

Irish energy market forum

prices • purchasing • management



Paul Boylan
CRS Country Head, Citi
7th October 2010

Customer
Innovation
Talent
Image



Acknowledgements



This presentation, reflects our approach to Energy/Environmental Awareness.

Elements covered:

- a) Citi's Approach to sustainability – Awareness Campaign
- b) Efficient Energy Management Strategies
- c) Getting back to the basics
- d) Positive Behavioural Changes
- e) Our Green Agenda

Introduction



- In '07, we kicked off a local Energy Awareness campaign as part of a Citi Global Environmental Initiative, setting targets and focusing on change at all levels.
- Citi Ireland was one of the first to embrace and adopt an environmental profile. Since then we have led by example sharing initiatives both inside and outside the organisation.
- Our Energy Management Strategy is now fully integrated with our overall Environmental Awareness Campaign.

Our key success factors are as follows;

1. Citi employees changing their behaviour towards energy consumption.
2. Efficient building energy utilisation.

Energy Awareness Campaign 2009



Our 2008 campaign created great momentum and in 2009 we anticipated similar success (but strived to be better)!

We set “**5 key objectives**”:

1. Obtain unilateral support at all levels - Reach out!
2. Increase awareness achieving a 10% energy reduction per head against '08!
3. Provide incentives to support behavioural change!
4. Communicate / Raise Awareness!
5. Outline / Focus on success!

1. Obtaining support from all levels in the organisation.



- We set out to -
 - Share campaign objectives ... Get “buy in”.
 - Encourage coalitions.
 - Engage “new-starters” early on.
 - Establish a “Greener” Team representing a “wider audience”.
- Key milestones included:
 - Launch of campaign.
 - Site wide energy assessments and analysis.
 - Reward through rebates !
 - Focus on Image – Improve our Green Profile !
 - Roll out initiatives/challenges to maintain momentum !

Obtain support and buy-in



28% 35%
CITI COMPLETED AN ESCO AGREEMENT WITH CES ENERGY. THIS GREATLY CONTRIBUTED TO A 28% REDUCTION IN THE FACILITY'S CARBON EMISSIONS - A CUT OF 1,260 TONNES

2008 €100,000
THE SAME AGREEMENT PRODUCED SAVINGS IN EXCESS OF €100,000, COMPARED TO THE PREVIOUS YEAR

2009 €350,000

Citi banks on energy independence

Citi Ireland is widely regarded as an environmental leader within the Citi global banking network. Its Dublin base at North Wall Quay is viewed as one of the regional flagship facilities and the flag-waver for local environmental efforts. As the regional processing centre for Citi's European operations, with 2,400 staff nationwide, Citi is also the largest foreign bank operating in Ireland.

Operating over eight floors, the North Wall Quay building has had its combined heat & power (CHP) system re-engineered in an energy services agreement that is delivering major carbon savings. However, this is just one outcome of Citi's current environmental mission to drive down energy usage per head by 15% and deliver an overall carbon reduction of 28%.

buys its energy reement, leaving ant operation and

leading the way tribution will membership as an perience on energy n to benefit from the

ts of managing ven more proactive management in 2009"

FROM TOP LEFT
ENERGY AGREEMENTS PROGRAMME
COMPARING RESULTS
RESULTS AND TAKE-AWAYS
ABOUT Citi

2. Reducing energy consumption by 10% per head.



- In 2009, the actual reduction achieved was 9.53% per head.. (despite an increase in occupancy of 18.53%)
- In addition to embracing new technologies we needed to adopt the following:
 - Back to basics.. Identify key areas for improvement
 - Use of Monitoring packages:
 - Environmental Database.
 - Equipment Reviews.
 - Episensor: “Wireless” Energy Monitoring System.



