THE FUTURE OF SUSTAINABLE SANITATION

AMALOOLOO LOW FLUSH TECHNOLOGY

Initiative by Amalooloo

Background

Betram (Pty) Ltd was founded in 1986 and has developed a character of passionate involvement in bringing about high quality, sustainable sanitation solutions.

We have been able to close the sanitation loop through extensive investment in research and development.

Over 20 years of experience has revealed that the industry's biggest challenge is the inability of current technologies to treat faecal sludge or human organic waste on site, in a way that is safe and eco-friendly.

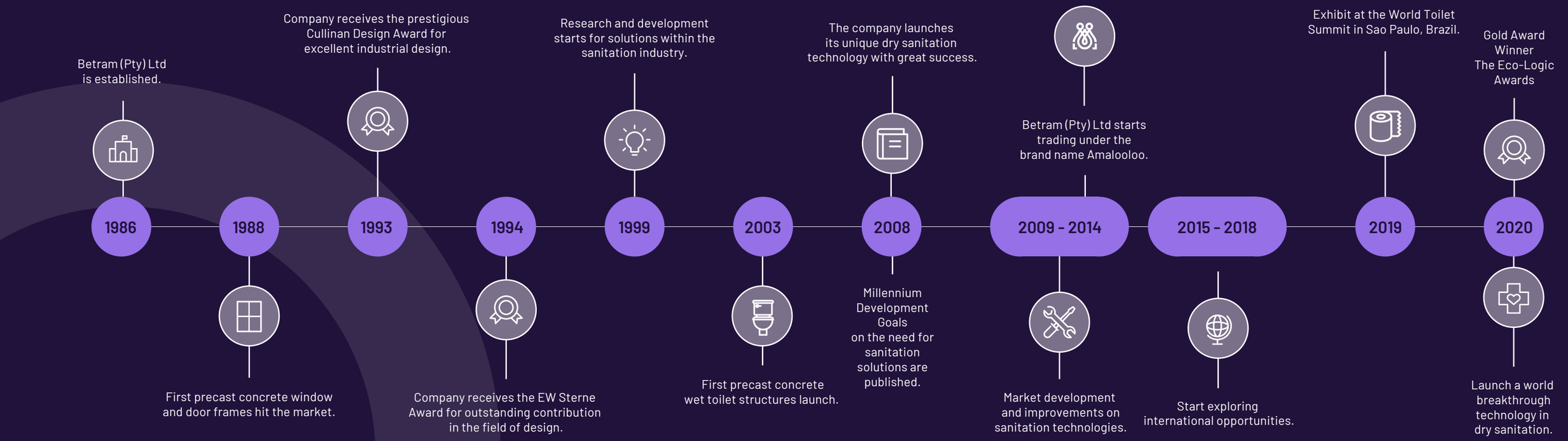
Another key aspect of this challenge is the lack of communication between the supplier of the technology and the end user for sustainability.

We have realised that we need to approach sanitation in a holistic way that includes the design, manufacturing, transportation, installation, education, communication, maintenance, and recovery of nutrients for the growth of healthy agricultural products for households and communities. In 2020, Betram (Pty) Ltd patented a world-first in dry sanitation technology, MyLoo, which launched during the first quarter of 2021.

The MyLoo sanitation system is at the forefront of solving sanitation problems in urban, peri-urban, and rural areas, as well as in schools. It is an affordable, superior product that does not compromise on quality or style and includes the safe management, storage, collection, treatment and disposal of human excreta.

