

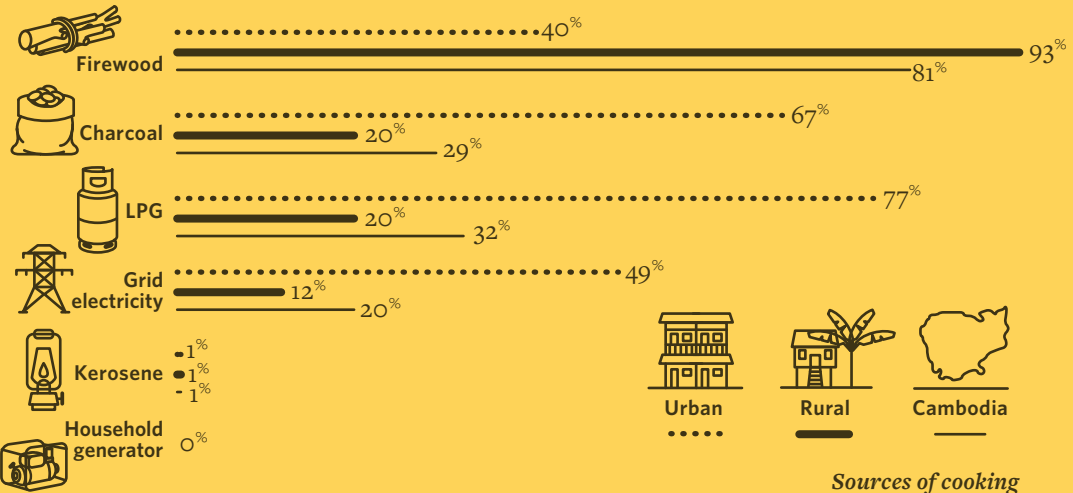
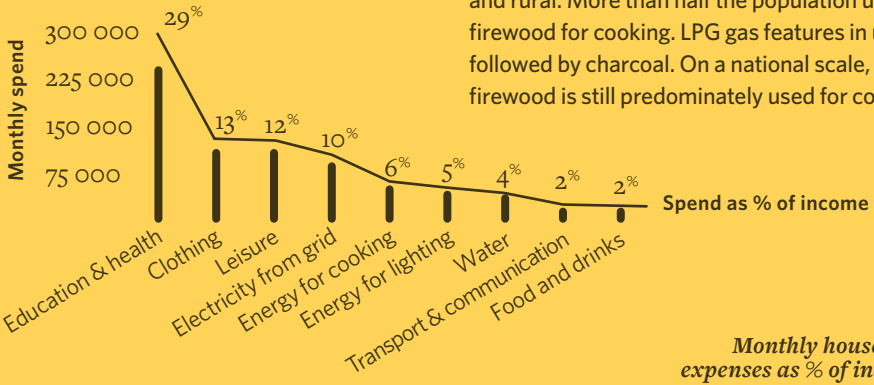
Households in Cambodia on average devote 18% of their monthly expenses to energy needs



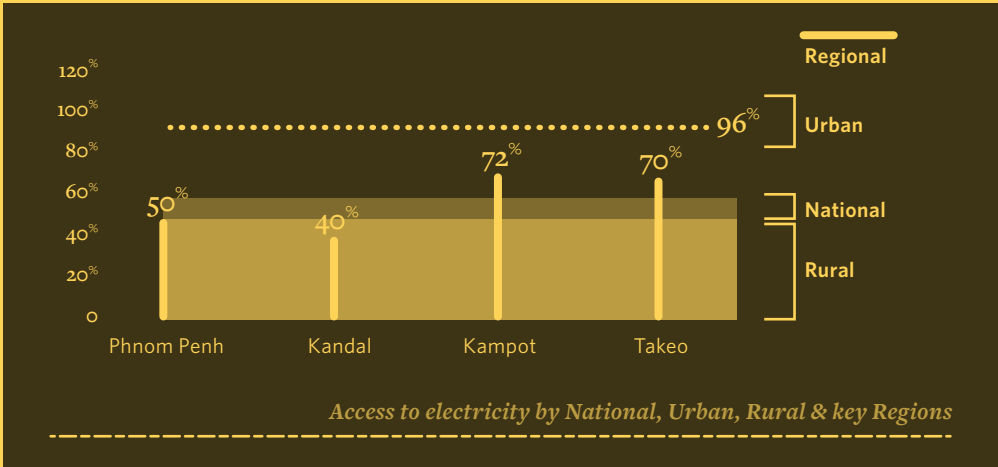
Households in Cambodia on average devote 18% of their monthly expenses on their household energy needs, more than food, water and transport combined. Addressing energy poverty by scaling up the availability of affordable and more efficient energy services is the key to improve social equity and sustainably achieve Cambodia's

