

MAPPING OF ENERGY SAVING SOLUTIONS IN BIDIBIDI SETTLEMENT

PROJECT FACT SHEET



IN PARTNERSHIP WITH



WITH SUPPORT FROM



Netherlands Enterprise Agency



DCHI

Dutch Coalition for Humanitarian Innovation





OVERVIEW

In February 2020, the Humanitarian OpenStreetMap Team (HOT) carried out a community mapping exercise across Bidibidi Refugee settlement in Yumbe district to better understand the state of energy saving solutions available to refugees in the settlement as well as relevant market trends and challenges associated with accessing and purchasing these solutions. In collaboration with refugees and host community members in Bidibidi, HOT led extensive data collection activities, collecting information from energy saving solution retailers about where they purchased their products from, what their available stock consisted of, and the biggest challenges they faced in selling these products to the refugee and host populations. Once these data collection activities were completed, the information was compiled and will be shared with AMPERE project partners and implementers to better understand the accessibility and availability of energy solutions in the settlement in order to more effectively target interventions linking potential customers with the clean energy market as well as increase the awareness and use of such products.

DEFINITIONS OF THE ENERGY SAVING SOLUTION RETAILERS

Depending on who you ask, a shop can be defined in a number of ways. In this resource, the shop definitions were self-identified by the shopkeepers themselves, as follows:

- **Business:** An institution started by an individual or group of persons with the primary goal of making profit.
- **NGO-supported:** An institution started by a non-governmental organization that is partially or fully ran or operated by said NGO.
- **Cooperative:** An institution started and run by an autonomous association of persons who voluntarily unite to meet their common (economic) needs.
- **Social enterprise:** An institution maximizing the social and environmental impact of energy saving solutions with the aim of making minimal profit (on behalf of the enterprise owner).

DEFINITIONS OF ENERGY SAVING SOLUTIONS

SOLAR SOLUTIONS are devices that primarily use sunlight to produce energy that allow it to function. Below is a list of solar solutions available for purchase in Bidibidi settlement.

- **SOLAR POWERED LIGHT BULBS:** a fixture usually connected to a solar panel to efficiently produce light from the electricity that had been stored by the solar panel. Solar bulbs are usually sold together with the solar panel but can also be purchased separately as a single item.
- **SOLAR PANELS:** a device used to convert light into electricity and is generally manufactured in a frame-like structure. Solar panels can usually be purchased with a battery which stores the electricity generated. Solar bulbs can also be added to this package. Solar panel may also be sold as an individual item or combined with a bulb and battery.
- **SOLAR LAMPS:** a lighting device sometimes called a solar light or lantern that produces light primarily through sunlight. This device typically may have a smaller solar photovoltaic panel mounted on top of it or a solar panel used to charge it.
- **ENERGY SAVING COOKSTOVES** are devices that generate heat from an energy carrier, such as firewood, charcoal or briquettes, and transfer the heat with reduced carbon emissions as compared to traditional cookstoves or three-stone-fires.
- **BRIQUETTES** are any form of compressed energy carrier or combustible biomass material used for fuel of kindling to start a fire.
- **ENERGY SAVING COOKING BAGS** are bag-like items enabling the retention of heat in food items that are brought to boil over a heat source to continue cooking for a few hours (ideally 12 hours) after removal from the heat source, e.g. wonder bags.
- **WATER FILTERS** are devices that purify, cleanse and refine water to make it safe for drinking through the use of a filtration process, reducing the reliance of energy carriers to boil water.
- **HEAT CONSERVING BOTTLES** are insulated mechanisms that are designed to retain heat no matter what the temperatures are surrounding the bottle.

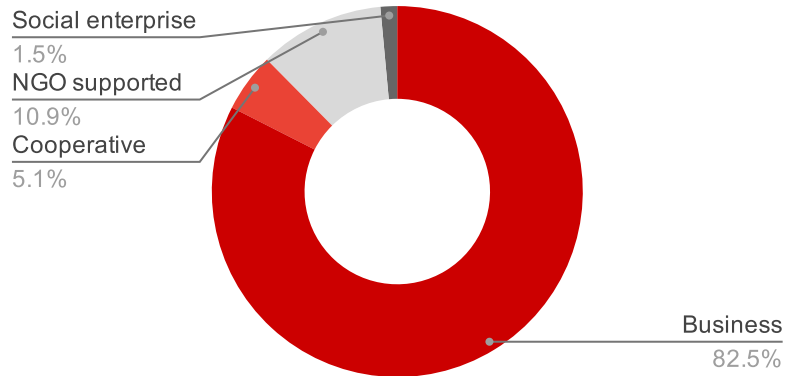
STATE OF ENERGY SAVING SOLUTIONS IN BIDIBIDI SETTLEMENT

From surveys carried out, the data tells us that the majority of the institutions identified were private businesses selling energy saving solutions alongside a multitude of household and food items.

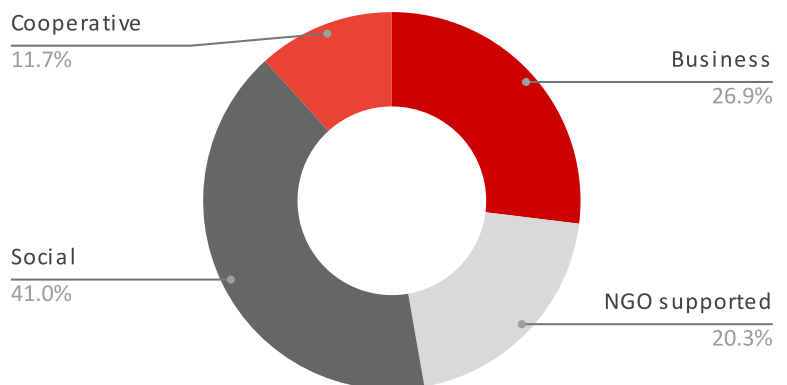
Close to 11% of the retail points identified themselves as NGO supported institutions. Cooperatives and social enterprises made up the smallest portions of institutions that traded energy saving solutions.

In terms of daily customers, social enterprises were identified as serving, on average, the highest number of customers followed by businesses and NGO supported institutions. Cooperatives appear to have the lowest capacity - or number - of customers on a daily basis.