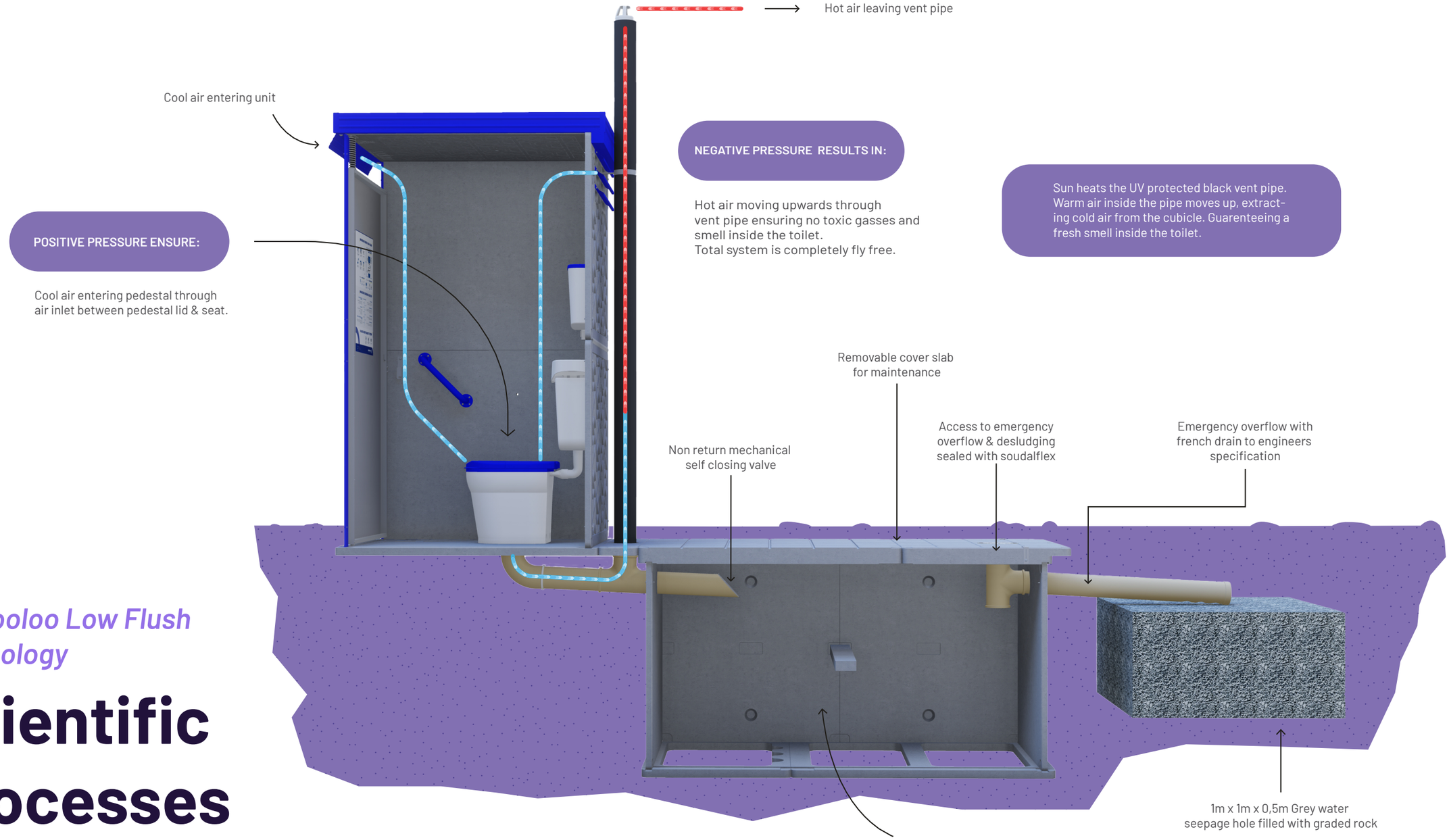
We believe in the empowerment of people through the transfer of skills, training, technologies, and processes for the provision of sustainable job opportunities.

OUR HISTORY:



Amalooloo Low Flush Technology

Scientific processes behind the technology



POSITIVE PRESSURE ENSURE:

Cool air entering pedestal through air inlet between pedestal lid & seat.

NEGATIVE PRESSURE RESULTS IN:

Hot air moving upwards through vent pipe ensuring no toxic gasses and smell inside the toilet.
Total system is completely fly free.

Sun heats the UV protected black vent pipe. Warm air inside the pipe moves up, extracting cold air from the cubicle. Guarenteeing a fresh smell inside the toilet.

LEACH PIT LIFE SPAN CALCULATION

Emptying / maintenace cycle
(1x households @ 5 occupants per household = 5 users)
Amalooloo also provides a leach pit.
(calculatios = sludge accumulation rate for leach pits @0.03m³ per person per year = 5 users x 0.03m³ per year = 0.15m³ per year)
The water used from the 500l tank is only used for filling the cistern and the waste of the outside basin does not flow into the leach pit but gets diverted into a subsoil french drain where communities can plant a vegetable garden.
Emptying interval: leach pit size = 1.5m³ / 0.15m³ per year = 10 years per
Emptying interval @ R1500 per interval. Total emptying cost per 5 year cycle = R750.00
Calculations based on 5 users per household.