development targets as stated by the Royal Government of Cambodia to have all villages in Cambodia have access to electricity services by 2020 and 70% of households access to quality electricity services by 2030.

Firewood remains the main source of cooking energy for all households, rich and poor, urban and rural. More than half the population use firewood for cooking. LPG gas features in usage followed by charcoal. On a national scale, firewood is still predominately used for cooking.



Sources of cooking

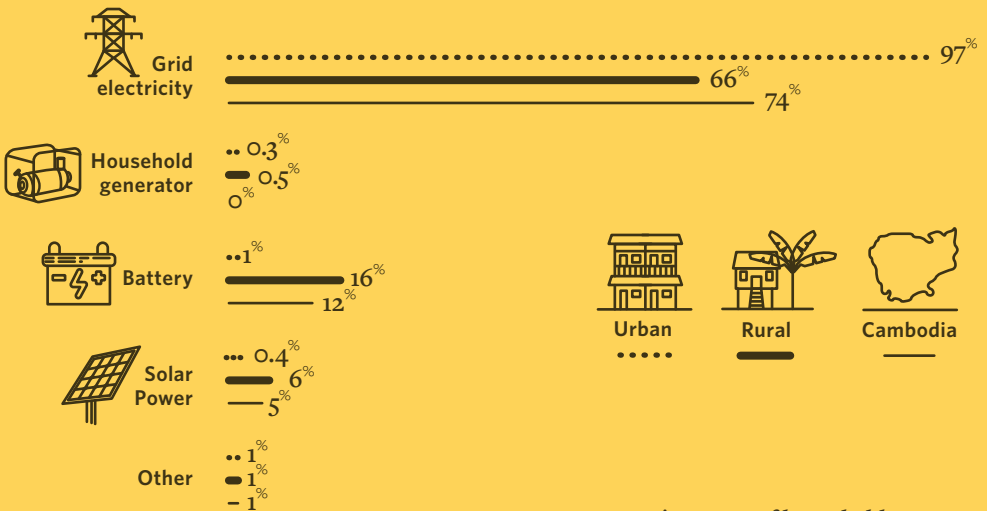


Household energy landscape

High levels of access in smaller urban areas (96%) masks the real issues of electrification nationally. 25% of the population live in urban areas compared to 75% in rural areas.

Disaggregated data demonstrates large rural areas with limited access to grid electricity. Large cities have on average between 50% - 70% access to a power grid.

Grid electricity only supplies about half the household energy needs. Access and usage of electricity in larger provinces is closer to rural areas than urban areas.