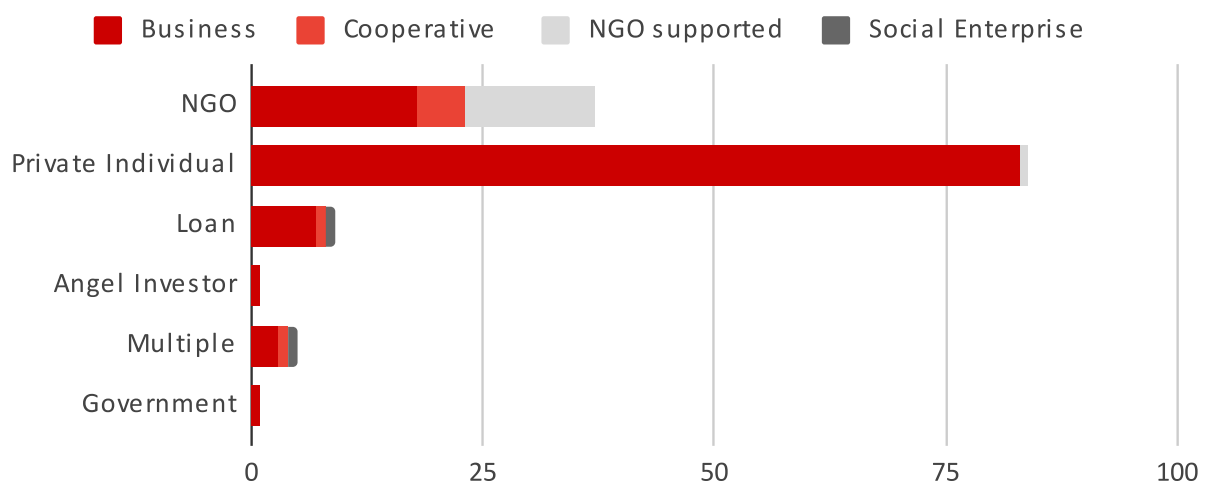
TYPES OF INSTITUTIONS



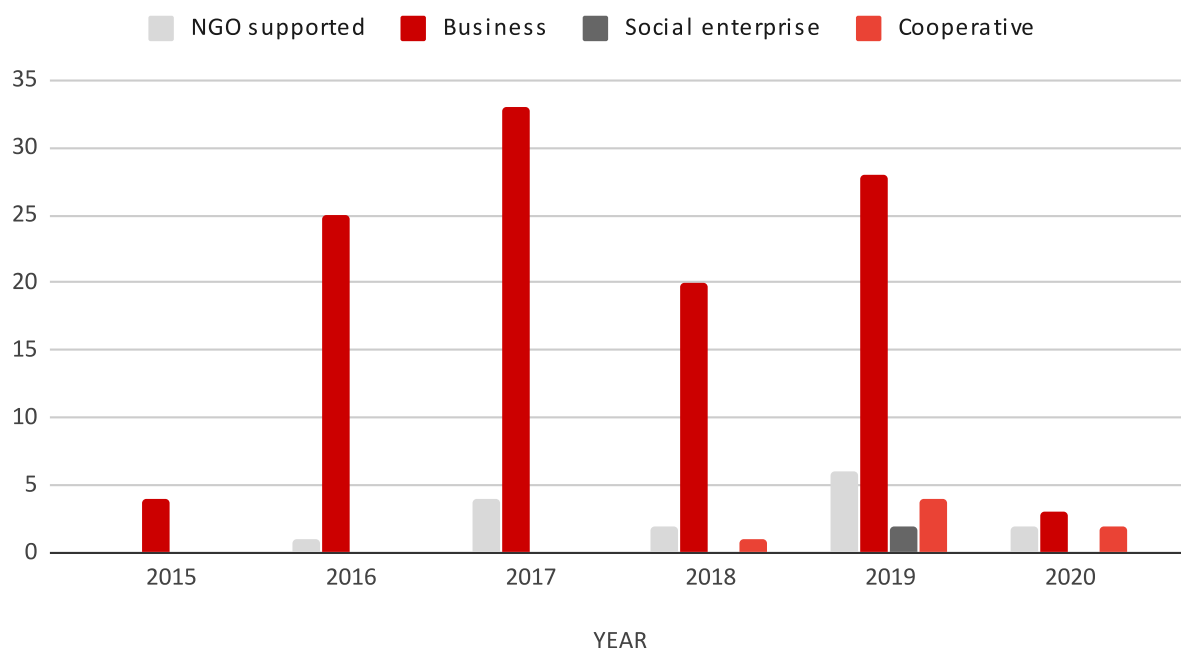
AVERAGE CAPACITY



SOURCE OF SEED FUNDING



NUMBER OF ENERGY SAVING SHOPS ESTABLISHED



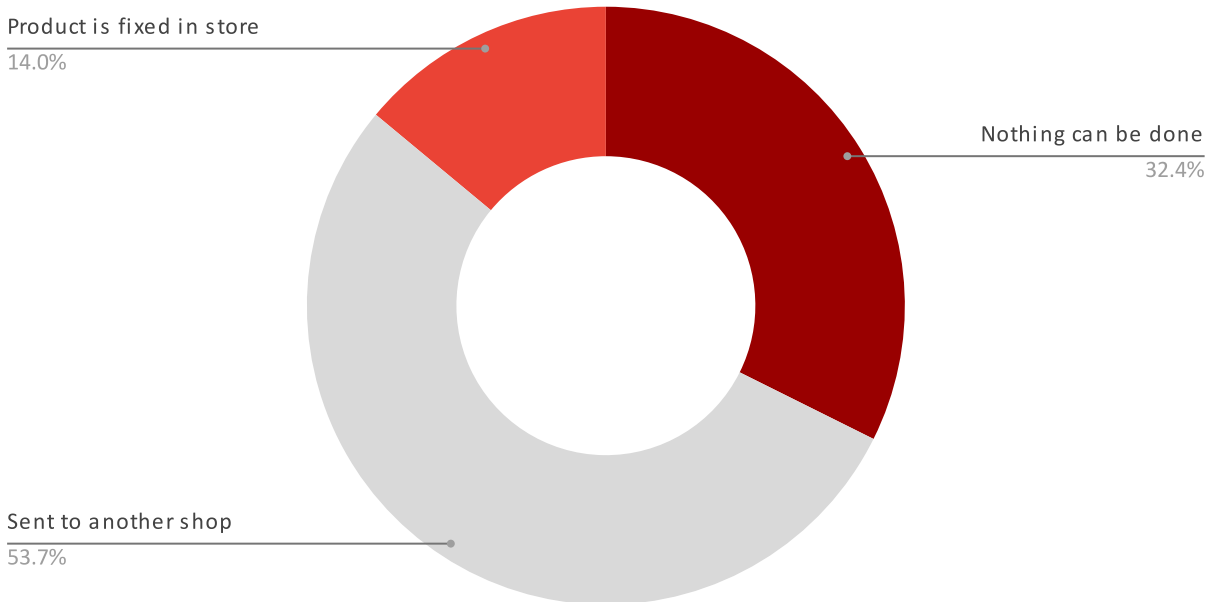
Five main sources of funding were identified as supporting retailers to establish their shops - these included funding from NGOs, private individual funds, loans, angel investors and government. The data shows that a large number of retailers identified private individual funds as their major source of capital when establishing their institutions. Businesses made up close to 100% of the private individual source of funding. The data also shows that NGO funding has been sourced by different institutions with businesses and NGO supported institutions having the highest percentages. Most of the cooperatives also sourced their funding mainly from NGOs. From the data collected, it appears that only two institutions - both businesses - sourced their funding from the government and angel investor respectively to establish their shops.

The data shows that, since 2015, there has been a steady increase in the number of businesses being established that sell energy saving solutions in Bidibidi. Over the same five-year period, there has also been a steady increase in the number of NGO supported and cooperative institutions establishing retail shops, with an 'establishment peak' in 2019 for a record number of shops (10 total) established.

In 2018, there was a decrease in the number of business retailers but in 2019, the number increased again. In 2020, as of March 2010, there are already new businesses (3) being established.

REPAIRING ENERGY SAVING SOLUTIONS - WHERE AND HOW?

OPTIONS FOR PRODUCT REPAIR



According to the data, close to 55% of the retailers responded that, in general, they send energy saving solutions to other shops for repairs. On the other hand, close to 33% of the retailers stated that they inform customers nothing can be done when a product breaks. This indicates that a huge majority of energy solution providers cannot and will not provide on-site repairs for their commodities.