CRS Environmental Database V.2

Building Data Entry

Building Search Reports & CE Factors & Emissions Qtrly Consumption Variance Mthly Portfolio (RSF) Variance Impact Report CORE Reports Missing Data Reports Clear Report Data

Home Page Users Guide Change Password Log Out

Asset Manager Telephone Number: 0035316223456

Region: WEMEA

Sub Region: UK & IRELAND

Country/State: IRELAND / NONE

City and/or District Location: DUBLIN

Postal Code: D1

Building Name: NORTH WALL QUAY

Building Address: 1 NORTH WALL QUAY

Building Code: 13550

Primary Building Use: OFFICE

Building Status: ACTIVE

CC Email: steve.rogers@citi.com

Owned/Leased Status

Owned:

Triple Net Leased:

Leased (utilities included in rent):

Leased (utilities NOT included in rent): X

Year: 2010

Change Year

Save

Energy Units Go To: Full Page

Active Building:

Building Code:

13550

Building Name:

NORTH WALL QUAY

Documentations	Units	Data Feed Status	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total	CE Entry Choice		Conversions /Description
																Option 1 Estimate per sq. ft. per YR.	Option 2 Total Consum. Est. per YR.	
2009 Monthly Elec. Data (Kwh):			251837.00 (Act)	216856.00 (Act)	248062.00 (Act)	235683.00 (Act)	288037.00 (Act)	370130.00 (Act)	371355.00 (Act)	322616.00 (Act)	306580.00 (Act)	299364.00 (Act)	289856.00 (Act)	356709.00 (Act)	3557065.00			
Data Doc. type	ELEC. Kwh	Included in 3rd party consumption	325356.00	325133.00	304891.00	289488.00	374682.00								1619550.00	0.00	0.000000	MWH = Kwh/1000
Supplier Invoices	Mwh	data feed Date started	325.36	325.13	304.89	289.49	374.68								1619.55			
Doc. File Loc./Exp.	CE		Act	Act	Act	Act	Act	Act	Act	Act	Act	Act	Act	Act	Save			
CRS	NA	Date ended																
(Data SDI clear allowed)																		
2009 Monthly Gas Data (Gas Kwh):			1247100.00 (Act)	1098632.00 (Act)	1201948.00 (Act)	1050255.00 (Act)	864248.00 (Act)	829621.00 (Act)	733024.00 (Act)	959656.00 (Act)	1041295.00 (Act)	935171.00 (Act)	932796.00 (Act)	883320.00 (Act)	11777066.00			
Data Doc. type	GAS Gas Kwh	Included in 3rd party consumption	821351.00	857351.00	1104484.00										2783186.00	0.00	0.000000	1 Gas Therm = Kwh*0.0341 1 Gas Therm=Cubic Meters*0.351/1.037
Meters	Therm	data feed Date started	28008.07	29235.67	37662.9										94906.64			
Doc. File Loc./Exp.	CE		Act	Act	Act	Act	Act	Act	Act	Act	Act	Act	Act	Act	Save			
CES	NA	Date ended																
(Data SDI clear allowed)																		
2009 Monthly F.OIL Data (Ltrs):			180.00(Est)	180.00(Est)	180.00(Est)	180.00(Est)	180.00(Est)	180.00(Est)	180.00(Est)	180.00(Est)	180.00(Est)	180.00(Est)	180.00(Est)	180.00(Est)	2160.00			
Data Doc. type	F.OIL Ltrs	Included in 3rd party consumption	180.00	180.00	180.00	180.00									720.00	0.00	0.000000	Gallon = Ltrs * 0.2642
Calculated Estimate	Gallon	data feed Date started	47.56	47.56	47.56	47.56									190.22			
Doc. File Loc./Exp.	CE		Act	Act	Act	Act	Act	Act	Act	Act	Act	Act	Act	Act	Save			
ESTIMATE	NA	Date ended					NA	NA	NA	NA	NA	NA	NA	NA				
(Data SDI clear allowed)																		
2009 Monthly Steam Data (Mlbs):			(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)				
Data Doc. type	STEAM Mlbs	Included in 3rd party consumption													0.00	0.00	0.000000	

2. Reducing energy consumption by 10% per head.



- In 2009, the actual reduction achieved was 9.53% per head.. (despite an increase in occupancy of 18.53%)
- In addition to embracing new technologies we needed to adopt the following:
 - Back to basics.. Identify key areas for improvement
 - Use of Monitoring packages:
 - Environmental Database.
 - Equipment Reviews.
 - Episensor: “Wireless” Energy Monitoring System.