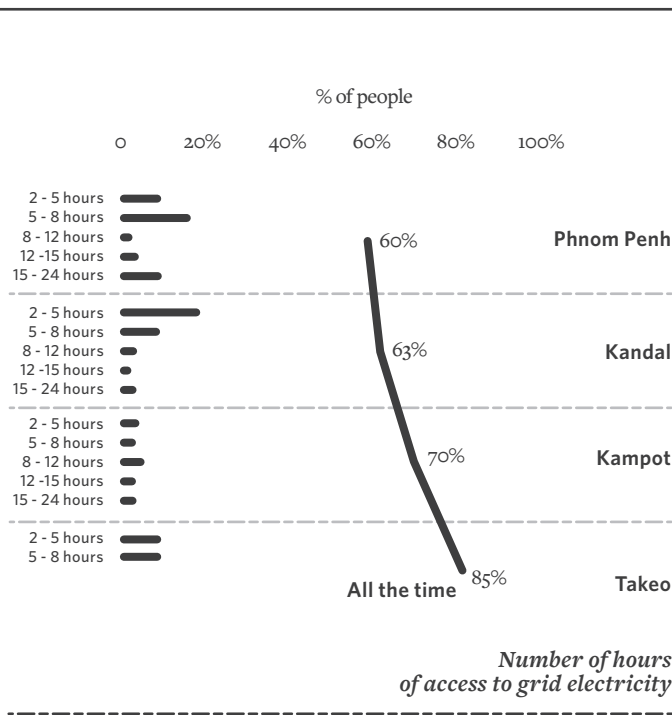
Main source of household energy

Cambodia

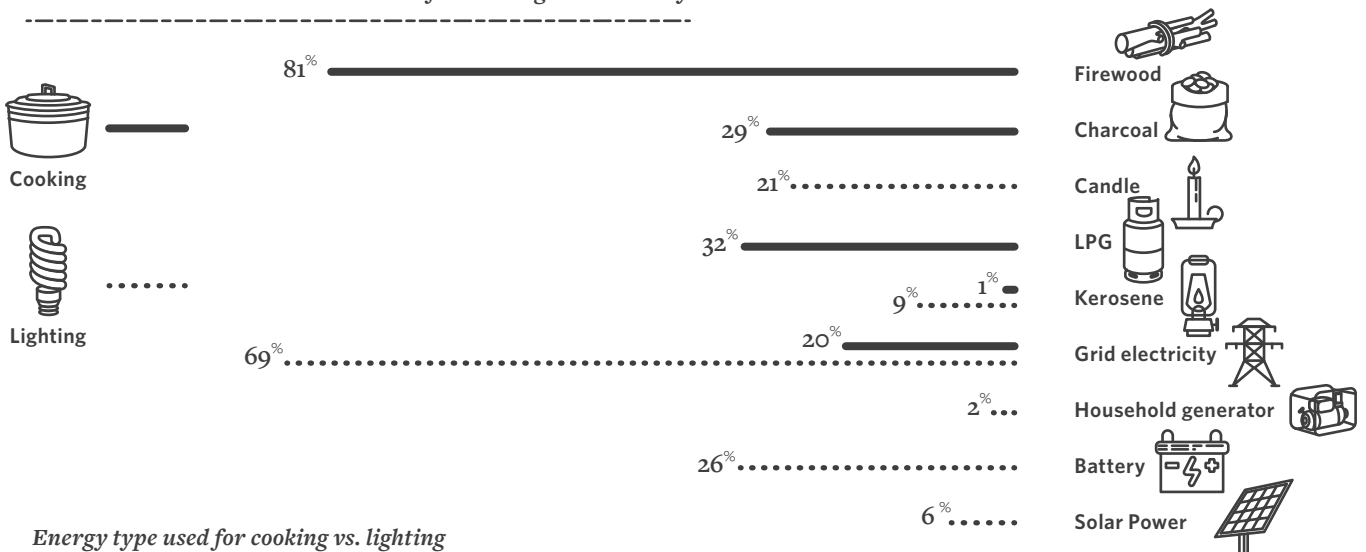
CLEAN ENERGY



Of those with access to electricity, just over half have access to electricity all the time. Over 10% of people in Cambodia do not have access to electricity for between 2-5 hours regularly, thus indicating the need for alternative sources of electricity such as batteries.



Household energy mix is driven largely by the usage of firewood for cooking (81%), followed by liquid petroleum gas (32%), charcoal (29%). Lighting requires less energy and for fewer hours in the day. It is generally driven by grid electricity (69%), battery (26%), and candles (21%). There is a small adoption of solar energy (6%). Current solar is mainly used by people in the higher income bracket of USD\$5 - USD\$ 7.99/day.