Key features

Key design features include:



1. Chromadek® flashing to create catchment area for rainwater harvesting
2. Front Chromadek® louver to prevent driven rain from entering structure
3. Patented self-closing stainless steel door with ventilation openings on top & bottom
4. Open rim pedestal
5. Unique locking method so that a person cannot be locked in from the outside when the toilet is in use
6. Hand wash facility inside toilet
7. 50mpa Reinforced precast concrete panels with aesthetic design
8. Emergency overflow with French drain and access to emergency overflow
9. Ventilation holes ensure proper ventilation inside the unit
10. Transparent water reservoir with lid for washing of hands



Pedestal design

The aesthetic design of the pedestal was a collaborative effort, taking into consideration the wide range of users, from both male and female users of every age.

KEY FEATURES



Hygiene pad

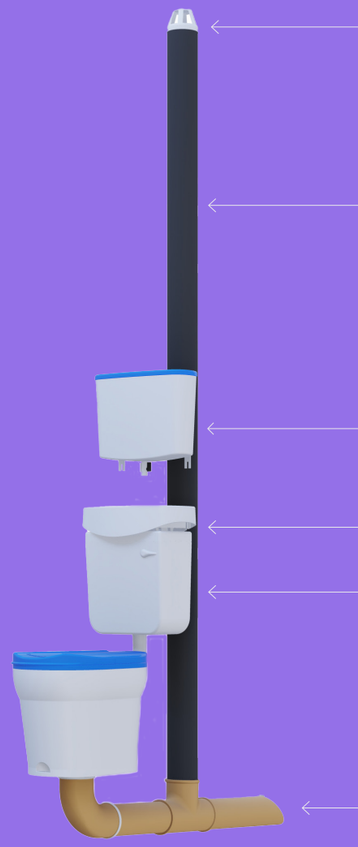


Child safe



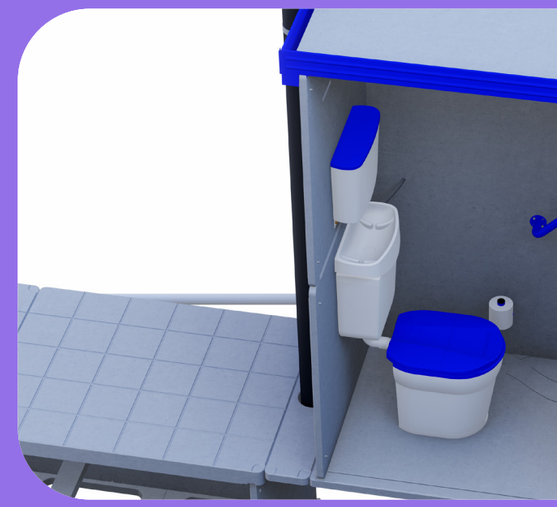
Open rim pedestal

COMPLETE SANITATION SYSTEM



FUNCTIONALITY

- **Volume of water required to flush:**
  The system is designed to require only 1,5 liters of water to perform a flush, making it an efficient and water-saving solution for sanitation.
- **Free flow system:**
  Instead of a traditional flushing mechanism, this system utilizes a free flow system where the cistern is filled by adding the required volume of water directly from the hand wash basin. This innovative approach simplifies the flushing process and reduces the need for complex plumbing.
- **Reservoir for hand washing:**
  The primary purpose of the reservoir in this system is for hand washing.
- **Odourless:**
  The system's design incorporates features to prevent unpleasant odours. This indicates that the system is equipped with mechanisms to trap or eliminate any potential odours, ensuring a pleasant and hygienic environment for users.



LET'S TALK TOILETS

UNICEF estimates that 5,7 billion people could be living in areas with water scarcity by 2050.

Without running water, the traditional flush toilet cannot work.

The creators of the innovative Amalooloo Dry Sanitation Solution have used years of experience and research to develop and produce the future of sanitation.