Quarterly Energy Services Assessment



CRS Quarterly Energy Services Assessment Q2 - 2009

Legend -
Writing in Green reflects a reduction change
Writing in Black indicates no change
Writing in Red reflect an increase change

HVAC	FLOOR	SLA Start Time	SLA End Time	SLA Run Time hrs	Review Time In	Review Time Out	Review Run Time hrs	Revised Time In	Revised Time Out	Revised Run Time	Revised Time In	Revised Time Out	Revised Run Time	Comment	Delta	SF KW	RF KW	VAV Qty	VAV Kw	FCU's (Kw)	Atrium Fans (Kw)	Total Kw	Total Kwh
BLOCK A	G	07:30	19:00	10:30	07:15	18:00	10:45	07:45	17:55	10:10	07:45	17:55	10:10			11	3	15	20.5	2		36.5	0.00
	1	07:30	19:00	11:30	04:05	23:00	18:55	04:15	22:55	18:40	04:15	22:55	18:40			15	5.5	14	16.7		7	44.2	0.00
	2	07:45	20:00	12:15	06:00	21:59	15:59	06:00	21:55	15:55	06:00	21:55	15:55			15	5.5	14	14.7		7	42.2	0.00
	3	06:00	19:00	13:00	08:00	17:30	09:30	06:00	17:55	11:55	06:00	17:55	11:55			15	5.5	24	25.2		7	52.7	0.00
BLOCK B	4	06:00	19:00	13:00	07:25	18:00	10:35	08:00	17:55	09:55	08:00	17:55	09:55			11	3	13	13.65			27.65	0.00
	G	07:30	19:00	10:30	06:57	21:30	14:33	07:45	14:30	06:45	07:45	14:30	06:45			11	3	10	10.5	2		26.5	0.00
	1	06:00	19:00	13:00	07:40	17:59	10:19	07:50	17:55	10:05	07:50	17:55	10:05	B1 OOH for May 2009		22	11	19	19.95		14	66.95	0.00
	2	07:00	19:00	12:00	05:45	21:45	16:00	07:30	17:55	10:25	07:30	17:55	10:25			22	11	19	19.95		8.5	61.45	0.00
BLOCK C	3	06:00	19:00	13:00	06:38	18:00	11:22	07:30	17:55	10:25	07:30	17:55	10:25	Dealers Request		22	11	18	18.3		8.5	60.4	0.00
	4	06:00	19:00	13:00	07:00	19:00	12:00	07:45	17:55	10:10	07:30	17:55	10:10			22	11	25	26.25	2		61.25	0.00
	G	07:30	19:00	10:30	07:45	18:00	10:45	07:45	18:30	10:45	07:45	18:30	10:45			15	7.5	9	9.45	3		34.95	0.00
	1	06:00	19:00	13:00	07:20	18:00	10:40	07:50	17:55	10:05	07:50	17:55	10:05			15	5.5	14	14.7		8.5	43.7	0.00
BLOCK D	2	06:00	19:00	13:00	06:55	18:00	11:05	07:51	17:55	10:04	07:51	17:55	10:04			15	5.5	14	14.7		5	40.2	0.00
	3	06:00	19:00	13:00	07:24	20:30	13:06	07:52	17:55	10:03	07:52	17:55	10:03			15	5.5	18	18.9		5	44.4	0.00
	4	06:00	19:00	13:00	06:03	19:50	13:47	07:53	17:55	10:02	07:53	17:55	10:02			15	5.5	19	19.95	2.2		42.65	0.00
	5	07:30	20:00	12:30	07:40	17:00	09:20	07:55	16:55	09:00	07:55	16:55	09:00			15	5.5	21	22.05			42.55	0.00
BLOCK D Auditorium	G	07:30	19:00	10:30	07:36	18:01	10:25	07:50	17:55	10:05	07:50	17:55	10:05			7.5	2.2	6	6.3	1.2		17.2	0.00
	IOB				08:00	16:45	08:45	08:00	16:45	08:45	08:00	16:45	08:45			5.5	3						
	1	06:00	19:00	13:00	07:55	18:00	10:05	07:55	17:55	10:00	07:55	17:55	10:00			11	5.5	10	10.5		5	32	0.00
	2	06:00	19:00	13:00	07:30	18:00	10:30	07:55	17:55	10:00	07:55	17:55	10:00			11	5.5	10	10.5		5	32	0.00
	3	06:00	19:00	13:00	07:35	18:00	10:25	07:35	18:00	10:25	07:35	18:00	10:25			11	5.5	10	10.5		5	32	0.00
	4	06:00	19:00	13:00	06:59	18:00	11:01	07:30	17:55	10:25	07:30	17:55	10:25			7.5	2.2	16	16.8			26.5	0.00

