

Site Energy Use Audit

Electricity		Amount (€)	Excess Capacity Charge	Demand Charge	Excess Wattless Charge	Excess charges
Date paid	Period Covered					
27/01/2014	Nov-Dec	2842.8				
18/12/2013	"	2312	342.54	211.26	37.77	591.57
20/11/2013	Sept-Oct	2251.65				
18/10/2013	"	1965	435.96	0	52.15	488.11
01/10/2013	Jul-Aug	1824.3				
20/08/2013	"	1986	436.04	0	56.34	492.38
23/07/2013	May-Jun	1983.85				
18/06/2013	"	2168	541.3	0	47.18	588.48
21/05/2013	Mar-Apr	2265.28				
18/04/2013	"	2328	541.3	0	40.7	582
22/03/2013	Jan-Feb	3185.94				
18/02/2013	"	2329	541.3	188.56	48.02	777.88
2013 12 months total		27,441.32				3520.42
23/01/2013	Nov-Dec	2797.3				
18/12/2012	"	2424	451.08	194.96	47.74	693.78
23/11/2012	Sept-Oct	2396.16				
20/10/2012	"	1757	511.22	0	49.24	560.46

12.80%

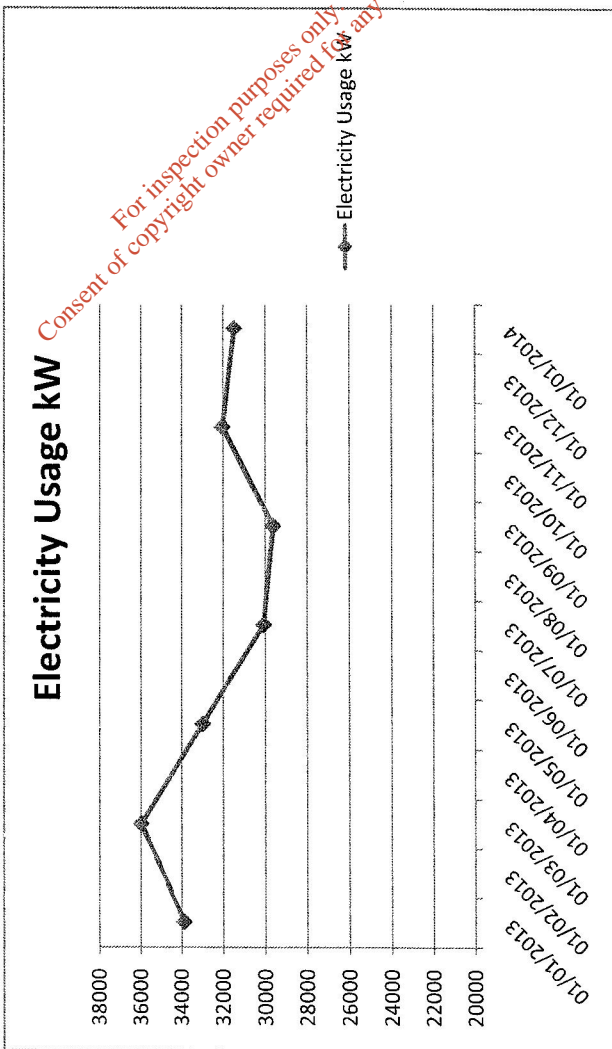
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Gas		Amount (€)
Date paid	Period Covered	
02/01/2014	Oct-Dec	850.9
04/11/2013	Aug-Sep	213.16
04/09/2013	Jun-Aug	30.84
05/07/2013	Apr-Jun	481.54
07/05/2013	Feb-Apr	2050.89
08/03/2013	Dec-Feb	430.73
03/01/2013	Oct-Dec	926.27
05/11/2012	Aug-Oct	338.73
06/09/2012	Jun-Aug	213.79

consumption Oct 2012 - Oct 2013 59106 kWh

RV Site Energy Use Audit

Bill issue date	Electricity Usage kW	CO2 emissions kg	(CO2) kg/kWh	Comments
13/01/2014	31450	9544	0.303	"
06/11/2013	32000	9122	0.285	"
18/09/2013	29600	8640	0.29	2012 data 469g per kWh
09/07/2013	30050	9762	0.325	2010 data 523g per kWh
07/05/2013	32950	11225	0.341	"
08/03/2013	35950	12076	0.336	"
09/01/2013	33850	11252	0.332	"



Energy saving solution: put sensors on lights in office corridors.

