

## Annex 21. Philippine Gross Generation by Plant Type, 2003-2016 (in GWh)

PHILIPPINES by Plant Type	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Coal</b>	<b>14,939</b>	<b>16,194</b>	<b>15,257</b>	<b>15,294</b>	<b>16,837</b>	<b>15,749</b>	<b>16,476</b>	<b>23,301</b>	<b>25,342</b>	<b>28,265</b>	<b>32,081</b>	<b>33,054</b>	<b>36,686</b>	<b>43,303</b>
<b>Oil-based</b>	<b>7,170</b>	<b>8,504</b>	<b>6,141</b>	<b>4,665</b>	<b>5,148</b>	<b>4,868</b>	<b>5,381</b>	<b>7,101</b>	<b>3,398</b>	<b>4,254</b>	<b>4,491</b>	<b>5,708</b>	<b>5,886</b>	<b>5,661</b>
<i>Combined Cycle</i>	439	738	91	239	653	513	639	1,202	124	227	247	515	276	694
<i>Diesel</i>	5,509	6,253	5,717	4,152	4,162	3,660	3,771	4,532	2,762	3,332	3,805	4,730	5,521	4,722
<i>Gas Turbine</i>	42	82	25	0	9	36	62	3	0	0	0	0	10	0
<i>Oil Thermal</i>	1,180	1,431	309	274	324	658	909	1,364	512	695	438	463	80	245
<b>Natural Gas</b>	<b>13,139</b>	<b>12,384</b>	<b>16,861</b>	<b>16,366</b>	<b>18,789</b>	<b>19,576</b>	<b>19,887</b>	<b>19,518</b>	<b>20,591</b>	<b>19,642</b>	<b>18,791</b>	<b>18,690</b>	<b>18,878</b>	<b>19,854</b>
<b>Renewable Energy (RE)</b>	<b>17,692</b>	<b>18,874</b>	<b>18,308</b>	<b>20,459</b>	<b>18,837</b>	<b>20,628</b>	<b>20,191</b>	<b>17,823</b>	<b>19,845</b>	<b>20,762</b>	<b>19,903</b>	<b>19,810</b>	<b>20,963</b>	<b>21,979</b>
<i>Geothermal</i>	9,822	10,282	9,902	10,465	10,215	10,723	10,324	9,929	9,942	10,250	9,605	10,308	11,044	11,070
<i>Hydro</i>	7,870	8,593	8,387	9,939	8,563	9,843	9,788	7,803	9,698	10,252	10,019	9,137	8,665	8,111
<i>Biomass</i>	0	0	0	0	0	0	14	27	115	183	212	196	367	726
<i>Solar</i>	0	0	2	1	1	1	1	1	1	1	1	17	139	1,097
<i>Wind</i>	0	0	17	53	58	61	64	62	88	75	66	152	748	975
<b>Total Generation</b>	<b>52,941</b>	<b>55,957</b>	<b>56,568</b>	<b>56,784</b>	<b>59,612</b>	<b>60,821</b>	<b>61,934</b>	<b>67,743</b>	<b>69,176</b>	<b>72,922</b>	<b>75,266</b>	<b>77,261</b>	<b>82,413</b>	<b>90,798</b>