Landlord Ventilation		SLA Start Time	SLA End Time	SLA Run Time hrs	Review Time In	Review Time Out	Review Run Time hrs	Revised Time In	Revised Time Out	Revised Run Time	Revised Time In	Revised Time Out	Revised Run Time	Comment	Supply	Extract					Delta	Total Kw	Total Kwh
Servery AHU	BIK C Plant	06:30	23:30	17:00	07:25	14:15	06:50	07:25	14:15	06:50	07:25	14:15	06:50		7.5						5.5	7.5	41.25
Servery Extract	BIK C Plant	06:30	23:30	17:00	07:25	14:15	06:50	07:25	14:15	06:50	07:25	14:15	06:50			4					5.5	4	22.00
Kitchen Extract	BIK C Plant	06:30	23:30	17:00	06:00	15:00	09:00	06:00	15:00	09:00	06:00	15:00	09:00			4					5.5	4	22.00
Dishwash Extract	BIK B Plant	06:30	23:30	17:00	06:00	15:00	09:00	06:00	15:00	09:00	06:00	15:00	09:00			1					5.5	1	5.50
Exec Kitchen		06:30	23:30	17:00	07:40	17:00	09:20	07:40	17:00	09:20	07:40	17:00	09:20			1					5.5	1	5.50
Dishwash Extract	5th floor	06:30	23:30	17:00	07:40	17:00	09:20	07:40	17:00	09:20	07:40	17:00	09:20			0.2					5.5	0.2	1.10
UPS Ventilation	UPS Rm	06:30	23:30	17:00	00:01	23:59	23:58	00:01	23:59	23:58	00:01	23:59	23:58			1					5.5	1	5.50
UPS Ventilation	UPS Rm	06:30	23:30	17:00	00:01	23:59	23:58	00:01	23:59	23:58	00:01	23:59	23:58			2					17	2	34.00
Toler Ventilation	Block A	06:30	23:30	17:00	04:10	23:00	18:50	04:10	23:00	18:50	04:10	23:00	18:50		1.5	1.2					5.5	2.7	14.95
Toler Ventilation	Block B	06:30	23:30	17:00	03:50	22:00	19:10	03:50	22:00	18:30	03:50	22:00	18:30		2.2	1.2					5.5	3.4	18.10
Toler Ventilation	Block C	06:30	23:30	17:00	07:40	21:30	13:50	08:15	18:30	10:15	08:15	18:30	10:15		1.5	1.2					5.5	2.7	14.95
Toler Ventilation	Block D	06:30	23:30	17:00	07:40	20:30	12:50	07:50	18:00	10:10	07:50	18:00	10:10		1.5	1.2					5.5	2.7	14.95
Supply & Extract	Basement	06:30	23:30	17:00	06:40	20:00	13:20	06:40	20:00	13:20	06:40	20:00	13:20		1.2	7.2					5.5	8.4	46.20
Supply & Extract	Basement	06:30	23:30	17:00	07:00	19:00	12:00	07:00	19:00	12:00	07:00	19:00	12:00		2.4	7.2					17.00	9.6	163.20

