Function	990	28/11/2019
Australian Labor Party	Function	1,000	5/9/2019
Liberal Party of Australia	Function	1,500	18/7/2019

## Economic value generated and distributed

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Direct economic value generated and distributed (\$m)<sup>28</sup></b>					
<b>GRI 201-1</b>					
<b>Direct economic value generated</b>					
Energy Markets	12,888	14,293	14,344	13,558	11,423
Integrated Gas	269	434	539	549	500
Contact Energy	-	-	-	-	251
Corporate	-	-	-	-	-
<b>Total revenue</b>	<b>13,157</b>	<b>14,727</b>	<b>14,883</b>	<b>14,107</b>	<b>12,174</b>
Interest received	190	234	229	224	222
Gain on dilution/divestment of Origin's interests in subsidiaries/joint ventures	-	-	-	-	-
Net gain on settlement of GenTrader arrangements	-	-	-	-	-
Other	54	26	253	187	41
Share of results of equity accounted investees	608	632	-	-	-
<b>Direct economic value generated</b>	<b>14,009</b>	<b>15,619</b>	<b>15,365</b>	<b>14,518</b>	<b>12,437</b>
<b>Direct economic value distributed</b>					
Net expenses <sup>29</sup>	12,436	12,923	13,610	15,087	11,182
Depreciation and amortisation	509	419	381	477	624
<b>Total operating costs</b>	<b>12,945</b>	<b>13,342</b>	<b>13,991</b>	<b>15,564</b>	<b>11,806</b>
<b>Employee wages and benefits net of taxes</b>	<b>662</b>	<b>664</b>	<b>648</b>	<b>618</b>	<b>691</b>
Interest expense <sup>30</sup>	316	388	500	553	548
Dividends	478	165	2	2	460
<b>Total payments to providers of capital</b>	<b>794</b>	<b>553</b>	<b>502</b>	<b>555</b>	<b>1,008</b>
Community investments	4	4	3	4	7
<b>Total community contributions</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>7</b>
<b>Economic value distributed</b>	<b>14,405</b>	<b>14,563</b>	<b>15,144</b>	<b>16,741</b>	<b>13,512</b>

<sup>28</sup> The value distribution calculation and commentary in this section is based on the income and expenses reported in the Income Statement of Origin Energy Limited. Any restatements made to prior year results have been made in line with Origin accounts.

<sup>29</sup> Excludes capital expenditure; includes taxes and royalties.

<sup>30</sup> Excludes capitalised interest.

## Creating value in our communities

	FY2020	FY2019	FY2018	FY2017	FY2016
<b>Origin Energy Foundation</b>					
Total community support since inception (\$)	29,335,914	26,113,140	23,701,139	21,933,233	19,680,088
Total community investment during the period by the Origin Energy Foundation (\$)	3,222,775	2,412,000	2,419,230	3,155,470	3,304,100
Monetary value of grants provided through Origin Energy Foundation <i>Grants</i> program since inception (\$)	21,243,861	19,702,405	18,925,300	17,700,400	16,039,400
Monetary value of grants provided through Origin Energy Foundation <i>Grants</i> program during the period (\$)	1,541,456	777,089	1,224,900	1,661,030	1,628,730
Activities participated in by employees donating time and professional skills through Origin Energy Foundation <i>Give Time</i> program volunteering	2,036	2,181	1,552	1,095	1,032
Hours donated by employees through Origin Energy Foundation <i>Give Time</i> program volunteering	6,758	9,153	8,002	5,912	6,126
Monetary value of donations made by employees through Origin Energy Foundation <i>Give2</i> program (\$)	475,767	408,357	339,533	328,292	337,296
Monetary value of donations delivered within the not-for-profit sector when matched with Origin Energy Foundation <i>Give2</i> program (\$)	930,213	815,214	679,066	656,584	674,593
Organisations within the not-for-profit sector received donations through Origin Energy Foundation <i>Give2</i> program	278	252	240	206	216

# Glossary



## Ash dam

A pond used for disposing of coal ash generated by burning coal in coal-fired power plants.

## CO

Carbon monoxide.

## CO<sub>2</sub>

Carbon dioxide.