Energy type used for cooking vs. lighting

Overview of energy usage

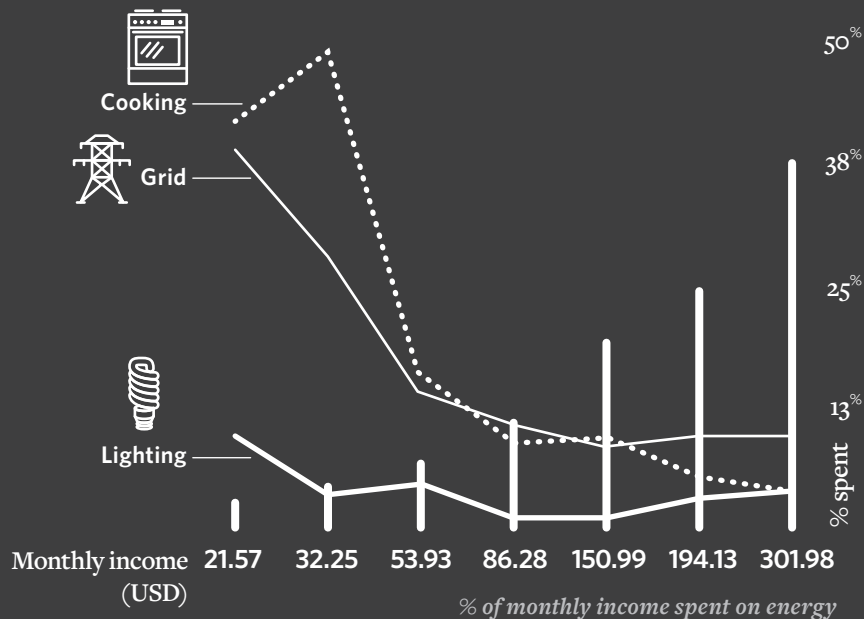
Energy is a major household expense on a monthly basis.

Electricity and energy for lighting and cooking are major household expenses for both rural and urban populations. Rural households spend more on lighting than urban households. However, overall, urban households have a higher proportion of their monthly expenses spent on energy. On average, urban households (57%), purchase energy for cooking once a month or more frequently, compared to rural households (19%). This could be due to the fact that biomass is "freely" available in rural areas and cooking stoves remain largely traditional. Also, LPG is mainly used in urban areas and is more costly. Overall, for those interested in solar home systems, the initial investment is substantial, while operating costs are minimal.

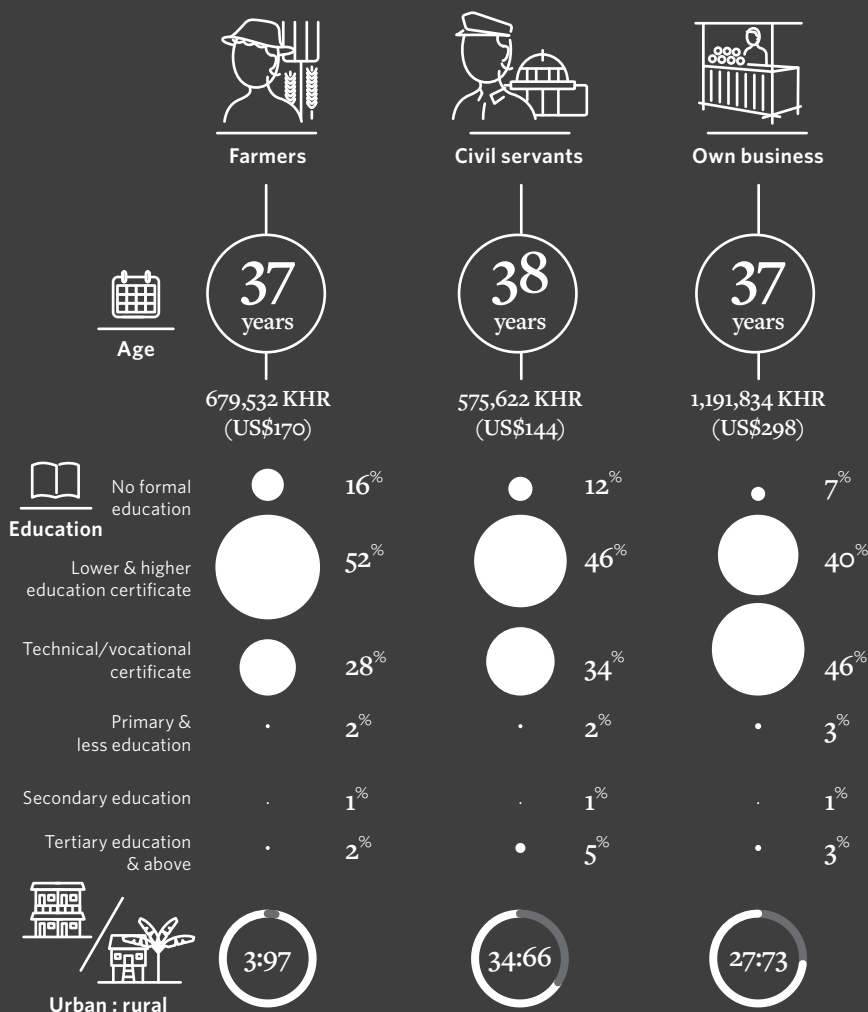
A number of households are interested in Solar Home Systems.

