



WIND POWER – ISLAND SYSTEM

Operation of four wind power plants on four islands in the Aegean Sea.

Project Description:

The each power plant were installed in 1992 as Turn-Key projects by the Consortium Vestas/Rokas on the following islands:

Andros:	7 V27-225KW	(1,575MW)
Samos:	9 V27-225KW	(2,025MW)
Chios :	11 V27-225KW	(2,475MW)
Psara :	9 V27-225KW	(2,025MW)

The wind power plant on each island is connected to the local diesel power station.

A load management system, placed at the diesel power station, is controlling the wind/diesel power output.

Existing Diesel Generation Capacity:

Andros:19,640MW	used:12,100MW
Samos:43,755MW	26,100MW
Chios	
Psara :46.090MW	26.500MW



DIESEL OIL SAVED BY USING WIND POWER, IN TONS.

	1993	1994	1995	1996	1997
Andros	412,8	424,8	395,1	418,4	425,9
Samos	489,3	538,4	541,5	504,6	415,3
Chios	501,4	614,7	562,8	530,5	503,1
Psara	354,9	418,2	427,7	430,2	443,9



NET PRODUCTION OF DIESEL AND WIND GENERATION

	1993	1994	1995	1996	1997
Andros	33045 4839	35465 4980	38334 4631	37072 4904	33330 4992
Samos	72869 5736	76415 6311	86912 6348	89663 5915	90676 4868
Chios Psara	91577 10037	92970 12108	99528 11611	108318 11262	117220 11101

Above figures = MWh