



Experiences from Solar Battery Charging Kiosks in Rwanda

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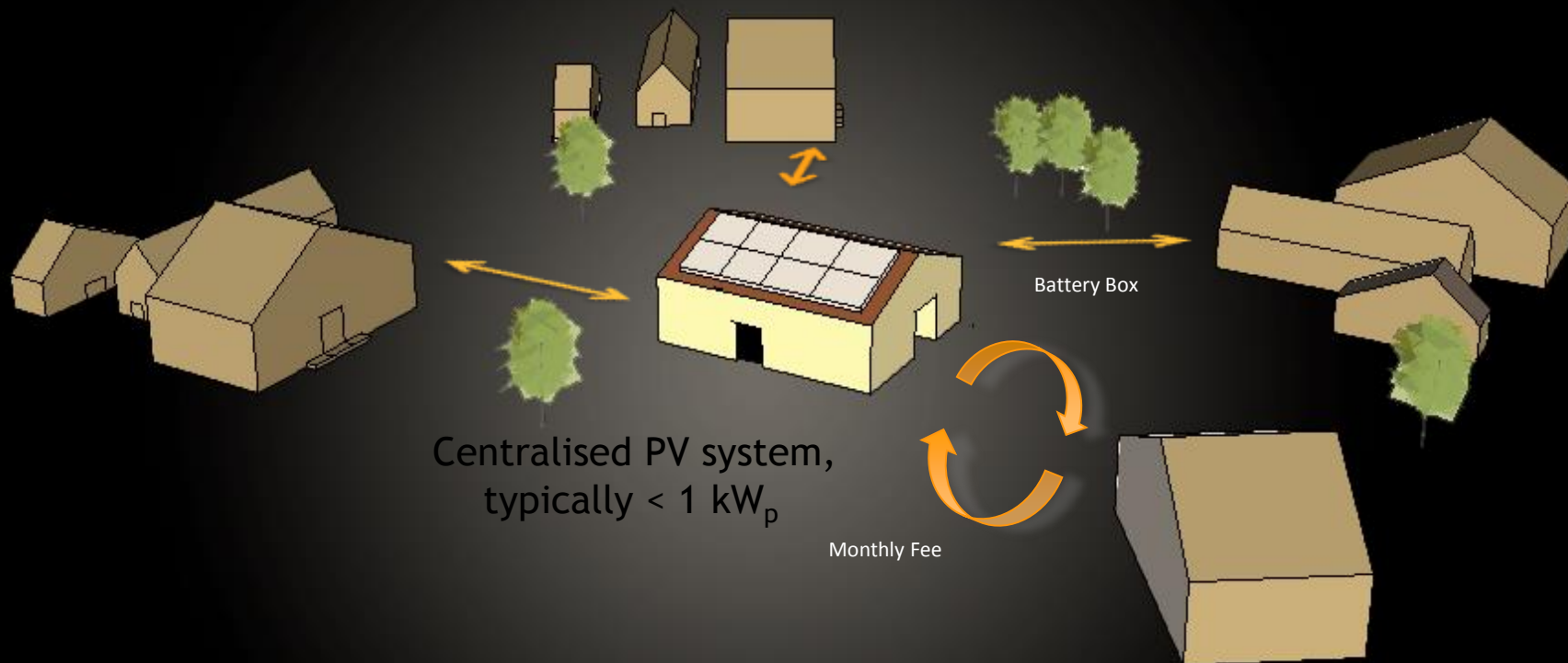
With thanks to A. Jaoude, J. Holzigel, R. Mehta, R. Mori, A. Stott, and C. Emmott

Overview

- Student led organisation at Imperial College London
- Works across Rwanda and Tanzania



Energy Kiosk



Energy Kiosk Concept

- Battery Boxes
- Rented fully charged by customers
- Used to power lighting and charge phones



Past Experience

- Large Organisations
 - Lighting a Billion Lives (TERI)
 - UNDP
 - World Bank
- Businesses
 - Solar Kiosk
 - EGG Energy
 - Sunlabob