Retailers who sent products to another shop for repairs were asked a follow-up question: where do you usually send your energy saving products to be repaired? Close to 45% of the responders mentioned their products are sent to Arua town, indicating that Arua is a popular repair point for most retailers selling energy saving energy solutions.

The average travel cost between Bidibidi and Arua is approximately UGX 20,000; the transport cost is the responsibility of the client and it therefore increases the total cost of the repair. Only 14% of the energy saving retailers mentioned Yumbe as the nearest location used for repairs, indicating that despite the geographic proximity to the district, most retailers still prefer Arua for repairs.

For solar solutions, in particular, close to half of the retailers responded that when a customer returns with a solar solution for repair, they inform them that nothing can be done to fix it.

REPAIR OPTIONS BY TYPE OF ENERGY SAVING SOLUTION

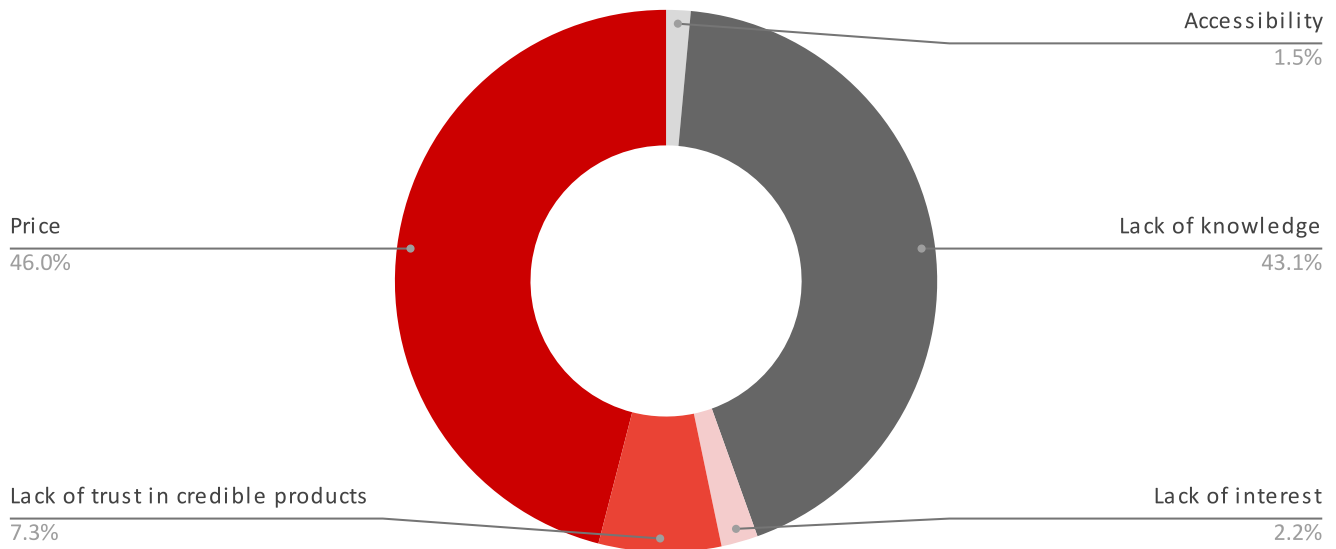


Majority of the solar retailers mentioned they send their products to another shop for repairs, indicating that solar solutions very rarely can be fixed by the retail shops that sell them. For energy saving cookstoves, most retailers noted they take stoves to another shop to be fixed. Only 1 retailer responded that nothing can be done when it breaks, indicating that cookstoves have a low internal repair capacity - in comparison to other solutions - in and around this particular region. The retailer for the energy saving cooking bags mentioned that when a client comes to the shop to repair it, his answer is usually that nothing can be done, indicating that energy saving cooking bags also have a low internal repair capacity both in and around the region.