Sensors installed in July 2013.

Energy use has dropped since the sensors were installed, however, a comparison needs to be drawn between amount of material treated onsite over the same period to have a better understanding of energy used on-site from Jan 2013 - Jan 2014

Calculations:

MIC		kVA x € x no. of days covered by billing period
2014	60 x 0.0853 x ~60	
2013	60 x 0.0824 x ~60	
2012	60 x 0.0769 x ~60	

Excess Charge Charge applies to kVA used in excess of MIC (kVa x €15.57)

Demand Charge Nov - Feb, extra charge applies to kW used between 5-7pm to balance extra demand during this period (€0.0936 / kW / day)

Excess Wattless Charge applied to all wattless energy that exceed 1/3 of total energy used.
Wattless energy is reactive energy, energy used in start-up operations (€0.00875)

PSO Levy €1.54/kVA/M

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Period	60 KVA		80 KVA		90 KVA		60	80	90	
	Excess Charge	PSO Allowance	Excess Charge	PSO Allowance	Excess Charge	PSO Allowance				
31-10-13 to 31-12-13	22	342.54	277.2	317.316	31.14	369.6	423.088	€ 937.06	€ 823.83	€ 891.77
30-08-13 to 30-10-13	28	435.96	118.8	311.748	124.56	158.4	415.664	€ 866.51	€ 698.62	€ 645.82
01-07-13 to 29-08-13	29	436.044	59.4	296.64	135.324	79.2	395.52	€ 792.08	€ 610.04	€ 534.06
01-05-13 to 30-06-13	36	541.296	118.8	301.584	240.576	158.4	402.112	€ 961.68	€ 801.09	€ 720.79
01-03-13 to 30-04-13	36	541.296	118.8	301.584	240.576	158.4	402.112	€ 961.68	€ 801.09	€ 720.79
01-01-13 to 28-02-13	36	541.296	118.8	291.696	240.576	158.4	388.928	€ 951.79	€ 787.90	€ 705.96
Current Allowance is 60KVA										
Oct - Dec 13 only period where usage is well below the 90KVA allowance (No Glass Cleaning)										
Oct - Dec 13 cost of 90KVA allowance exceeds cost of 80KVA allowance.										
Oct - Dec saving would be €113 for 80KVA - Annual €680										
Recommend - Apply for 80KVA allowance, if cost below €600 then proceed										
								€ 5,470.80	€ 4,522.58	€ 4,219.20
								-€	948.22	-€ 1,251.60
									-17%	-23%

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 Rev. Number: 1

Prepared By: N. Coulter
 Approval By: N. Madden
 Effective Date: 28/05/2013

Sig.: *[Signature]*
 Sig.: *[Signature]*

TITLE: Internal Audit Checklist

Audit Date	Audit Type	Audit No eg. 2012/001	Auditor	
22/01/2014	Compliance <input type="checkbox"/> Process <input type="checkbox"/> Performance <input checked="" type="checkbox"/> Other <input type="checkbox"/>	2014/001	Print Name	NIKITA COULTER
			Signature	<i>[Signature]</i>
<p><i>Complete the following checklist after reviewing the requirements of IS EN 14001 and the relevant sections of The Recycling Village Ltd Environmental Management System.</i></p>				
Clause/Area to be Audited	Items to Audit eg. procedures, activities, record, documents etc	People to interview eg. EMR, managers, operators etc	Key things to look for? Questions to ask?	
ISO 4.3.3 ENV 6 Site Energy Use	Electricity Bills Gas Bills	Managing Director Financial Manager Facility Manager Electric Ireland ESB Networks Bord Gáis	How often does RV received bills? How is energy use determined? What has been the trend in energy use over the period Jan 2013 – Jan 2014? Have we increased/reduced our energy usage? Are there any potential financial savings we can make? How will potential financial savings impact on Carbon emissions?	