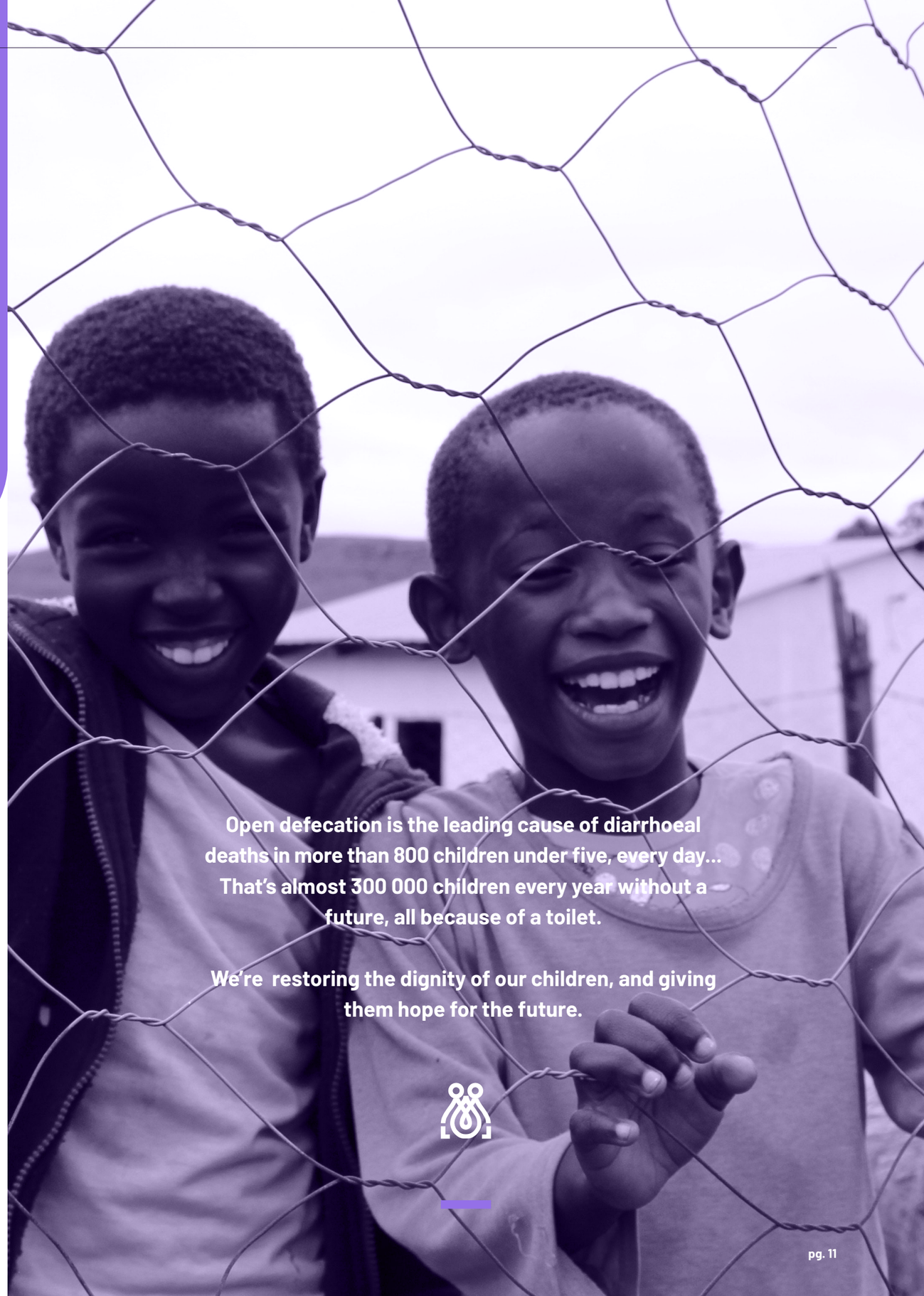
MyLoo safely manages human waste in drought-stricken areas, without using water.

SIMPLE, SUSTAINABLE SANITATION

Many have endeavoured to rethink the toilet, but solutions have been complex, expensive and inaccessible to the impoverished communities that truly need safe sanitation solutions.

APPLICATION IN THE SANITATION INDUSTRY

The sanitation solution has been implemented in residential households, clinics, ablutions, and schools across South Africa and abroad.





Initiative by Amalooloo

betram®
Patented Waterborne and Dry Sanitation Solutions

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