According to the data, over 80% of the energy saving solutions cannot be repaired in or around the settlement. Close to 55% of the retailers reported that they generally have to send a solution to another shop for repair, indicating that when a solution breaks, customers must wait for quite some time until the solution is fixed. Similarly, customers can expect to pay hefty fees for their repairs since their products must travel to nearby down to be fixed. Setting up repair shops closer to the settlement could have a positive impact on reducing the time it would take for solutions to be repaired and the total cost for it to be fixed. Alternatively, organizing "repair boot camps" for retailers who are interested in learning skills to repair energy saving solutions, particularly solar-related, could have a tremendous impact on how communities perceive such repairs as the repair would take place in front of them.

CHALLENGES IN SELLING ENERGY SAVING SOLUTION PRODUCTS

CHALLENGES FACED IN SELLING PRODUCTS TO CUSTOMERS



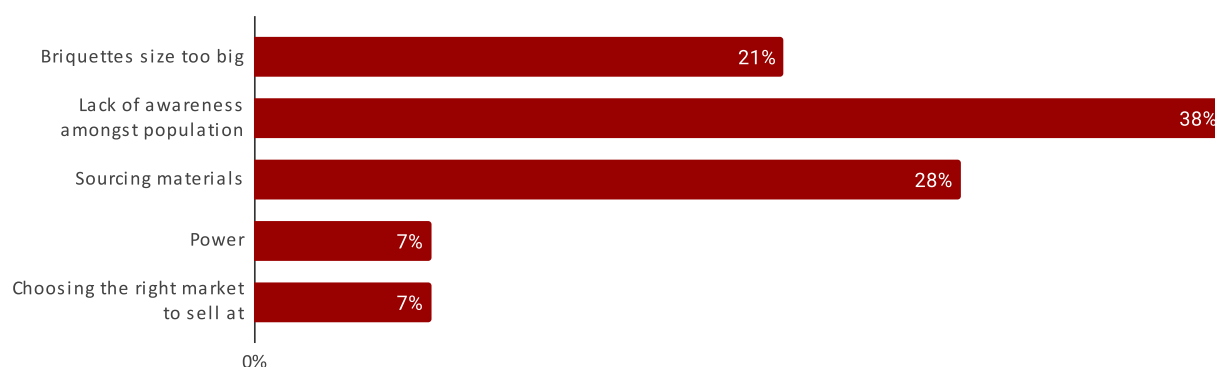
Close to half of the retailers interviewed mentioned that the high purchase price of some energy saving solutions made it difficult to sell the products to residents within the settlement.

Not far behind the challenge around price is the lack of knowledge in the settlement about the different energy saving solutions available to them. Close to 45% of the retailers mentioned that most residents do not have enough information about the advantages of using energy saving solutions over traditional products. Only 7% of the retailers mentioned lack of trust in credible products as a major challenge in selling their products, indicating that from the sellers' perspective (which could be biased) the possibility of purchasing a non-authentic solution is not a major problem. Similarly, only 1% of energy saving solution retailers mentioned accessibility to available energy saving solutions as a major challenge,

indicating that, to a large extent, most energy retailers have steady and reliable suppliers for the energy solution products they sell.

The most cited challenge by NGO supported institutions was the lack of knowledge amongst residents about the advantages of energy saving solutions. Business institutions cited both high prices of commodities as well as lack of knowledge about energy saving products representing a challenge to them. For social enterprises, the main challenge is both the lack of knowledge and lack of interest amongst Bidibidi residents in selling their products while cooperatives cited high prices and lack of trust in credible products as theirs.

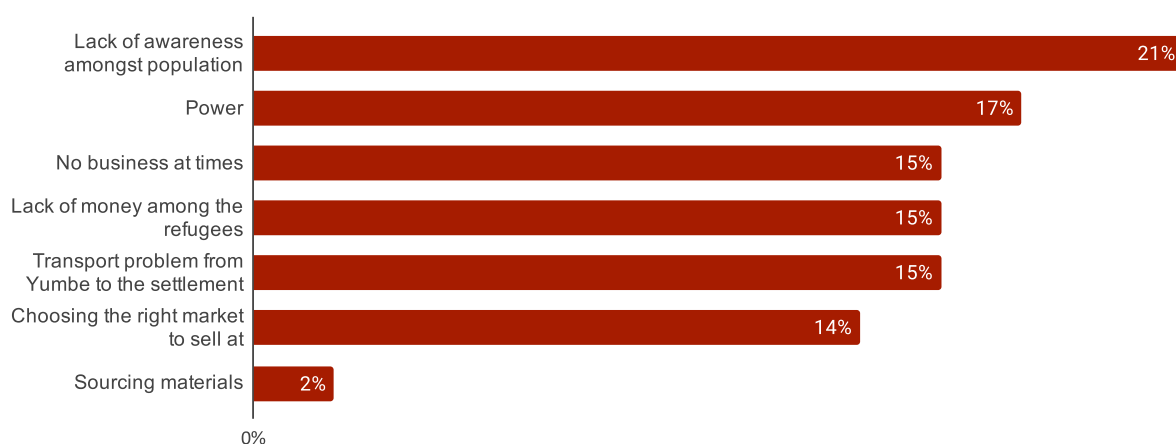
CHALLENGES IN THE BRIQUETTES BUSINESS



Close to 40% of the businesses selling briquettes cited lack of awareness amongst the population as a challenge. Most of the retailers mentioned that a large portion of the population still do not truly believe that briquettes cook faster and longer than the traditional firewood energy source. For these retailers, a major challenge has been sourcing the correct materials consistently to

ensure high-quality made briquettes. For this reason, most retailers selling briquettes also act as manufacturers of the solution. Another challenge highlighted in the surveys was that briquette sizes manufactured were often too big for cookstoves sold; over 20% of the briquette retailers highlighted this to be the biggest challenge impacting their monthly sales.