## CO<sub>2</sub>-e

Carbon dioxide equivalent (CO<sub>2</sub>-e) is a measure for describing how much global warming potential a given type and amount of greenhouse gas may cause, using the functionally equivalent amount or concentration (CO<sub>2</sub>) as the reference.

## Consequence rating of serious and above (environmental)

An environmental consequence rating that includes medium to long-term reversible impacts to low-risk or listed species, habitats, ecosystems or area/s of cultural significance; extensive long-term partially reversible damage to vulnerable species, unique habitats, ecosystems or area/s of cultural significance; or extensive permanent damage to endangered species, habitats, ecosystems or area/s of cultural significance.

## Consequence rating of serious and above (safety)

A safety rating that includes injury or illness to one or more persons, resulting in a fatality, permanent partial or total disability, life-threatening illness, hospitalisation, five or more days lost time or alternative/restricted duties for one month or more.

## CSG

Coal seam gas. Natural gas contained within coal seams.

## Electricity measures:

### Watt (W)

A measure of power when one ampere of current flows under one volt of pressure.

### Kilowatt (kW)

One kW = 1,000 watts.

### Kilowatt hour (kWh)

Standard unit of electrical energy representing consumption of one kilowatt over one hour.

### Megawatt (MW)

One MW = 1,000 kW or one million watts.

### Megawatt hour (MWh)

One MWh = 1,000 kilowatt hours.

## Gigawatt hour (GWh)

One GWh = 1,000 megawatt hours or one million kilowatt hours.

## Terawatt hour (TWh)

One TWh = 1,000 gigawatt hours, or one million megawatt hours.

## Flaring

A process to release gas by burning the methane in specially designed flares within infrastructure. Flaring converts methane to carbon dioxide, which is a less potent greenhouse gas than methane.

## Fugitive emissions

Fugitive emissions are the gases that leak or are vented or flared while extracting, producing, processing, storing, transmitting or distributing certain fossil fuels. The Australian regulatory definition for fugitive emissions includes flaring but excludes landscape emissions.

## Gas measures:

### Joule (J)

Standard unit of measurement for energy.

### Gigajoule (GJ)

One GJ = 10<sup>9</sup> joules.

### Terajoule (TJ)

One TJ = 10<sup>12</sup> joules.

### Petajoule (PJ)

One PJ = 10<sup>15</sup> joules.

## GHG emissions

Greenhouse gas emissions mainly refers to carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, hydrofluorocarbons and perfluorocarbons.

## GHG emissions intensity

The level of greenhouse gas emissions per unit of economic activity.

## kt

One kilotonne = 1,000 tonnes.

## Leaks

Gas can leak from infrastructure, particularly at pipe joints and valves.

## LNG

Liquefied natural gas.

## LPG

Liquefied petroleum gas.

## Nationally Determined Contribution

Nationally determined contributions (NDCs) are the efforts by each country to meet their commitments under the Paris Agreement to reduce national emissions and adapt to the impacts of climate change.

## National Electricity Market (NEM)

The wholesale electricity market for the electrically connected states and territories, with the exception of Western Australia and the Northern Territory.

## NGERs

*The National Greenhouse and Energy Reporting Act, 2007* introduced a single national framework for reporting and disseminating company information about greenhouse gas emissions, energy production and energy consumption.

## NO<sub>x</sub>

Nitrogen oxide.

## PM2.5

Particulate matter that is 2.5 micrometres or less in diameter.

## PM10

Particulate matter that is 10 micrometres or less in diameter.

## Process safety event

An unplanned or uncontrolled Loss of Primary Containment (LOPC) of any material, including non-toxic and non-flammable materials from a process, or an undesired event or condition that under slightly different circumstances, could have resulted in LOPC.

## Reverse osmosis

A process that uses a membrane under pressure to separate relatively pure water (or other solvent) from a less pure solution.

## SBTi

The Science Based Targets initiative is an independent body made up of representatives from the World Resources Institute, the Carbon Disclosure Project, the World Wildlife Fund and the UN Global Compact.

## SO<sub>x</sub>

Sulphur oxide.

## Venting

The process that relieves pressure in the system, releasing gas.

## VOC

Volatile organic compound.

## Water measures:

### Kilolitre (kL)

One kL = one thousand litres (1,000 L).

### Megalitre (ML)

One ML = one million litres (1,000,000 L).