Landlord heating		SLA Start Time	SLA End Time	SLA Run Time hrs	Review Time in	Review Time out	Review Run Time hrs	Revised Time In	Revised Time Out	Revised Run Time	Revised Time In	Revised Time Out	Revised Run Time	Comment	Prim Pmp	Block A	Block B	Block C	Block D		Delta	Total Kw	Total Kwh					
LPHV Primary Circuit		05:00:00	19:00:00	14:00	04:00	19:00	15:00	04:00	19:00	15:00	04:00	19:00	15:00		30						7	30	210.00					
LPHV Secondary Circuits - Block A		05:00:00	19:00:00	14:00	04:00	22:40	18:40	04:00	22:40	18:40	04:00	22:40	18:40			4	18.5	5.5	5.5		7	33.5	234.50					
LPHV Secondary Circuits - Block B		05:00:00	19:00:00	14:00	05:45	21:30	15:45	05:45	21:30	15:45	05:45	21:30	15:45															
LPHV Secondary Circuits - Block C		05:00:00	19:00:00	14:00	06:30	21:15	14:45	06:30	21:15	14:45	06:30	21:15	14:45															
LPHV Secondary Circuits - Block D		05:00:00	19:00:00	14:00	06:20	20:20	14:00	06:20	20:20	14:00	06:20	20:20	14:00															
LPHV Radiator Circuits - All areas		05:00:00	19:00:00	14:00	07:00	08:30	01:30	07:00	08:30	01:30	07:00	08:30	01:30			0.25	0.25	0.25	0.25		7	1	7.00					
LPHV FCU circuits Blocks A&B		05:00:00	19:00:00	14:00	04:00	23:00	19:00	04:00	23:00	19:00	04:00	23:00	19:00			1.1			1.1		7	2.2	15.40					
LPHV FCU circuits Blocks C&D		05:00:00	19:00:00	14:00	06:45	14:45	08:00	06:45	14:45	08:00	06:45	14:45	08:00															
Toler AHU Circuits - Block A		05:00:00	19:00:00	14:00	04:00	23:00	19:00	04:00	23:00	19:00	04:00	23:00	19:00			0.2		0.25			7	0.45	3.15					
Toler AHU Circuits - Block B		05:00:00	19:00:00	14:00	07:25	21:20	13:55	07:25	21:20	13:55	07:25	21:20	13:55															
Toler AHU Circuits - Block C		05:00:00	19:00:00	14:00	07:25	21:20	13:55	07:25	21:20	13:55	07:25	21:20	13:55															
Toler AHU Circuits - Block D		05:00:00	19:00:00	14:00	07:25	21:20	13:55	07:25	21:20	13:55	07:25	21:20	13:55															
5th Floor AHU circuit		05:00:00	19:00:00	14:00	07:25	17:00	09:35	07:25	17:00	09:35	07:25	17:00	09:35					0.25			7	0.25	1.75					
Servery AHU circuit		05:00:00	19:00:00	14:00	07:15	13:45	06:30	07:15	13:45	06:30	07:15	13:45	06:30					0.25			7	0.25	1.75					
Boilers		05:00:00	19:00:00	14:00	04:00	19:00	15:00	04:00	19:00	15:00	04:00	19:00	15:00					1			7	1	7.00					
Landlord heating Reduced Kwh per day																												480.55

2. Reducing energy consumption by 10% per head.



- In 2009, the actual reduction achieved was 9.53% per head.. (despite an increase in occupancy of 18.53%)
- In addition to embracing new technologies we needed to adopt the following:
 - Back to basics.. Identify key areas for improvement
 - Use of Monitoring packages:
 - Environmental Database.
 - Equipment Reviews.
 - Episensor: “Wireless” Energy Monitoring System.



