



Intervention Brief

The Alternative Service Delivery Unit

The Alternative Service Delivery Unit (ASDU) is a community-led, data-driven independent off-grid service delivery unit that oversees the design, facilitation and implementation of tailored service delivery models that are financially sustainable, technically sound and socially inclusive. The ASDU is being implemented by the GreenCape Sector Development Agency (GreenCape) and is directed by GreenCape's institutional identity, governance, standards and compliance frameworks.

The ASDU is currently active on a site called Nomzamo Agricultural Village. For this community, we have completed an in-depth enumeration exercise and engaged in we-design sessions to build our understanding of their community and their priorities, and to help us design their energy service delivery needs.

Project aim

In partnership with the Royal Danish Embassy in South Africa and the New Zealand High Commission of South Africa, the Alternative Service Delivery Unit is supporting the community of Nomzamo Agricultural Village in meeting their energy needs. In order to build a strong social foundation for an alternative energy intervention, the implementing team have over the last year undertaken extensive social mobilisation, enumeration and participatory co-design exercises to understand the community's profile and priorities; and build community buy-in and readiness.

GreenCape is looking for technical partner/s to provide sustainable off-grid energy service/s that meet the energy needs of ~300 homes and contribute to create economic and social development in the wider community.

Settlement information

Nomzamo Agricultural Village is located in Ermelo, Mpumalanga, on land belonging to the provincial government. This is a relatively young community, having been established ~2017, with majority of the community members coming from surrounding areas. It has led by a very proactive and strong leadership team that has the best interests of the community at heart.

Based on the enumeration which was conducted in September 2023, Nomzamo is home to 2097 people, of which 958 are children. **There is no formal electricity in this settlement and limited communal water points (all of which are informally connected).** The unemployment rate in the area is close to 56%, with 89% of households earning or receiving less than R3500 per month.

There is no municipal service delivery offered to this community for electricity, water and sanitation or solid waste management. Water is illegally connected for all purposes, and is mainly

The Alternative Service Delivery Unit

GreenCape Office
2nd floor, Aria North Wharf Building
42 Hans Strijdom Avenue, Foreshore
Cape Town
8000

Landline | +27 021 811 0250
Email | asdu@green-cape.co.za

In partnership with:



ROYAL DANISH EMBASSY
Pretoria



NEW ZEALAND
HIGH COMMISSION
Te Aka Aorere



fulfilled through a number of communal taps. There are no sanitation services. **The majority of the community depends on low quality self-dug pit latrines.** While most community members are safe from crime, **they do not feel safe to use the toilets at night due to fear of falling in** (there is no area lighting).

Most of their fixed monthly income is spent on energy (cooking fuel), food, and phone related costs.

High food costs are attributed to the lack of refrigeration where they are restricted from buying perishable goods in bulk. Residents tend to buy what they need for the day or relying on non-perishables, and with the leftovers going to waste.

Most residents use a combination of wood and coal (not charcoal) for cooking and heating. Some use paraffin for cooking and lighting, and a few use gas. While gas is considerably cheaper to buy per month, it requires a **high upfront amount, which is not viable for residents.** As such, they end up paying considerably more by the end of the month for the other fuel types because they can pay for them as per their need. **Most residents use candles for lighting.** There are different types of candles with different costs and durability, but on average, it costs R5 per candle and can cost as much as R300 per month.

As **there are no Wi-Fi or charging infrastructure,** residents spend between R50 and R200 per month on data and airtime. Most people make use of daily specials for airtime and data. For charging, many rely on their neighbours or charge their phones at shops, for a fee.

