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	6,589	5,859
Solar panels	farms	4,402	3,211
Wind turbines	farms	514	541
Methane digesters	farms	31	46
Renewable energy producing systems (see text) - Con.			
Geothermal/geoexchange systems	farms	1,958	2,230
Small hydro systems	farms	90	40
Wind rights leased to others	farms	624	682

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	131	110
Land in farms	acres	36,740	35,196
Average size of farm	acres	280	320
Estimated market value of land and buildings	$1,000	219,738	216,677
Average per farm	dollars	1,677,390	1,969,792
Average per acre	dollars	5,981	6,156
Estimated market value of all machinery and equipment	$1,000	22,830	15,764
Land in farms according to use:			
Total cropland	farms	117	96
	acres	16,407	15,907
Harvested cropland	farms	111	93
	acres	15,261	14,492
Other pasture and grazing land that could have been used for crops without additional improvements	farms	4	7
	acres	379	480
Other cropland	farms	23	18
	acres	767	935
Total woodland	farms	24	28
	acres	6,753	7,537
Woodland pastured	farms	3	4
	acres	(D)	559
Woodland not pastured	farms	23	27
	acres	(D)	6,978
Permanent pasture and rangeland other than cropland and woodland pastured	farms	10	12
	acres	2,806	7,187
Land in farmsteads, homes, buildings, livestock facilities, ponds, roads, wasteland, etc.	farms	56	50
	acres	10,774	4,565
Irrigated land	farms	17	13
	acres	460	417
Market value of agricultural products sold	$1,000	22,001	13,048
Average per farm	dollars	167,947	118,616
Market value of agricultural products sold - Con.			
Crops, including nursery and greenhouse crops	$1,000	15,137	8,068
Livestock, poultry, and their products	$1,000	6,864	4,980
Total farm production expenses [1]	$1,000	20,660	15,068
Average per farm	dollars	157,710	136,984
Government payments	farms	8	27
	$1,000	35	240
Average per farm	dollars	4,332	8,903
Total income from farm-related sources	farms	38	28
	$1,000	677	1,056
Average per farm	dollars	17,803	37,716
Tenure:			
Full owners		99	77
Part owners		22	18
Tenants		10	15
Farms by North American Industry Classification System:			
Oilseed and grain farming (1111)		85	67
Vegetable and melon farming (1112)		2	1
Fruit and tree nut farming (1113)		-	-
Greenhouse, nursery, and floriculture production (1114)		6	6
Other crop farming (1119)		21	19
Tobacco farming (11191)		-	-
Cotton farming (11192)		-	-
Sugarcane farming, hay farming, and all other crop farming (11193, 11194, 11199)		21	19
Beef cattle ranching and farming (112111)		2	2
Cattle feedlots (112112)		-	-
Dairy cattle and milk production (11212)		-	2
Hog and pig farming (1122)		-	-
Poultry and egg production (1123)		-	1
Sheep and goat farming (1124)		-	-
Aquaculture and other animal production (1125, 1129)		15	12

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