UNDP funded kiosk
in Aroucha, Rwanda

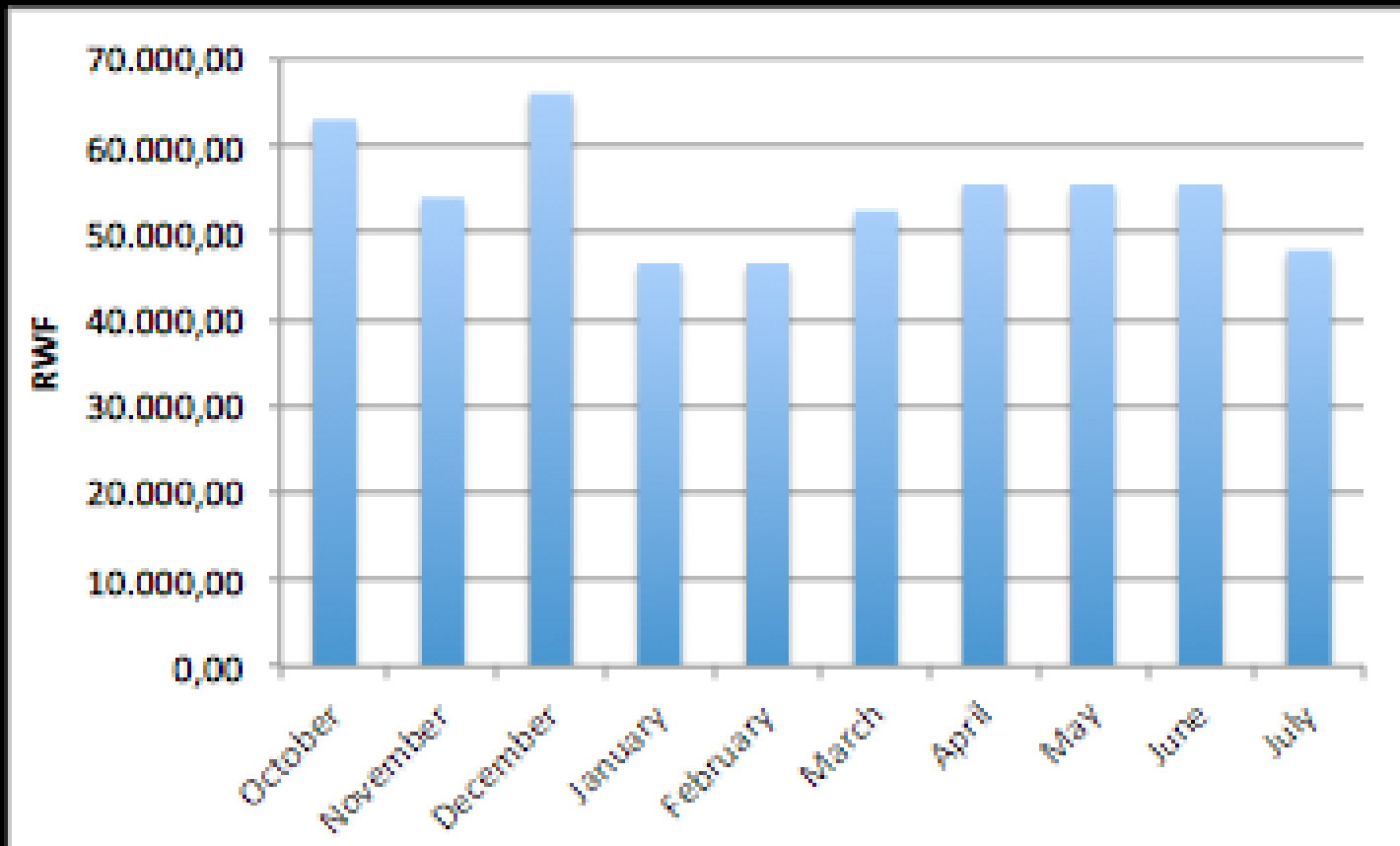
Energy Kiosks



Kiosk Economics

Year	Overall income per year (both models)	“Pay-per-recharge”	“Monthly fee”
2009-2010	343,000 RWF	100%	-
2010-2011	1,061,500 RWF	28%	72%
2011-2012 (only 10 months)	735,000 RWF	26%	74%