Most adults interested in owning a solar home system (37%) are self employed farmers, followed by government employees (19%), with 11% that have their own business. Of these, males show a greater interest (53.8%) than females (46.2%).

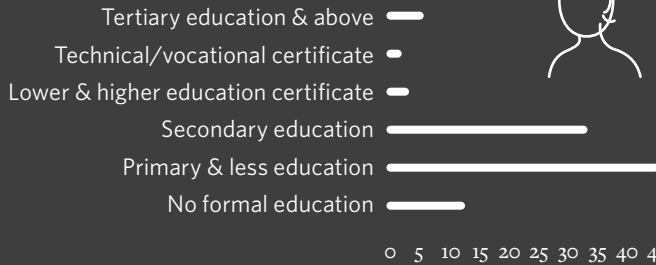
Of those adults interested in solar home systems, the majority (45.5%) have a primary school education with another 33.8% holding a secondary school qualification.



Monthly income (USD) | % of monthly income spent on energy



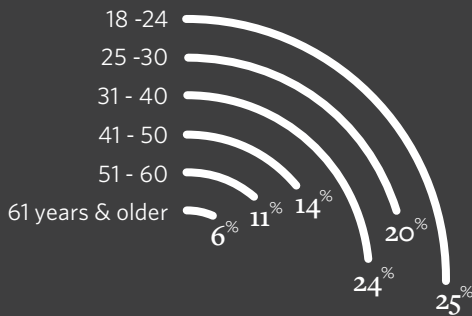
Profile of those interested in a solar home system



Education levels of those interested in solar home systems



Average daily income of potential solar users



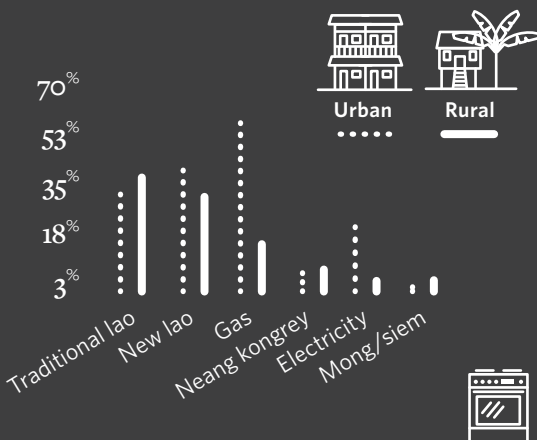
Age-Distribution of adults that would like to have SHS

There is a large youth population interested in solar home systems.

