

Executive Summary

Energy consumption of households 2011

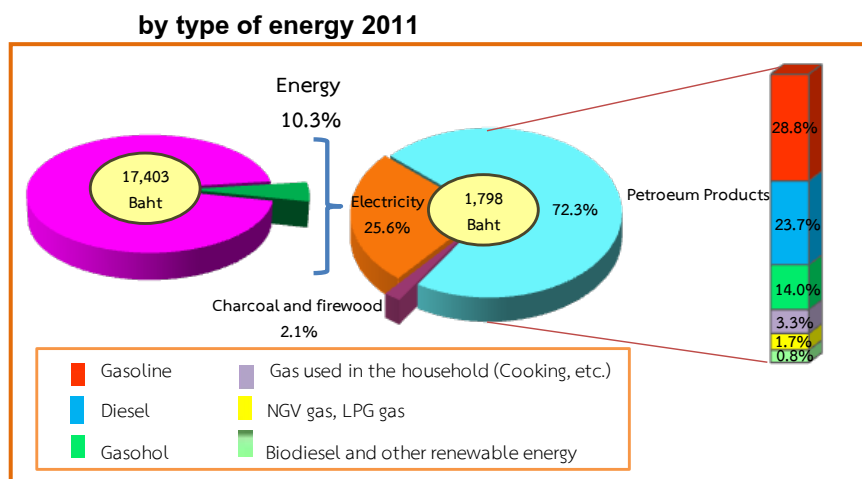
National Statistical Office conducted the survey on household energy consumption in 2011, by incorporating the questions with the 2011 Household Socio-Economic Survey, aiming at summarizing the use of energy. The data were collected from 52,000 sampled households located in and outside municipality of all provinces throughout the country, during the period of January to December 2011.

The data obtained from the survey included the cost relating to petroleum products, for example, petrol, gas and the use of energy in the other forms (electricity, charcoal and firewood).

The results of the survey are summarized below;

The household expenditure on energy

Chart 1 : Average expenditure of household on energy consumption



A survey in 2011 showed that households in the country had the average total expenditure, of about 17,430 baht per month, with this amount it was on energy of about 1,798 baht or 10.3 percent of the total monthly expenditure. The most expenditure on energy (72.3 percent) was on Petroleum products, such as

Gasoline (28.8 percent), Diesel (23.7 percent), Gasohol (14.0 percent), the LPG and CNG (3.3 percent). The lowest proportion was biodiesel and other renewable energy (0.8 percent). Apart from this, it was the expenditure on other energy (27.7 percent), with the amount, it was the cost of electricity (25.6 percent) and the charcoal and firewood (2.1 percent).

For the total household expenditure on energy in various regions in 2011, It was found that the households in Bangkok and 3 provinces (Nonthaburi, Pathum Thani and Samut Prakan) spent the highest average energy, about 2,763 baht per month which was 2 times higher than those of households in the Northeast which had the least average expenditure on energy of about 1,395 baht per month, followed by households in the South (2,114 baht), in the central region (1,897 baht) and households in the North (1,422 baht), respectively.

Table 1 Average per month of household expenditure on energy by type of energy and region, 2011

Region/items	Whole kingdom	Bangkok and 3 province ^{1/}	Central	North	Northeast	South
The total expenditure on energy	1,798	2,763	1,897	1,422	1,395	2,114
Gasoline	519	443	536	447	471	792
Diesel	426	424	498	352	366	573
Electricity	460	979	502	328	289	433
Gasohol	252	757	233	167	121	168
NGV,LPG	30	95	38	13	10	23
Gas used in households (Cooking, etc.)	59	49	65	61	53	78
Charcoal and firewood	38	☆ ^{2/}	14	48	76	5
Biodiesel and other alternative energy	14	15	11	6	9	42

1/ Nonthaburi, Pathum Thani and Samut Prakan

2/ negligible amount

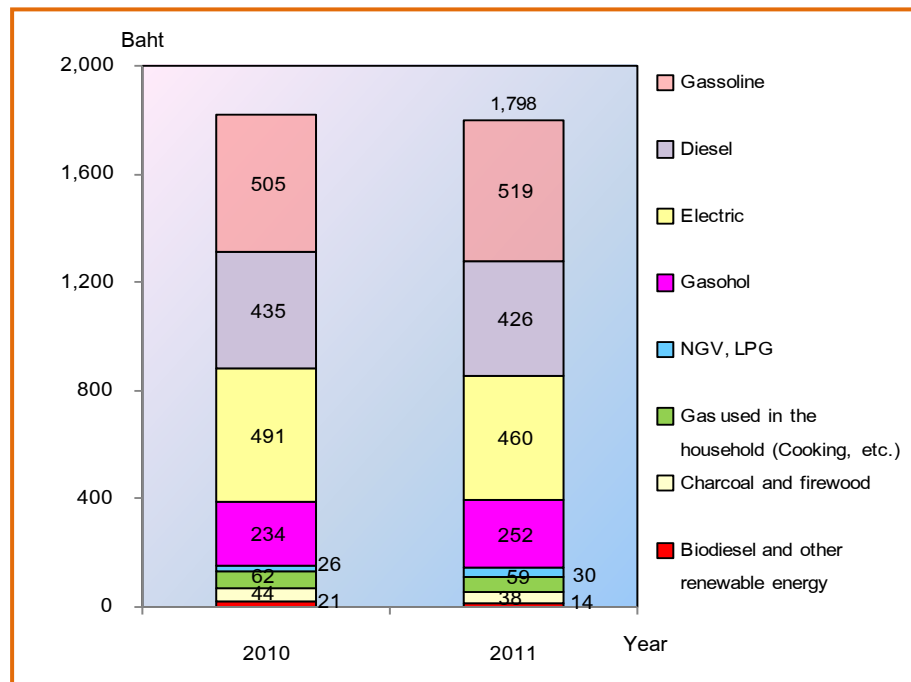
When considering the type of energy, it was found that households in Bangkok and 3 provinces (Nonthaburi, Pathum Thani and Samut Prakan) spent on the electricity, Gasohol, NGV and LPG higher than households in the other regions. The monthly average cost of electricity, about 979 baht per month, gasohol about 757 baht per month which was 3.4 and 6.3 times of those households in the Northeast, which spent the least on electricity and gasohol (the average monthly expenditure were 289 and 121 baht, respectively)