Kiosk Economics



Original Energy Kiosk Design



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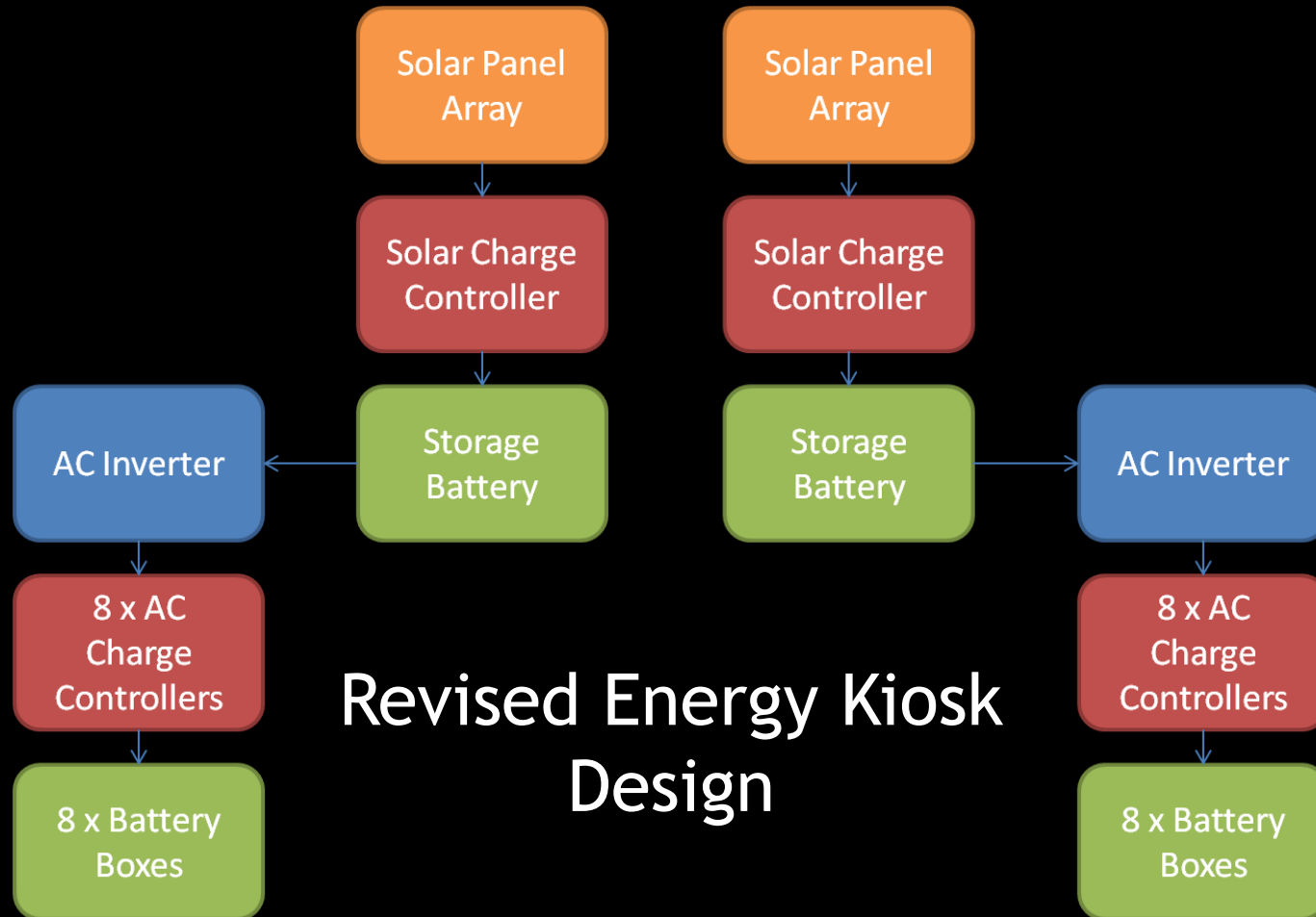