CHALLENGES IN THE SOLAR BUSINESS



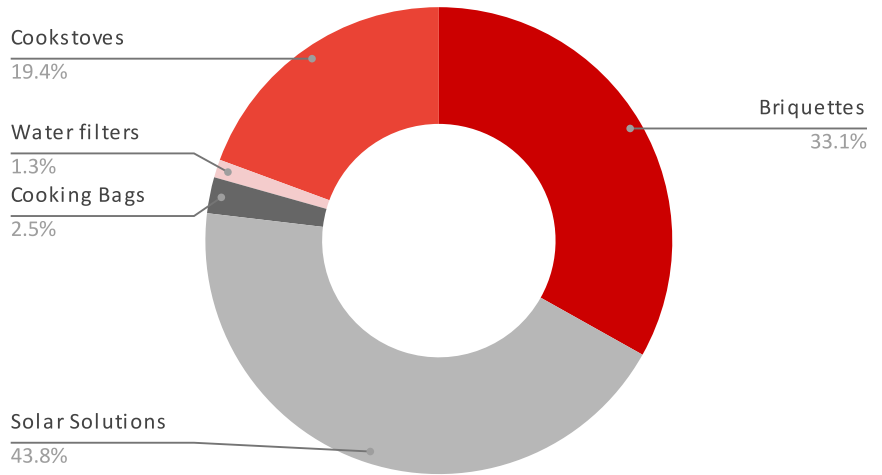
In the solar business, over 20% of the respondents noted that a large portion of the population still do not see the value of using solar solutions in their daily routine. Another challenge was the high cost and/or lack of transport to and from Yumbe for suppliers to bring stock to the settlement. This transport cost is transferred to customers, reducing the number of residents that can purchase the item.

Lack of disposable money and low purchasing power amongst the refugee population was also highlighted as a periodic but significant challenge. Sourcing materials seemed to not be a major challenge to most retailers selling solar solutions. Only 2% of the solar solution retailers mentioned that they find it difficult to source the right solutions that are attractive to their clients.

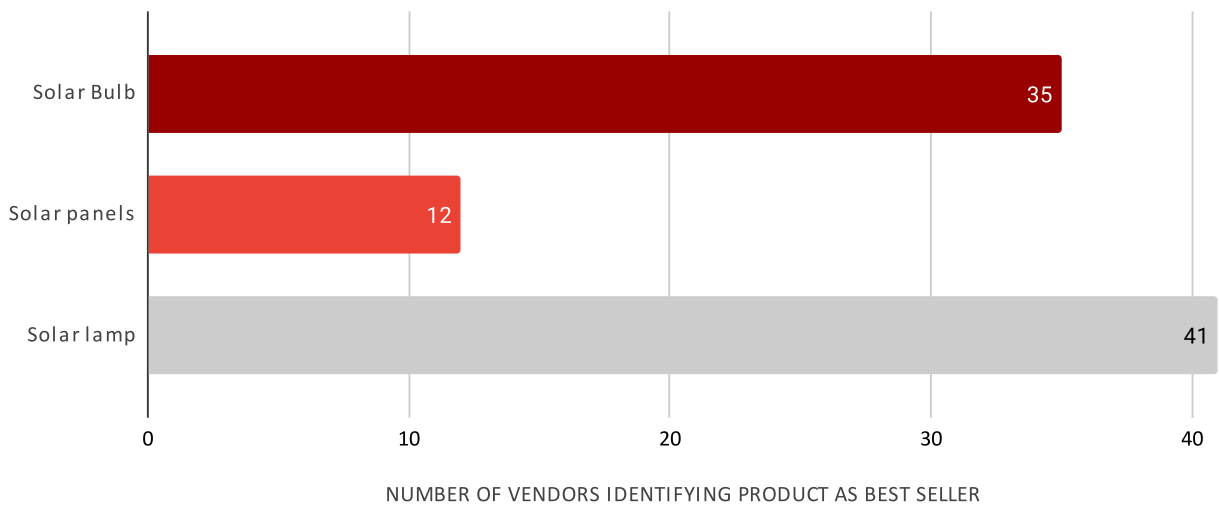
ENERGY SAVING SOLUTIONS THAT SELL IN BIDIBIDI SETTLEMENT

Solar solutions and briquettes were identified as the most purchased energy saving solutions across the settlement. Energy saving cook stoves made up 20% of the market with water filters and cooking bags reported as purchased the least across the settlement.

HIGHEST SELLING ENERGY SAVING SOLUTIONS



BEST SELLING SOLAR PRODUCTS

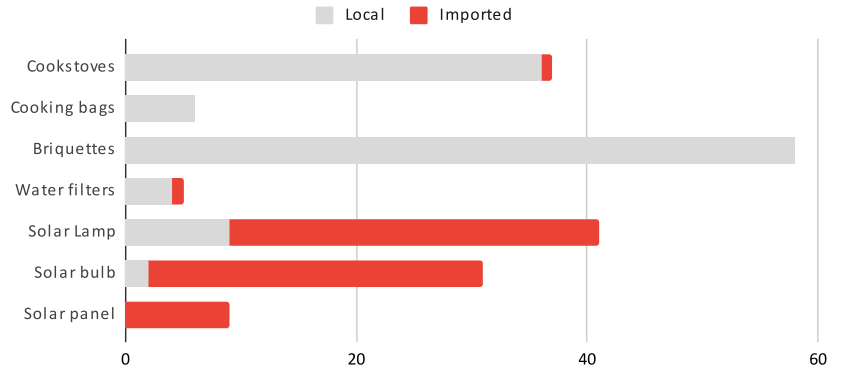


The most sold solar solutions were solar lamps and bulbs. These two items accounted for more than half of the total solar solutions sold within the settlement with solar panels being the least sold item.

SOURCING AND CERTIFICATION OF ENERGY SAVING SOLUTIONS

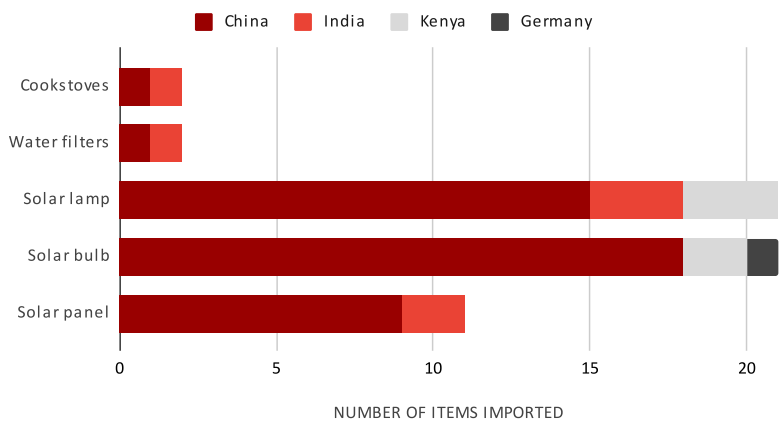
Most solar solutions were imported with only a few solar bulbs and lamps assembled locally. Briquettes were all locally produced as raw materials exist locally and the skills to produce them have been shared between local communities for some time. All retailers selling cooking bags and cook stoves noted that their solutions are made locally.