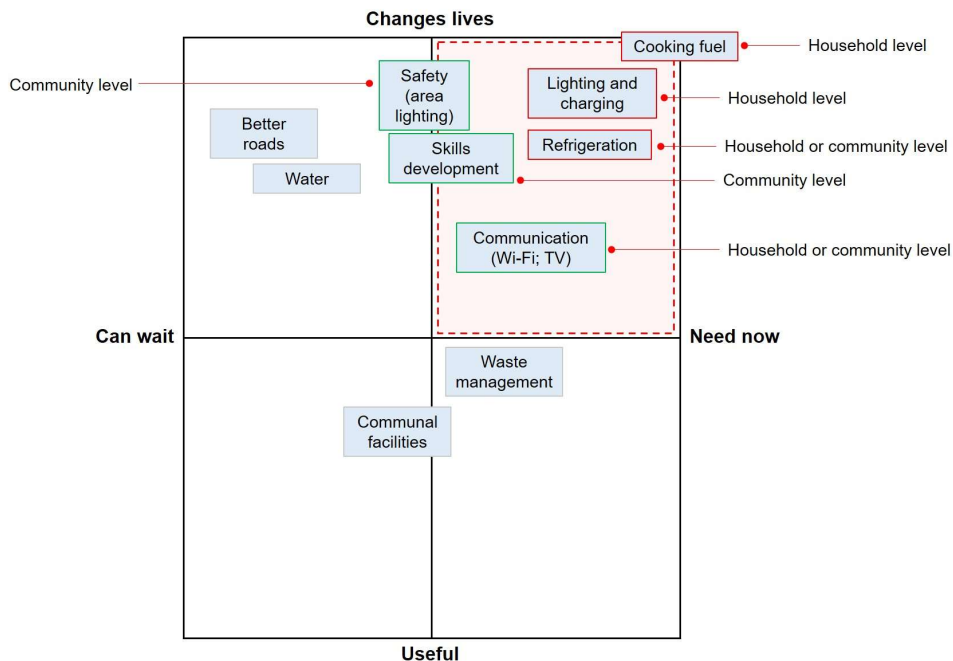
Key components	Detail
Name	Nomzamo Agricultural Village
Number of households	681
Average household size	3
Percentage employed	56%
Average fixed income per household per month ¹	R1600 – R2500
Average expenses per household per month	
Cooking fuel (wood and coal)	R1100
Lighting	R300
Cellphone	R70
Food	R1000
Transport	R60
Average home structure type	Informal; 15 m ² ; 2 rooms made from zinc
Common appliance use	Cellphone charger; TV and radio
Willingness to pay for alternative services	
Water and sanitation	Maybe
Energy	Yes
Waste	No
Main sources of energy	

¹ This is the average fixed monthly income per household, but most residents will do odd-jobs or receive grants that result in the actual income being higher.

Heating	Wood; coal
Cooking	Wood + coal; paraffin; gas
Lighting	Candles; paraffin; informal electricity

Within the framework of the verified enumeration data above, we have worked with the community leaders to help us understand their needs and priorities for an energy service to address (we-design process). The following prioritisation grid illustrates the main priorities (outlined in red), as well as secondary priorities (outlined in green), both within the top-right corner. There are certainly far more needs, but these are the ones they would like to have addressed more urgently and which they believe would create the most meaningful impact.

Insights from we-design process with community



The community leadership of Nomzamo Agricultural Village, with the support and on behalf of their community, prioritised the following key needs:

- Home-level solution for more efficient and cost-effective cooking fuel
- Home-level electricity (internal lights and charging of small appliances in individual homes).
- Home- or community level refrigeration (the ability to refrigerate food in their homes or to set up and power a community butchery or other communal facility)

The following needs were also identified. While these are not critical or urgent, they would add a lot of value to this community, especially paired with one/more of the above:

- Community level safety in the form of public area lighting;
- Skills development opportunities and job opportunities; and
- Home- or community level connectivity (the ability to connect to the internet – potentially community-level; and to watch television and listen to the radio – household level)



Willingness to pay for a service: The communities are willing to pay for safe, reliable and affordable services up to R350 per month (but their preference will be for solutions that do not have a fixed monthly cost but that can instead be paid for as they use them, i.e. pay as you go). This is dependent on the quality of service this offers, and how many of the identified needs can be solved for. The willingness to pay for a service is a trend we are observing in all of the communities we are working in, however, the capacity to pay is different for each one.

Level of service: Most of the issues that were prioritized can be solved on an individual household level. This eliminates certain types of interventions; or requires the combination of different types of services and business models for success.

Most valuable appliances to be powered: Fridge, TV, lights, cellphone chargers.

Project timeframe

The project will begin in February 2024.

Social foundations

The Community Organisation Resource Centre (CORC) are our social service partners, and have run the enumeration and mobilisation process. They will be involved in the community throughout the project to assist them with savings schemes and other social impact projects (e.g. agricultural farming and any other identified social impact opportunities).

Expression of interest

If you have experience offering off-grid energy-related services within South African informal settlements, and are interested to understand more about how your company could support the selected community, its profile and priorities, ASDU financial and partnership model, and the tender process and timelines, please attend our Briefing Session on Tuesday, 21 November 2023 from 13:30 to 15:00 (GMT+2). The Terms of Reference and RFI process will be launched at this event.