

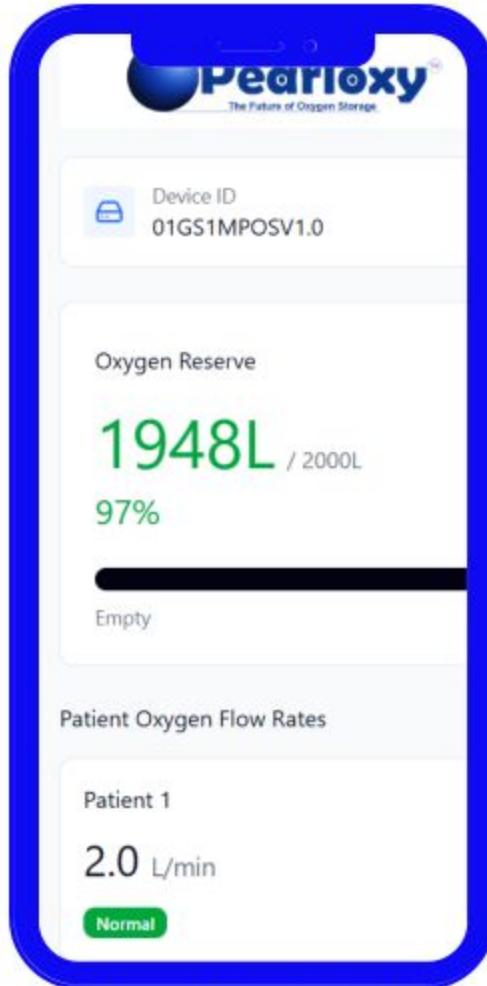


# Uninterrupted Oxygen Supply

30x cheaper than \$1000 per Disability-  
Adjusted Life Year World Bank estimate



PearlOxy's Medium  
Pressure Oxygen  
Storage (MPOS)



# 40% of Child Deaths are Preventables

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When power fails, oxygen stops. In Uganda, 64% of health facilities report temporary power interruptions, sometimes lasting hours.



(Uganda Climate Change Vulnerability & Adaptation Assessment, 2024)

# How MPOS works: Hardware and Software Synergy for Uninterrupted Oxygen

**1** Maximize Oxygen Concentrator Output



**2** Store up to 2,000L fuel-free reserve.

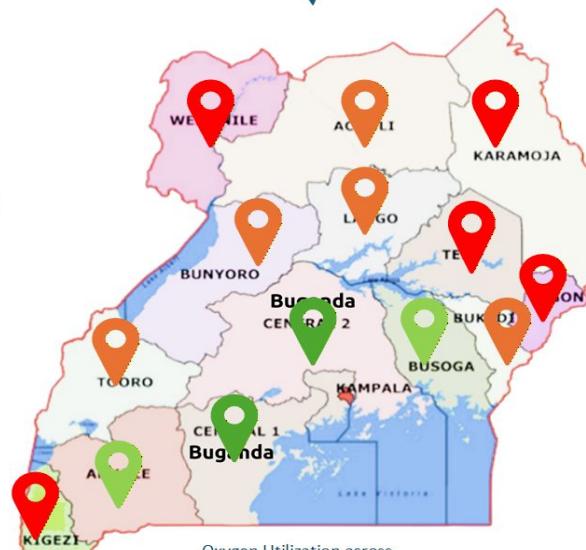
**Pearloxy™**  
The Future of Oxygen Storage

In-Charge App



System Monitoring Dashboard

**3** Serve up to 4 patients with 4 hour backup and automated switch over



Oxygen Utilization across Different sub-regions Of the country

**4** Monitor usage and performance seamlessly in real-time.

# Time to Empty 2,000L Reserve

Flow Rate (L/min)	Minutes to Empty	Hours to Empty	Approx. Days
1 L/min	2,000 min	33.3 h	1.39 days
2 L/min	1,000 min	16.7 h	0.70 days
3 L/min	667 min	11.1 h	0.46 days
4 L/min	500 min	8.3 h	0.35 days
5 L/min	400 min	6.7 h	0.28 days
6 L/min	333 min	5.6 h	0.23 days
7 L/min	286 min	4.8 h	0.20 days
8 L/min	250 min	4.2 h	0.17 days

# Step by step, we are building our MPOS device to save lives.



## 2022

**Prototype Development**  
Built first MPOS prototype, proving technical feasibility



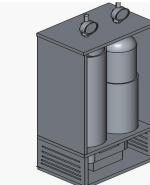
## 2023

**Recognition and Validation**  
Winner of \$4,500 innovation prize.  
**Graduate of**  
Founder Institute accelerator program



## 2024

**Intellectual Property**  
Applied for utility patent, system currently patent process handled by **AF Mpanga**.



## 2025

Foreign, Commonwealth & Development Office

**Stakeholder Engagement**  
Uganda Ministry of Health and the FDCO.  
**1st Runner-Up**  
**StartUp World Cup**  
**Uganda Finale**

## 2026

**Pilot Tests**  
Validate MPOS performance in real-world patient settings.



# THANK YOU



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