As for gasoline and diesel, the households in the South had the highest average cost, of about 792 baht and 573 baht per month, respectively, especially fishing and agricultural households, this might be due to the fluctuation of the fuel price. When considering the use of charcoal and firewood, the households in the Northeast had the highest monthly average expenditure, about 76 baht per household, while spending on Biodiesel and other alternative energy had the lowest cost compared to other kinds of energy.

Comparing the cost of energy of household

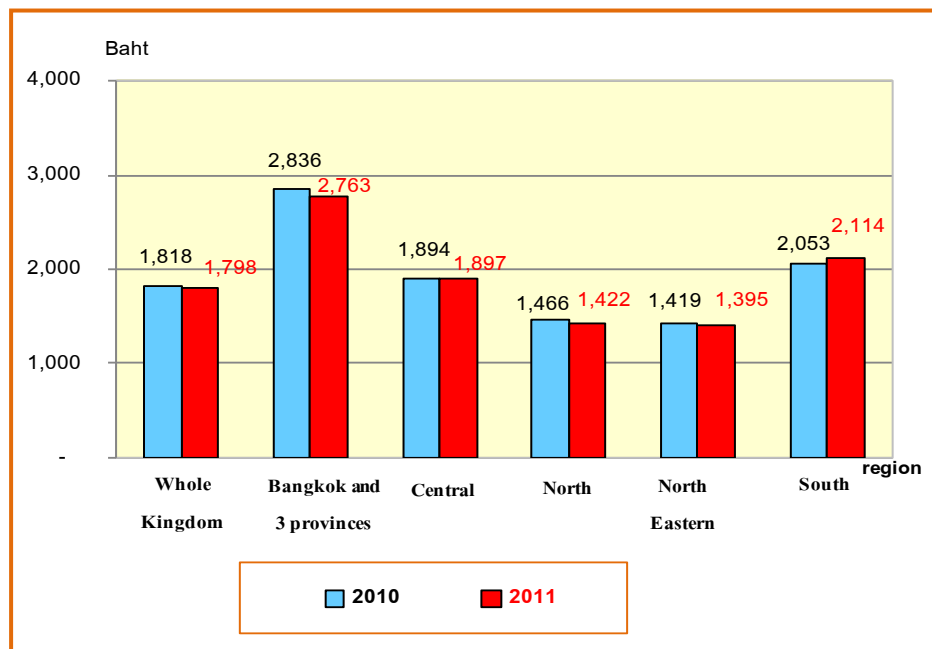
When comparing the cost of energy by households, around the country in 2010 and 2011, it is found that the average monthly cost of energy decreased from 1,818 baht to 1,798 baht or 1.1 percent per year. This might be because of the flood crisis at the end of the year. Especially expenditure on biodiesel and renewable energy decreased by 30.3 percent (from 21 to 14 baht), followed by charcoal and wood decreased by 13.6 percent (from 44 to 38 baht) and electricity decreased by 6.3 percent (from 491 baht to 460 baht). The NGV gas, LPG gas increased by 15.4 percent, which might be caused from the price rise of gas, while gasoline had the least increasing rate, of about 2.8 percent (from 505 to 519 baht).

Figure 2 : Comparing the average monthly cost of energy of household by type of energy between 2010 and 2011



Comparing, among regions, the cost of energy of household between 2010 and 2011, it was found that households in the South had the increasing rate by 3.0 percent (from 2053 to 2114 baht), followed by those in the Central had the slight increasing rate by 2.0 percent (from 1,894 to 1,897 baht). Households in the North, Bangkok and 3 provinces (Nonthaburi, Pathum Thani and Samut Prakan) had the decreasing rate by 3.0 percent (from 1466 to 1422 baht) by 2.6 percent (from 2,836 to 2,763 baht) and 1.7 percent (from 1419 to 1395 baht), respectively.

Figure 3 : Comparing the average monthly cost of energy of household by region between 2010 and 2011



Comparing the cost of energy of household by quarter

When comparing the cost of energy of household by quarter of the year 2010 and 2011, the survey showed that the cost increased from 1st quarter to 2nd quarter. That was the 1st quarter was stepping up from 1,703 baht in 2010 to 1,762 baht in 2011. The 2nd quarter stepped up from 1,768 baht in 2010 to 1,839 baht in 2011, and the cost decreased from the 3rd quarter to the 4th quarter, which was down from 1,921 baht in 2010 to 1,815 baht in 2011. The 4th quarter was dropped from 1,875 baht in 2010 to 1,804 in 2011. This might be caused from the fluctuation of oil price and caused by natural disasters especially at the end of the year 2011. There was severe flood damaging vehicles, although some areas have not flooded, the use of vehicles on the road was still problem. So the cost of energy declined in the 3rd quarter to the 4th quarter.

Figure 4 : Comparing the average monthly cost of energy of household by quarter of the year 2010 and 2011