EpiSensor – Wireless Energy Monitoring System



- EpiSensor has developed a distributed wireless system for collecting data from sensors and making it available in a database for
 - Data display
 - Decision Support
 - On-line Transaction Processing
- Monitor Energy, Temperature, Water, Lighting, etc. with one Wireless infrastructure
- Fully distributed system capable of expansion across total business
- Multi sensor, building/campus, site, country
- Comprehensive Data Display, Decision Support & Network Management software via Internet.

EpiSensor's SiCA Platform



Zigbee Wireless Sensors

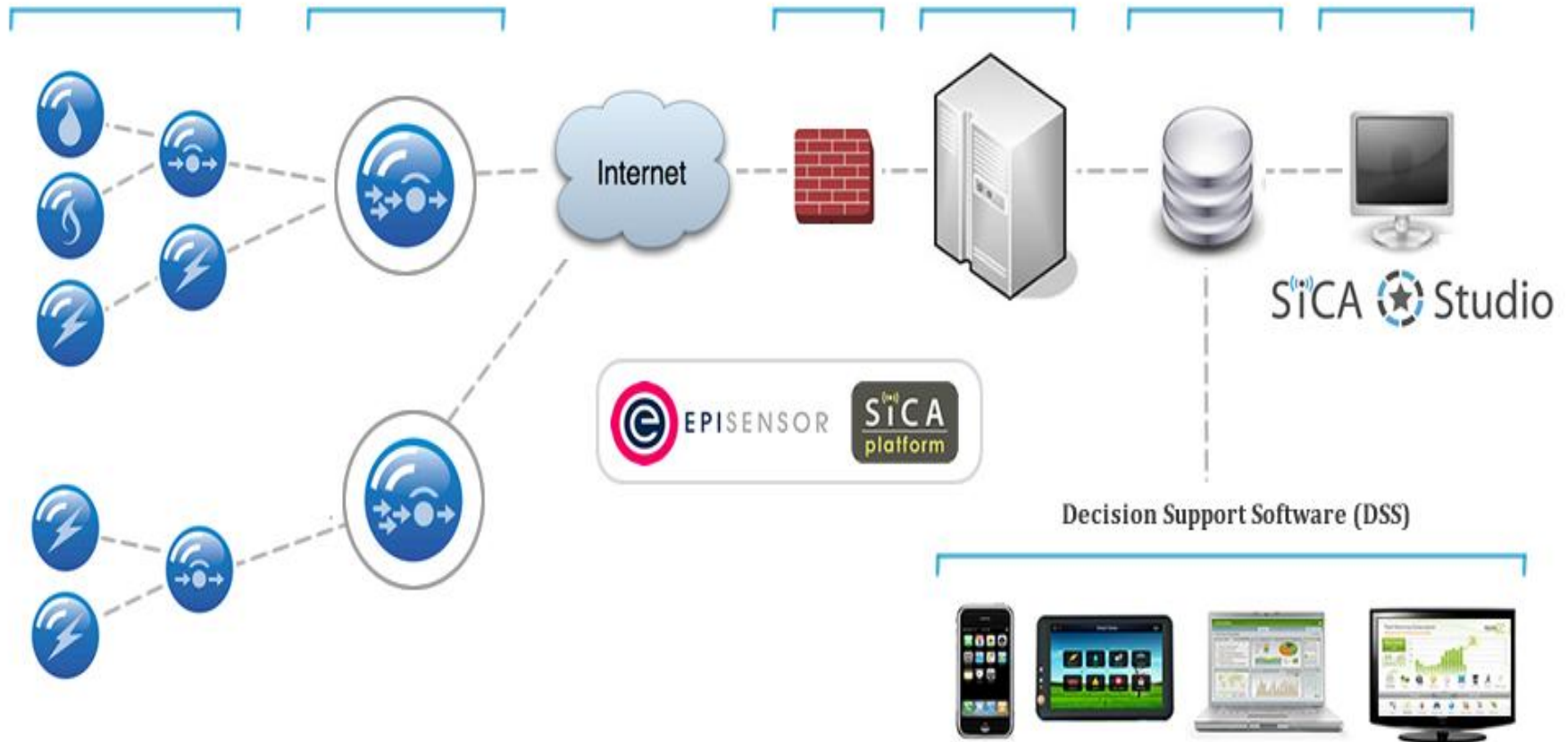
SiCA Gateway

Firewall

SiCA Server

Database

SiCA Studio



3. Providing incentives to support behavioural change.



The following is applied;