SOURCING OF ENERGY SAVING PRODUCTS



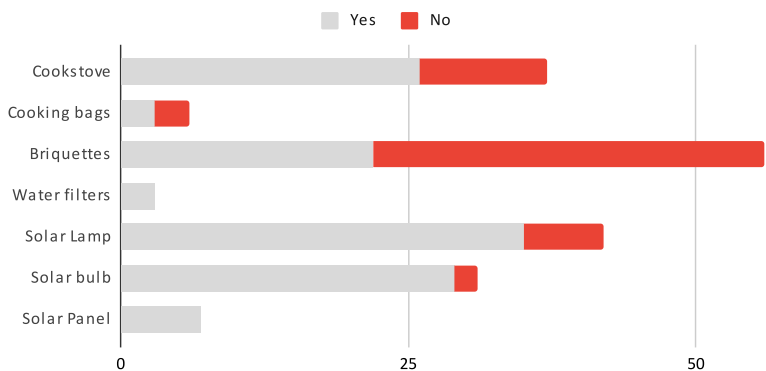
According to the data, most energy saving solutions are imported from China. With all major solar solution products being mainly imported from China, only a few solar lamps and bulbs are imported from India. A handful of retailers selling solar solutions did mention that they acquired solar bulbs from Germany as well.

COUNTRY OF ORIGIN FOR IMPORTED ITEMS



Based on the respondents, most of the solar solutions are marked as certified. Solar lamps were the least frequently certified solar solutions with over 5 retailers mentioning that some of their solar lamps were not certified. Briquettes appear to have the highest non-certification rate among all energy solution providers.

CERTIFICATION OF ENERGY SAVING SOLUTIONS



RETAILERS WITH RECYCLING ACTIVITIES IN BIDIBIDI SETTLEMENT

According to the survey data, only 10 retailers are carrying out recycling activities in Bidibidi settlement. 30% of these represent NGO supported institutions and the other 70% are businesses. Most of these institutions were recycling organic waste with only 30% of the institutions focusing on plastic bottles and bags. Those institutions who recycle plastic mentioned that they were collecting plastic waste for another company who would come and collect plastic from their shop.

Zone 1

Happy Group (NGO supported)
Manzur & Sons Enterprises (Business)
Loku and Sons (Business)
Jobless Corner (Business)

Zone 2

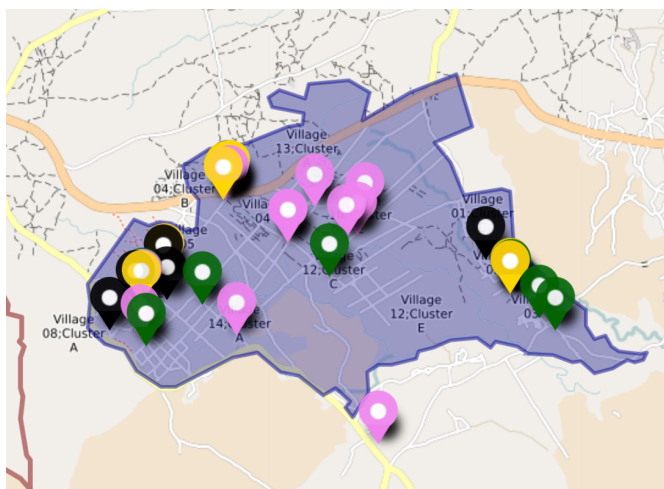
United Group (NGO supported)
Juma's Shop (Business)
Munguyiko Enterprise (Business)
Yajta Charcoal Briquettes (NGO supported)
Francis & Family Shop (Business)

Zone 4

Okello's Shop (Business)

INTERACTIVE MAP OF ENERGY SAVING SOLUTIONS

As part of this project, HOT developed an interactive map highlighting the distribution of all energy saving solution retailers across the settlement with detailed information for each establishment collected as part of the field survey. The purpose of this web-based information tool is to provide users with a quick overview of the data collected for all retail points across the five zones. To access the map, please visit <http://bit.ly/energy-saving-solutions-bidibidi>



SHOP DIRECTORY

Business Name	Category	Zone	Operator	Phone Number	Capacity	Solutions Available
Happy Shop	NGO	Zone 1	Night	778056698	15	energy saving cookstove; briquettes
Alaru's Shop	Business	Zone 1	Alaru Alex	775880823	13	energy saving cookstove; solar solutions
Khemis' Shop	Business	Zone 1	Khemis Cryton	789126748	10	solar solutions
Cultural Community Service Shop	Business	Zone 1	David Lesuk	786566989	55	energy saving cookstove
Happy Group	NGO	Zone 1	Kwaje Felix	773496361	40	energy saving cookstove
Dramani's Shop	Business	Zone 1	Dramani Adini	778233181	12	energy saving cookstove
Alex's Shop	Business	Zone 1	Alex Lomoro	775159196	20	energy saving cookstove
Dafur's Shop	Business	Zone 1	Zakaria Ahmed	787655662	9	solar solutions
God's Mercy	Business	Zone 1	Seme Mawa	770423494	15	briquettes
Moses Wani's Shop	Business	Zone 1	Moses Wani	789104912	20	energy saving cookstove
Brown's Son Enterprises	Business	Zone 1	John Brown	774148502	4	briquettes
Loku And Sons	Business	Zone 1	Morris Loku	771373485	6	briquettes
Jobless Corner	Business	Zone 1	Peter Kepo	786009158	7	briquettes
Rabuna Fi Shop	Business	Zone 1	Likambu	777209324	10	briquettes
Karaba's Shop	Business	Zone 1	Richard Bida	793561145	40	briquettes
Thomas Gamali's Shop	Business	Zone 1	Tunda Edward	778331950	15	energy saving cookstove
Briquettes Produce Group	Business	Zone 1	Gule Omari Hahan	779704124	10	briquettes
John Bebe's Shop	Business	Zone 1	Saviour Lomoro	779100622	5	briquettes
Family & Sons	Business	Zone 1	Tabuli	786048896	30	energy saving cookstove

