Table 49. **Renewable Energy: 2022 and 2017**

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

Item		2022	2017
Renewable energy producing systems (see text)	farms	919	944
Solar panels	farms	896	872
Wind turbines	farms	9	10
Methane digesters	farms	-	-
Geothermal/geoexchange systems	farms	11	40
Small hydro systems	farms	27	19
Wind rights leased to others	farms	43	68

Table 50. **Institutional, Research, Experimental, and American Indian Reservation Farms: 2022 and 2017**

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

Characteristics		2022	2017
Farms	number	60	45
Land in farms	acres	65,574	42,396
Average size of farm	acres	1,093	942
Estimated market value of land and buildings	$1,000	217,456	94,904
Average per farm	dollars	3,624,270	2,108,987
Average per acre	dollars	3,316	2,239
Estimated market value of all machinery and equipment	$1,000	19,014	15,061
Land in farms according to use:			
Total cropland	farms	55	36
	acres	26,836	19,363
Harvested cropland	farms	52	32
	acres	11,776	(D)
Other pasture and grazing land that could have been used for crops without additional improvements	farms	9	3
	acres	1,122	(D)
Other cropland	farms	23	21
	acres	13,938	9,552
Total woodland	farms	20	13
	acres	12,291	6,790
Woodland pastured	farms	4	1
	acres	(D)	(D)
Woodland not pastured	farms	17	13
	acres	(D)	(D)
Permanent pasture and rangeland other than cropland and woodland pastured	farms	34	20
	acres	16,210	12,385
Land in farmsteads, homes, buildings, livestock facilities, ponds, roads, wasteland, etc.	farms	42	31
	acres	10,237	3,858
Irrigated land	farms	28	15
	acres	2,020	654
Market value of agricultural products sold	$1,000	14,167	12,180
Average per farm	dollars	236,120	270,666
Market value of agricultural products sold - Con.			
Crops, including nursery and greenhouse crops	$1,000	6,034	5,527
Livestock, poultry, and their products	$1,000	8,133	6,653
Total farm production expenses [1]	$1,000	14,855	10,176
Average per farm	dollars	247,586	226,133
Government payments	farms	1	2
	$1,000	(D)	(D)
Average per farm	dollars	(D)	(D)
Total income from farm-related sources	farms	15	16
	$1,000	523	1,596
Average per farm	dollars	34,891	99,755
Tenure:			
Full owners		49	38
Part owners		10	6
Tenants		1	1
Farms by North American Industry Classification System:			
Oilseed and grain farming (1111)		10	4
Vegetable and melon farming (1112)		5	3
Fruit and tree nut farming (1113)		-	2
Greenhouse, nursery, and floriculture production (1114)		4	4
Other crop farming (1119)		10	10
Tobacco farming (11191)		-	-
Cotton farming (11192)		-	-
Sugarcane farming, hay farming, and all other crop farming (11193, 11194, 11199)		10	10
Beef cattle ranching and farming (112111)		10	8
Cattle feedlots (112112)		-	-
Dairy cattle and milk production (11212)		1	1
Hog and pig farming (1122)		2	1
Poultry and egg production (1123)		4	4
Sheep and goat farming (1124)		2	1
Aquaculture and other animal production (1125, 1129)		12	7

[1] Landlord production expenses are included within total farm production expenses.