- Out of Hours Charge backs!
- Rebates!
- Face to face building tours for employees.
- Environmental Expo./Citi Earth Week
- CRS Environmental Clinic: seeking savings at home & at work.
- Supports Citi's Green Agenda and forms an Integral part of our Corporate & Social Responsibility policy.

Face to Face Tours



The Plantroom Tours were arranged specifically to demonstrate the wide range of services required to make an office function



Educate - "There's more to an office than a desk, a PC and a chair"

Familiarise – The more you know the more you appreciate!

Raise Awareness – Create a different perspective. Make the office environment more exciting...



3. Providing incentives to support behavioural change.



The following is applied;

- Out of Hours Charge backs!
- Rebates!
- Face to face building tours for employees.
- Environmental Expo./Citi Earth Week
- CRS Environmental Clinic: Seeking savings at home & at work.
- Supports Citi's Green Agenda and forms an Integral part of our Corporate & Social Responsibility policy.

3. Providing incentives to support behavioural change.



The following is applied;

- Out of Hours Charge backs!
- Rebates!
- Face to face building tours for employees.
- Environmental Expo./Citi Earth Week
- CRS Environmental Clinic: Seeking savings at home & at work.
- Supports Citi's Green Agenda and forms an Integral part of our Corporate & Social Responsibility policy.

Providing incentives (and keeping it fun)



Spreading the Word!! Citi Environmental Expos



Our initiatives have been so successful that similar campaigns are being rolled out across other Citi facilities throughout the Global operations.

3. Providing incentives to support behavioural change.




- The following is applied;
 - Out of Hours Charge backs!
 - Rebates!
 - Travel incentives!
Wind down car fleet, Smarter business travel, Teleconferencing promotion, Tax Saver and Bike to Work schemes.
 - Face to face building tours for employees.
 - Environmental Expo./Citi Earth Week
 - CRS Environmental Clinic: seeking savings at home & at work.
 - Supports Citi's Green Agenda.
 - Integral part of our Corporate & Social Responsibility policy.

Showing the love! Citi Energy Clinic ?



CITI ENERGY/
ENVIRONMENTAL CLINIC.....



ENERGY QUESTIONS FOR
THE HOME AND WORKPLACE
CONTACT CRS ON *12119 OR
BY EMAILING *OP DUB CRS
SERVICE DESK
OR SUBMIT YOUR QUESTION
HERE TODAY.....

4. Communicating to ensure behavioural change.



- Communication tools used
 - In house monitors, Notice boards and displays, Information screens
 - Environmental Expo – Launched by John Gormley, Minister for the Environment, Citi Employee, Clients, Students, Colleagues etc..!
 - [CRS Environmental Webpage](#)
 - Green Initiatives Sharepoint site which allows employees to promote ideas and share best practices. [CRS Green Initiatives & Sharepoint Site](#)
 - Poster campaigns – Remembering Diversity... We posted daily messages in 7 different languages.
 - [Employee surveys](#) to obtain views and feedback
 - [*91% of employee performing one energy saving activity every day.](#)

Citi & the Environment

Did you Know?

Citi recycles 23,000 tons of paper annually!

