

Photovoltaic Proposal

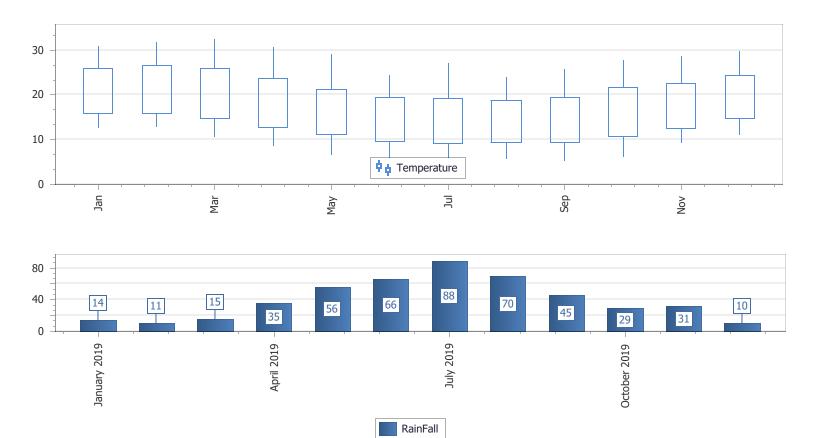
In order for humanity to overcome the real challenges faced in combating global warming we need to be innovative in our approach. Accepting that in order to help lower our carbon emissions, implementation needs to become more financially feasible to our clients. We recognize the magnitude of the challenge and understand that we can only be successful through collaboration, team work and advanced tools. It is our commitment to portray the financial viability of the solutions proposed through Jacara as accurately and transparently as possible

The factor influencing PV viability the most is design. By "design" we don't mean simply matching voltage, power and currents. Design factors need to include tariff, tariff regulations, seasonal consumption, generation changes, energy profiles, efficiency changes as well as array & mounting options. Jacara is the result of significant research and development dedicated to making PV viable to everyone through technology and innovation.



Customer Details		
Client Name	Okkie Potgieter	
Client Company	Westacre	
Address	Verster Street	
Town	Somerset Wes	
Email	okkie@westacre.com	
Telephone	082 440 2019	
Representative Name	Jacques van der Merwe	
Representative Company	Solartech	

Site Information		
Metering	Disc	
AC Distribution	Single Phase	
Annual Irradiation kW.h/kWp	1981	
Current Tariff	BulkRate	
Island Monitoring	Wi-Fi	
Cellphone Reception	Yes	
Grid Tie Monitoring	Local	

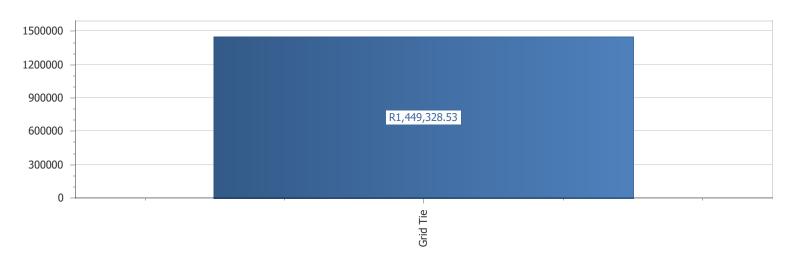


Consumption Breakdown and Suggestions

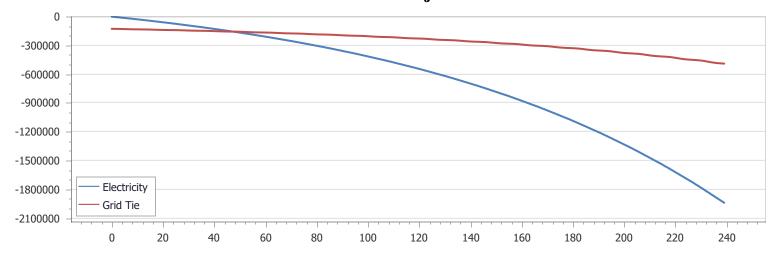
Line Name	Daily kW.h	Proposed Technology	Technology Cost	New kW.h	Essential	Payback
Geyser	9.49	Solar Geyser 200L	R32,000.00	.95	False	65
Oven	.95		R0.00	.95	False	0
Geyser 2	9.36	Retrofit 2.5m	R20,000.00	1.87	False	46
Pg	2.57		R0.00	2.57	False	0
Pg	.29		R0.00	.29	False	0
Lt - BedRs & BathRMs	2.15		R0.00	2.15	False	0
Lt - Living Areas	.46		R0.00	.46	False	0
Plugs	.30		R0.00	.30	False	0
Lt	.89		R0.00	.89	False	0
Air Conditioner	.00		R0.00	.00	False	0
Pg - Kitchen	5.56		R0.00	5.56	False	0
Pg - TV, DSTV, Sound	.15		R0.00	.15	False	0
Pg 2	1.76		R0.00	1.76	False	0
Pg - Laundry	3.93		R0.00	3.93	False	0
Oven 2	.20		R0.00	.20	False	0
Geyser 3	1.39		R0.00	1.39	False	0
Fridge & Wine Cooler	9.56	Efficient refrigiration	R10,000.00	1.91	False	23
-	49.01		R62,000.00	25.33	-	