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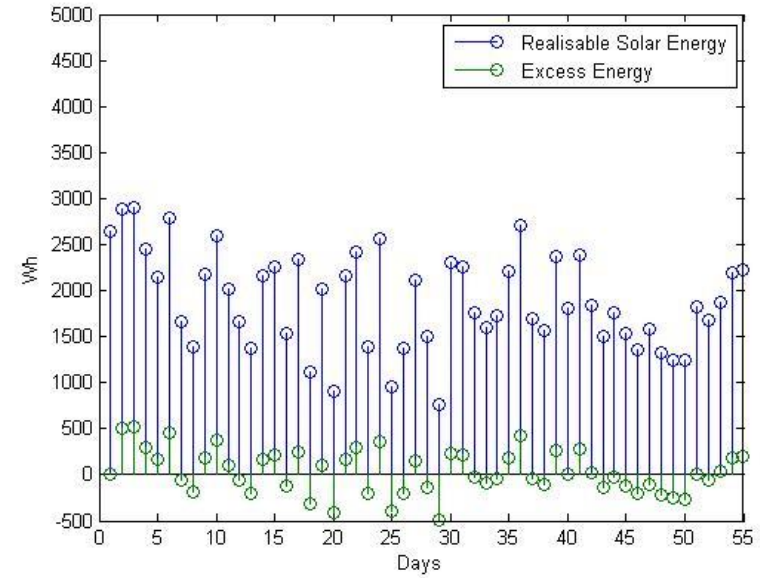
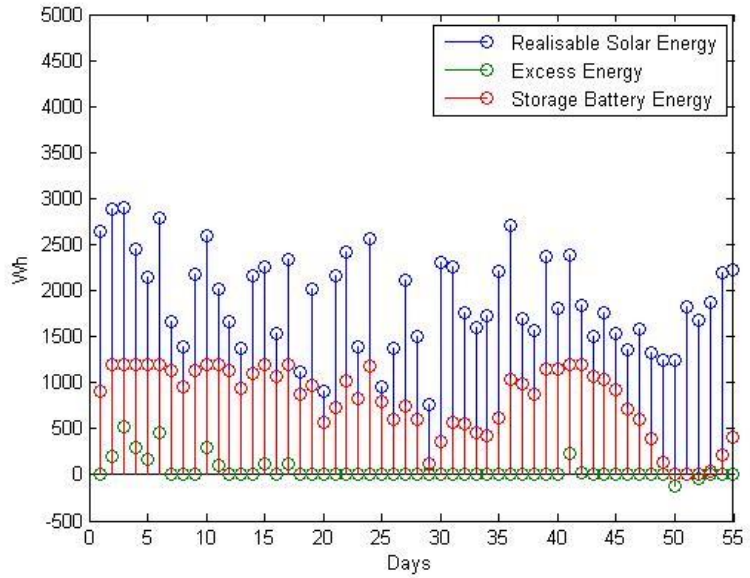
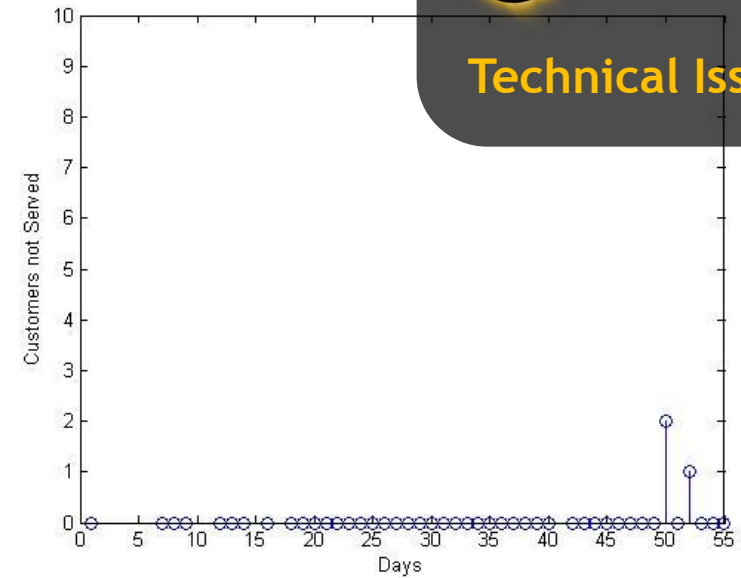
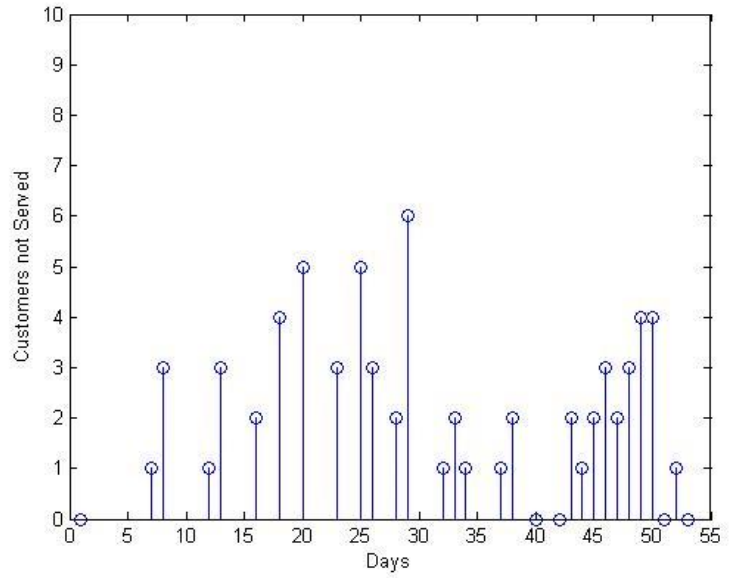