Mercy Briquettes Production	Business	Zone 1	Mercy Briquettes Production	789661070	35	briquettes
Garang's Shop	Business	Zone 1	Garang	775639874	50	energy saving cookstove
Free Boy's Shop	Business	Zone 1	Batali Cosmas	793651105	20	briquettes
Beatrice Enterprise	Business	Zone 1	Beatrice	778684449	5	energy saving cookstove; briquettes
Abasi Galana Enterprise	Business	Zone 1	Galana	775538783	40	solar solutions
Kenyi Francis' Shop	Business	Zone 1	Kenyi Francis	783662369	20	solar solutions
Alemi Kiosk	Business	Zone 1	Alemiga Joseph	786550205	30	energy saving cookstove; briquettes
Kaka Nyero's Shop	Business	Zone 1	Olum Francis Ola	785299427	15	energy saving cookstove
VIP Kiosks	Business	Zone 1	Kennedy Bidal	773730791	30	solar solutions
Peace of Christ Retail Shop	Business	Zone 1	Peter Gatkuok	774469842	10	energy saving cookstove; briquettes
Big Brother Alia & Sons Enterprise	Business	Zone 1	Alia Adnan	786053115	26	solar solutions
Sunday Energy Center	Business	Zone 1	Sunday Tom	775427613	5	solar solutions
Lemerefuku Business Enterprise	Business	Zone 1	Taban Francis	786734342	20	solar solutions
Everready's Shop	NGO	Zone 1	DCA	785584428	20	energy saving cookstove; briquettes
Sam & Sons	Business	Zone 1	Sunday Simon	778368443	30	briquettes;solar solutions
Thomas Cirilo Shop	Business	Zone 1	Pitia Alex Richard	776619029	28	energy saving cookstove; briquettes
Manzur & Sons Enterprises	Business	Zone 1	Manzur Khalid	782303271	20	briquettes
Glory's Briquettes Production	Business	Zone 2	Sharon Senado	781354889	20	briquettes
Baba's Shop	Business	Zone 2	Guya	789401163	15	briquettes
Asima's Shop	Business	Zone 2	Asima Jullius	778285963	20	solar solutions

United Group	NGO	Zone 2	Adra Uganda	782364163	5	briquettes
Bida Enterprises	Business	Zone 2	Emmanuel Bida	779822990	40	solar solutions
Juma's Shop	Business	Zone 2	Juma Joseph	782345347	7	briquettes
Sally's Shop	Business	Zone 2	Sally Hansen	789646149	30	solar solutions ;briquettes
Mama Mary's Shop	Business	Zone 2	Mama Mary	789104912	20	solar solutions
Moro's Shop	Business	Zone 2	Moro Bosco	789761992	50	solar solutions
God Know's Shop	NGO	Zone 2	Mama Isaac	787071203	50	energy saving cookstove ;briquettes
God Mercy Shop	Business	Zone 2	Lomeri Joseph	789104912	35	energy saving cookstove ;briquettes
Wilson Enterprise	Business	Zone 2	Wilson	776024424	50	solar solutions
Paradise Investment	Business	Zone 2	Kesi Moses	783476413	6	solar solutions
Paul & Sons	Business	Zone 2	Paul Makuma	779696078	6	solar solutions
Munguyiko Enterprise	Business	Zone 2	David Lokule	787253005	4	briquettes
Lomerika Shop	Business	Zone 2	David Salah	770763998	40	energy saving cookstove; briquettes
Baba Morris' Shop	Business	Zone 2	Alex Lemi	777393836	35	solar solutions
Taban Jackson & Family	Business	Zone 2	Taban Jackson	782165930	12	solar solutions
Yajta Charcoal Briquettes	NGO	Zone 2	Yajta Charcoal Briquettes	778230284	10	briquettes
Francis & Family Shop	Business	Zone 2	Francis Lokolong	785378676	9	briquettes
Ngongitali Enterprise	Business	Zone 2	Amos Lasu	770512909	6	solar solutions
Malish & Brothers Enterprise	Business	Zone 2	Stephen Juma	788836982	9	solar solutions
God Bless Me & My Shop Enterprise	Business	Zone 2	Alfred Tereka	778952269	30	solar solutions
Nelson Enterprise	Business	Zone 2	Nelson Mandela	782641762	4	solar solutions

S-Corner Shop	Business	Zone 2	Samuel Malisi	776530475	3	solar solutions
Simon Peter Enterprise	Business	Zone 2	Simon Peter	770458433	9	solar solutions
Kenyi & Family's Shop	Business	Zone 3	Kenyi & Family		15	solar solutions
Rufasi Modi's Shop	Business	Zone 3	Rufasi Modi	774012014	20	solar solutions
Maranga Shop	Business	Zone 3	Maranga Hostel	785752747	50	solar solutions
Peter's Shop	Social Enterprise	Zone 3	Peter		5	solar solutions
Bernard's Shop	Business	Zone 3	Bernard Kirumira	777488145	10	solar solutions
Emmanuel Yata's Shop	Business	Zone 3	Emmanuel Yata	785383801	3	energy saving cookstove
David Mandela Enterprise	Business	Zone 3	David Mandela	773089302	20	solar solutions
Moses Malish	Business	Zone 3	Moses & Sons		10	solar solutions
Ladu's Shop	Business	Zone 3	Ladu	789039069	30	solar solutions
Billigo Jobo's Shop	Business	Zone 3	Billigo	789508736	50	solar solutions
Baikana Enterprise	Business	Zone 3	Modi Juluis	787116789	30	solar solutions
Lemi,s Shop	Business	Zone 3	Lemi John		35	solar solutions
Kalid's Shop	Business	Zone 3	Kalid Noaha	786618152	10	solar solutions
Wani's Shop	Business	Zone 3	Wani Sabiti		23	solar solutions
Awezirinho Electronic Limited	Business	Zone 3	Awezi Torah Israfil	774707343	5	solar solutions
Blessed Briquette Producing Group	Business	Zone 3	Arike David	789658910	45	briquettes
Ngongita Briquette Group	Business	Zone 3	Taban Martin	785428737	40	briquettes
James' Shop	Business	Zone 3	James	703192732	20	solar solutions
Peter's Shop	Business	Zone 3	Peter	774166403	20	solar solutions
Young Stars Shop	Business	Zone 3	Rume Ben	770446032	1	briquettes