Total Current Monthly Cost	R2,824.87
Total Capital Layout	R62,000.00
Projected Monthly Cost	R1,341.42
Total Monthly Savings	R1,483.45
% Monthly Savings	53.00%
Current Daily Consumption	49.01kWh
Efficiency Target	25.33kWh

System Savings

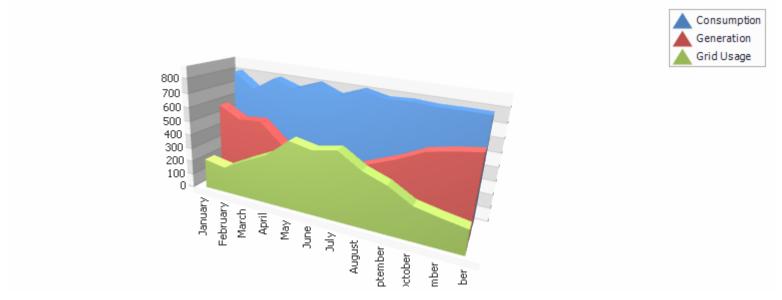


Cashflow Projection

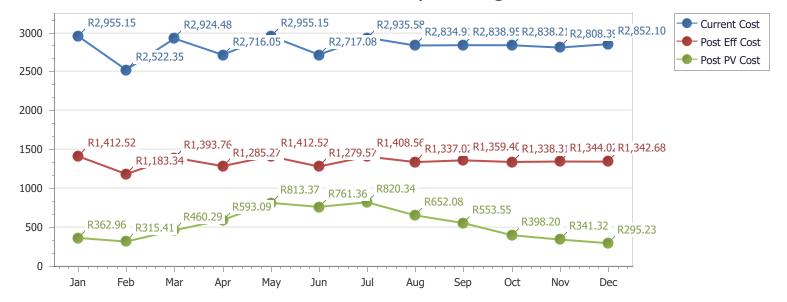


Grid-Tie

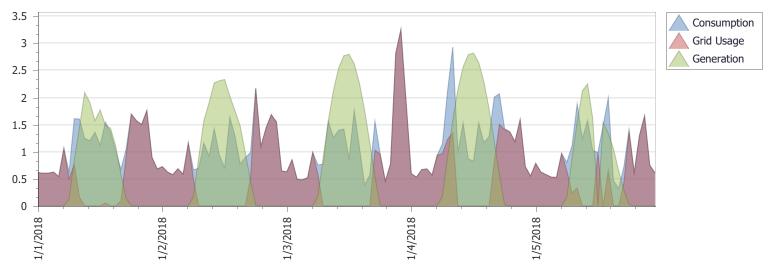
Grid-Tie Usage Projection



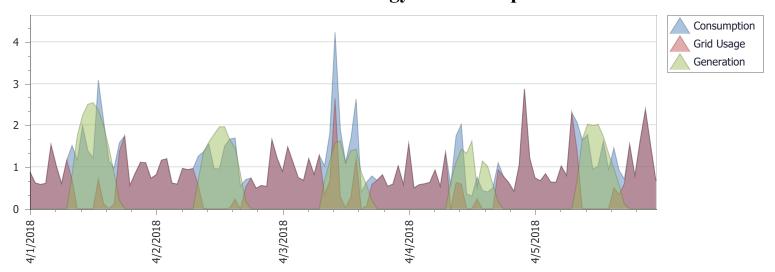
Grid-Tie Yearly Costing



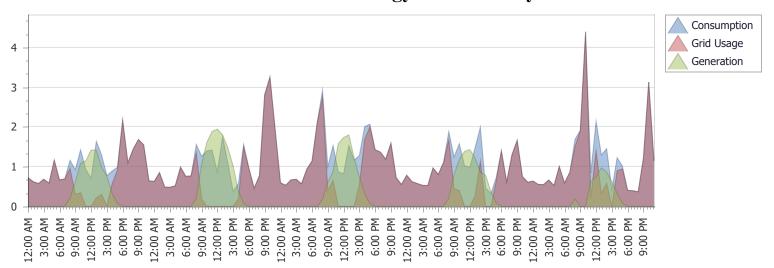
Grid-Tie Energy Profile - January



Grid-Tie Energy Profile - April



Grid-Tie Energy Profile - July



Grid-Tie System Specifications

Techinical Specifications		
3.2 kW.p		
3 kW		
SMA Sunny View		
Feedback Prevention Ready		
Single Phase		

Calculated Site Specific Information	
Payback	4.08 Years
Average Daily Generation	14.76 kW.h
Specific Yield	4.61 kW.h/kWp
Inverter Max Generation	2.89 kW
Inverter Load Factor	96.48 %

Grid-Tie System

Type	Item	Quantity
PV Modules	Canadian Solar 320W	10
Grid Inverters	SMA SB 3000TL	1
Cables & Connectors	4mm Solar Cable RB	5
Cables	4mm 3 Core	5
Cables & Connectors	MC4 Connection Set	1
Lightning Protection	275V Class 2 AC Surge Arrestor	1
DB Boards & Boxes	32A 1P 5Ka CB	1
Cables	Earth Rod Copper(m)	15
Cables	Earth Rod	1
Registration	No Certificate	1
PV Mounting	Mounting System	1
Consumables	Consumables	1
Installation	Installation	1
Total Excluding VAT		R58,589.51
Total Including VAT		R67,377.94