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Technical Issues



Technical Issues



- Shopkeeper Education
- Understanding of Energy Use
- Care of Batteries
- Increased income from Electricity Access
- Battery Sizing

Add dead picture image



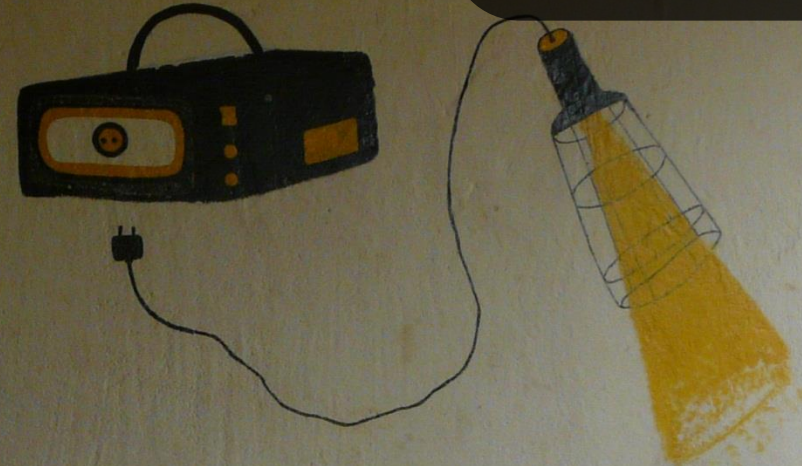
Enviroments Issues

- What to do with dead batteries?

Special thanks to the Energy Futures Lab at Imperial College London

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Thank you for your attention
For more information go to:
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