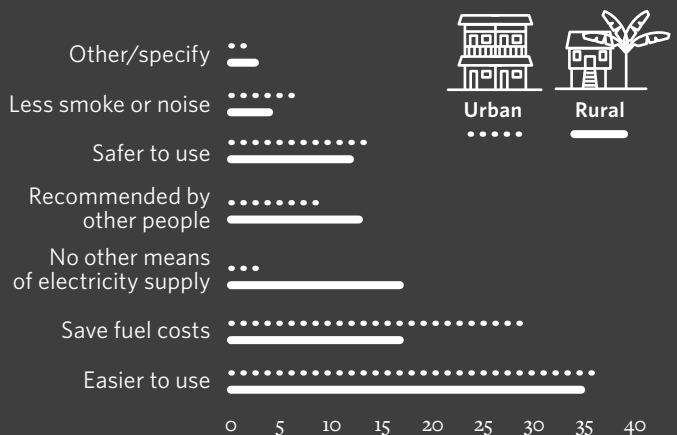
The majority of those interested in solar home systems are between the ages of 18 and 40. This can be expected as Cambodia has a bulging youth population of which most are formally employed by government (17%) and the private sector (11%). On average, the youth have higher incomes than senior citizens.

74% rural households are aware of solar home systems. Urban households solar home systems provide greater ease of use and save on fuel costs. For rural households however, almost a fifth (17%) would like solar home systems because there is no other means of electricity supply to their household. The main reason provided for not owning a solar lantern or home system provided by rural households was affordability (44%).

Traditional stoves still dominate most households and the usage of electrical stoves are fairly low.










Types of stoves used for cooking



Reasons for wanting to own a solar home system

Financial access of those interested in solar home systems

The table below shows the financial access of those interested in solar home systems. As can be seen, there is a substantial proportion of farmers (51%), government employees (56%) and business owners (52%) who are currently not using any borrowing facility at all. The same applies to savings where 60% of farmers, 44% of government employees and 59% of business owners stated that they were currently not saving. Government employees are the biggest users of regulated payments (71%). Very few of those interested in solar home systems have insurance. In terms of payments, 34% of those interested in SHS's already use mobile money (approximately 1 million in number).

		 Farmers	 Government	 Self employed
 Credit	Regulated	36%	36%	33%
	Unregulated	12%	11%	13%
	Family & friends or self	9%	1%	8%
	Not borrowing	51%	56%	52%
<hr/>				
 Payments	Regulated	36%	71%	44%
	Unregulated	6%	5%	10%
<hr/>				
 Insurance	Regulated	5%	7%	3%
	Unregulated	2%	7%	2%
<hr/>				
 Savings	Regulated	5%	39%	9%
	Unregulated	31%	30%	24%
	Family & friends or self	15%	19%	18%
	Not saving	60%	44%	59%

Usage of financial access of those interested in solar home systems



The MAP country data dashboards

The MAP country data dashboards are a subset of the larger FinScope Consumer Survey, with the data and insights presented in the dashboards being drawn and summarized from the nationally representative FinScope survey for that country. (More information and data on FinScope can be obtained from the full FinScope Consumer Survey).

The data driven from this focus note is part of UNCDF's Making Access Possible Programme. The FinScope survey provides a detailed understanding of the demand-side characteristics and explanatory factors for the entire adult population including a demand for energy. More efficient fuels and appliances reduce the share of income allocated to cooking and lighting, allowing

families to increase their spending on food, education and health services. Scaling up the availability of affordable and efficient energy services is key to attain Cambodia's development targets and access to appropriate and affordable financial services will be crucial in driving this development

The country-specific dashboards focus in on the areas that have emerged, during the country's FinScope data survey process and research, as strategic for financial inclusion interventions. The details and salient points highlighted via the dashboards will help financial services providers, as well as energy enterprises, to develop products and services tailored to meet the differential needs of segments within each dashboard focus area.

About the Making Access Possible Programme

Making Access Possible (MAP) is a multi-country initiative to support financial inclusion through a process of evidence-based analysis feeding into a financial inclusion roadmap jointly implemented by a range of local stakeholders.

MAP was initiated by the United Nations Capital Development Fund (UNCDF) and is implemented in partnership with FinMark Trust and the Centre for Financial Regulation and Inclusion (Cenfri). In each country, MAP brings together a broad range of stakeholders from within government, the private sector and the donor community to create a set of practical actions aimed at extending financial inclusion tailored to that country.



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