

2015 & 2030 Demand



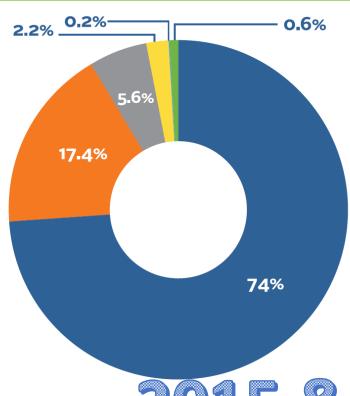
IMPLEMENTATION PLAN FOR BARBADOS NATIONAL ENERGY

Barbados Ministry of Energy and Water Resources



Heavy Fuel Oil – 74% • Kerosene – 17.4% • Bagasse – 5.6% • Diesel – 2.2% • Natural gas – 0.2% •

Solar - 0.6%

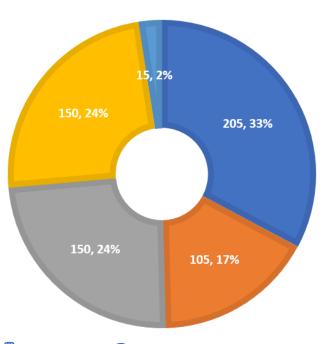


2030 ENERGY PRODUCTION (MW)



Wind onshore ■





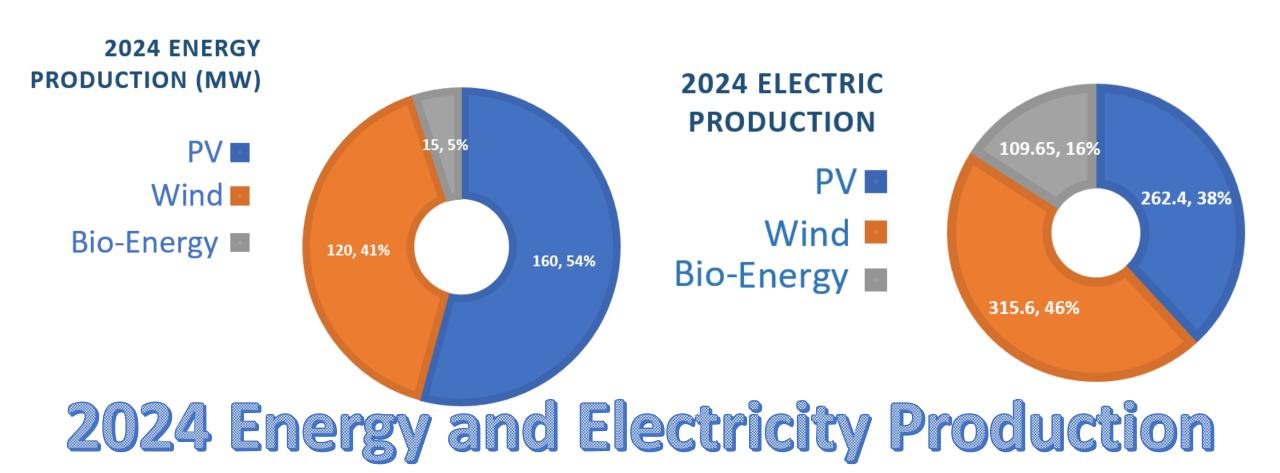
2015 & 2030 Production

	1	2	3	4	5	Total
PV	32	32	32	32	32	160
Wind				120		120
Bio-Energy					15	15
Total forecasted renewable energy requirement (MW)						
Energy Storage (MW)		20	20	20	20	80

Table 2A - Schedule of Installation of Renewable Energy Over the Next 5 Years (MW)

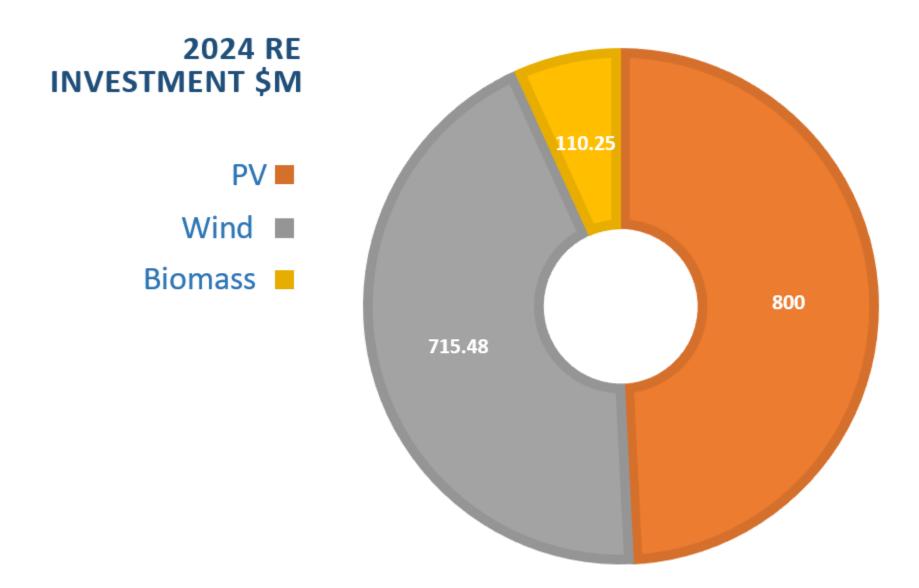
	1	2	3	4	5	Total
PV	52.48	52.48	52.48	52.48	52.48	262.4
Wind	0	0	0	315.6	0	315.6
Bio-Energy	0	0	0	0	109.65	109.65
Total	52.48	52.48	52.48	368.08	162.13	687.65

Table 3A - Schedule Electricity Production (Gwh) From Renewable Energy Over the Next 5 Years



	1	2	3	4	5	Total
PV	\$160.00	\$160.00	\$160.00	\$160.00	\$160.00	\$800.00
Wind	\$-	\$-	\$-	\$715.48	\$-	\$715.48
Biomas	\$-	\$-	\$-	\$-	\$110.25	\$110.25
Sub-Total						\$1,625.73
Energy Storage (MW)		\$162.60	\$162.60	\$162.60	\$162.60	\$650.40
Total	\$160.00	\$322.60	\$322.60	\$1,038.08	\$432.85	\$2,276.13

Table 4A - Schedule of Investment In Renewable Over the Next 5 Years (\$M)



	1	2	3	4	5	Total
PV	63.36	63.36	63.36	63.36	63.36	316.80
Wind	0	0	0	33	0	33
Bio-Energy	0	0	0	0	0.92	0.92
Total	63.36	63.36	63.36	96.36	64.28	350.72

NB: It is assumed that wind developments are set back by the international distance rules i.e. impact distance from the base of the Turbine

Table 5A - Spatial Requirements for Electricity Generation (Acres)