Table 49. Renewable Energy: 2017 and 2012

[For meaning of abbreviations and symbols, see introductory text.]

Item	2017	2012	ltem	2017	2012
Renewable energy producing systemsfarms	1,421	768	Renewable energy producing systems - Con. Small hydro systems	5	11
Solar panelsfarms	1,245	647	Biodiesel production systems (see text)	11	12
Wind turbinesfarms	158	147	Ethanol production systems (see text)	11	5
Methane digestersfarms	4	9	Other	61	22
Geothermal/geoexchange systems (see text)farms	73	17	Wind rights leased to others	139	85

Table 50. Institutional, Research, Experimental, and American Indian Reservation Farms: 2017 and 2012

[For meaning of abbreviations and symbols, see introductory text.]

Characteristics	2017	2012	Characteristics	2017	2012
Farms number Land in farmsacres Average size of farmacres	118 2,307,104 19,552	78 2,173,737 27,868	Market value of agricultural products sold (see text) - Con. Crops, including nursery and greenhouse crops	510 9,096	1,111 15,297
Estimated market value of land and buildings	891,794 7,557,580 387	860,079 11,026,651 396	Total farm production expenses\$1,000 Average per farmdollars	12,234 103,676	18,043 231,324
Estimated market value of all machinery and equipment\$1,000	14,641	11,697	Government payments 1 (see text)	7 79 11,237	1 (D) (D)
Land in farms according to use:			Total income from farm-related sourcesfarms \$1,000	27 2,007	24 2,880
Total cropland	21 10,610	14 14,563	Average per farmdollars	74,332	119,987
Harvested cropland	16 5,123	12 (D)	Tenure of producer (see text): Full owners	64	26
Other pasture and grazing land that could have been used for crops without additional improvements	7	5	Part owners Tenants	47 7	42 10
Other croplandfarms	(D) 5	(D) 4	Farms by North American Industry Classification System:		
acres Total woodlandfarms	(D) 10	3,048	Oilseed and grain farming (1111) Vegetable and melon farming (1112) Fruit and tree nut farming (1113)	-	1
Woodland pastured farms	8,255	(D)	Greenhouse, nursery, and floriculture production (1114)	-	
acres Woodland not pastured	6,806	(D) 4	Other crop farming (1119)	15	3
acres	1,449	614	Tobacco farming (11191) Cotton farming (11192)	-	-
Permanent pasture and rangeland other than cropland and woodland pasturedfarms	102	66	Sugarcane farming, hay farming, and all other crop farming (11193, 11194, 11199)	15	3
acres Land in farmsteads, homes, buildings, livestock facilities, ponds, roads, wasteland, etcfarms	2,285,484	2,147,647	Beef cattle ranching and farming (112111)	18	18
acres Irrigated landfarms	2,755 19	(D) 14	Dairy cattle and milk production (11212) Hog and pig farming (1122)	- -	
acres Market value of agricultural products	6,301	5,781	Poultry and egg production (1123)	- 4	2
sold (see text) \$1,000 Average per farm dollars	9,606 81,406	16,408 210,359	Aquaculture and other animal production (1125, 1129) (see text)	80	54

¹ Data for 2012 include loan deficiency payments, marketing loan gains, and net value of commodity certificates.