Happy Group	Business	Zone 3	Alex Lemeru	775089251	2	briquettes
Aliga Siraji's Shop	Business	Zone 3	Alicia Siraji	778829466	10	solar solutions
Sadam's Shop	Business	Zone 3	Sadam Akibaru	786497908	10	solar solutions
Zambaric Acid's Shop	Business	Zone 3	Zambaric Acid		10	solar solutions
Basri	Social Enterprise	Zone 3	Basri	787966552	50	solar solutions
Kumi Kumi Energy Saving Group	Cooperative	Zone 3	Kumi Kumi Energy Saving Group		10	briquettes
God Known's Energy Saving Group	Cooperative	Zone 3	God Known. S Energy Saving Group	780847657	8	energy saving cookstove
Safer Environment World	NGO	Zone 3	John Taban	775763882	1	briquettes
John's Shop	Business	Zone 3	John		25	solar solutions
Data's Shop	Business	Zone 3	Data	774991309	32	solar solutions
Yoyo Youth Energy Corporation	Cooperative	Zone 3	Bitu John	777904776	10	energy saving cookstove; briquettes; water filters; solar solutions; energy saving cooking bags
Bashir's Shop	Business	Zone 3	Bashir	775385178	5	solar solutions
Batali's Shop	Business	Zone 3	Batali	786456993	25	solar solutions
Yoyo Youth Energy Corporation	Cooperative	Zone 3	Bitu John	777904776	10	energy saving cookstove; energy saving cooking bags; briquettes; water filters; solar solutions
Happy Energy Saving Group	NGO	Zone 3	Emanuel Kenny	772596047	1	energy saving cookstove
Morogita Energy Saving Stoves	NGO	Zone 3	Data Kemis	773456439	3	energy saving cookstove
Village Power	Business	Zone 3	Amale Santo	788734443	15	solar solutions
Step By Step Group	Business	Zone 4	Step By Step	784369755	66	briquettes
Joseph's Shop	Business	Zone 4	Joseph Kenyi	787611260	50	energy saving cookstove

Lomago Shop	Business	Zone 4	Lomago Noel	776313557	40	briquettes
Lasu's Shop	Business	Zone 4	Lasu Felix	781332621	50	solar solutions
Okello's Shop	Business	Zone 4	Okello Opio	782396061	55	solar solutions
Kumi Kumi Saving Briquettes Group	Cooperative	Zone 4	Yuzo Margeat	786191807	3	briquettes
God's Care Shop	Business	Zone 4	Ngota Issac	775112814	5	solar solutions
Wowoji's Briquettes Production Group	Business	Zone 4	Wowoji Group	773781786	50	briquettes
Victor & Sons	Business	Zone 4	Victor	793102833	15	briquettes
Emmanuel's Shop	Business	Zone 4	Emmanuel Lokudu	783556720	17	solar solutions
Atiku's Shop	Business	Zone 4	Atiku Maliki	772902613	20	solar solutions
Abure's Shop	Business	Zone 4	Abure Nasuru	776672463	20	solar solutions
Kumi Kumi Briquette Group Oluba	NGO	Zone 4	Emmanuel Jackson	751770065	5	briquettes
Suniz Enterprise	Business	Zone 5	Geriga Amaza	774323574	12	solar solutions
Wacha Maneno Enterprise	Business	Zone 5	Alli Hamid	778562389	15	solar solutions
Aliga & Sons	Business	Zone 5	Amiga Kamis	778635912	8	solar solutions
Glass Company	Business	Zone 5	Alone Gadafi	779632876	20	solar solutions
Emmasonic Enterprise	Business	Zone 5	Emmanuel Lemi	788171288	6	solar solutions
The Dream Enterprise	Business	Zone 5	Emmanuel Amule	787959657	8	solar solutions
Galakimoni Enterprise	Business	Zone 5	Alison Jigo	770600547	6	solar solutions
Biomass Munguadoma Energy Savings	NGO	Zone 5	Simon Lokudu	788223018	10	briquettes
Bomass Munguaduma Energy Saving_2	NGO	Zone 5	Ayume Charles	774665819	3	briquettes
Mungusadiya	NGO	Zone 5	Keden Victoria	705507447	1	briquettes

Nguna Duma Briquette Group	NGO	Zone 5	Lukudu Samuel	779464678	15	briquettes
Ngun Ngaraki Briquettes Production Group	Business	Zone 5	Justine Kenyi	784933766	20	briquettes
Levi's Shop	Business	Zone 5	Levi Ngota	789039069	25	solar solutions
Victor's Shop	Business	Zone 5	Victor Hakim	780196810	30	solar solutions
Wilson's Shop	Business	Zone 5	Wilson	774115922	15	briquettes
Celina's Wonders Bags	Business	Zone 5	Celina Konga	700404580	3	energy saving cooking bags
Loketa Wata Business Group	Cooperative	Zone 5	Loketa Wata Business Group	775057120	4	energy saving cooking bags
Nugu Doma Briquette Group	Cooperative	Zone 5	Nugu Doma Briquettes Group	788223098	10	briquettes
Super Garaz	Business	Zone 5	Justin Sebit	771480851	16	solar solutions
Mawa's Shop	Business	Zone 5	Mawa Lawrence	775697609	50	briquettes; solar solutions
Sunrise Group	NGO	Zone 5	Sunrise Group	787625488	25	energy saving cookstove
Mondita Group	Business	Zone 5	Mondita Group	770716341	20	energy saving cookstove
Morijita Group	Business	Zone 5	Morijita Group	783557779	25	energy saving cookstove
Dumaki's Group	Business	Zone 5	Dumaki Group	780120563	15	energy saving cookstove
Iyete Group	Business	Zone 5	Iyete Group	771489408	23	energy saving cookstove; briquettes