Citi: Banking on Green



Citi's \$50 Billion Initiative



What Citi is Doing



Citi's Facilities Carbon Footprint

Video Views



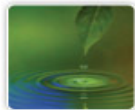
An Introduction to Citi's Environmental Initiatives

[View Video](#)



Pam Flaherty Interview

[View Video](#)



Citi Goes Green in Germany

[View Video](#)



Corporate Citizenship

Green News and Views



Results of Citi's first Employee Green Survey

Results of Citi's first Employee Green Survey
Citi's first employee green survey was conducted April 13 - May 1. Over 3,300 colleagues from around the world voiced their opinions on questions such as how Citi's green initiatives compare to those of our competitors, Citi's activities related to climate change, and their interest in participating in local green teams.

Some highlights include:

- 96 percent of employees responding say that environmental issues are important to them personally
- 94 percent believe that Citi has a responsibility to take actions with positive environmental impact
- 54 percent agree that environmental issues are important to senior management
- 42 percent agree that Citi's environmental actions are distinctive compared to competitors
- 53 percent are interested in participating in a local green team.

You can view the complete survey results [here](#).

Calendar of Events Worldwide

<< June, 2010 >>

Sun	Mon	Tue	Wed	Thu	Fri	Sat
-----	-----	-----	-----	-----	-----	-----

Green Resources for You



Volunteer -
An Opportunity to Improve Your Environment



What You Can Do



How to Speak Green
Glossary of Terms



Green Employee Store



Archives

4. Communicating to ensure behavioural change.



- Communication tools used
 - In house monitors, Notice boards and displays, Information screens
 - Environmental Expo – Launched by John Gormley, Minister for the Environment, Citi Employee, Clients, Students, Colleagues etc..!
 - [CRS Environmental Webpage](#)
 - Green Initiatives Sharepoint site which allows employees to promote ideas and share best practices. [CRS Green Initiatives & Sharepoint Site](#)
 - Poster campaigns – Remembering Diversity... We posted daily messages in 7 different languages.
 - [Employee surveys](#) to obtain views and feedback
 - [*91% of employee performing one energy saving activity every day.](#)



This Site: EMEA's Green Initiative ▾

EMEA's Green Initiative

Documents and Lists

Create

Site Settings

Help

View All Site Content

Documents

- Shared Documents
- Templates
- User Guides
- EMEA ENV DOC LIB
- Environmental Pages

Pictures

Lists

- Site Contributors
- Tasks
- Announcements
- CountryPages
- InitiativeOfTheWeek

Discussions

- General Discussion

Surveys

- Suggest topics for SharePoint User Guide

Recycle Bin

Our Environmental Impacts

- Energy
- Water
- Waste
- Supply Chain
- Procurement
- Design & Construction
- Real Estate
- On Site Generation
- Communication
- Country Objectives & Performance

The Document Library contains external documents providing more information on subjects relevant to environmental management.



Click [HERE](#) to visit the Document Library



"Environmental management is becoming a key strategic driver for Citi, and CRS is leading the way within Citi in tackling its environmental impacts. As co-chair of the CRS's Global Sustainability Group, it gives me great delight to hear about all the efforts that are being made to reduce our environmental impacts, and I am particularly proud of being able to promote EMEA's efforts to my global colleagues.

We have a real challenge in achieving Citi's 10% CO2 target and I encourage you all to come forward with ideas, best practices and promote them on this sharepoint site so we can rapidly promote them around EMEA"

John Killey, EMEA Region Head and co-chair of CRS's global sustainability group.



4. Communicating to ensure behavioural change.



- Communication tools used
 - In house monitors, Notice boards and displays, Information screens
 - Environmental Expo – Launched by John Gormley, Minister for the Environment, Citi Employee, Clients, Students, Colleagues etc..!
 - [CRS Environmental Webpage](#)
 - Green Initiatives Sharepoint site which allows employee to promote ideas and share best practices. [CRS Green Initiatives & Sharepoint Site](#)
 - Poster campaigns – Remembering Diversity... We posted daily messages in 7 different languages.
 - Employee surveys to obtain views and feedback
 - [*91% of employee performing one energy saving activity every day.](#)

Communicate, communicate, communicate...

Poster Campaign



Poster Campaign

CO₂ 100g

A computer left on overnight for a year creates enough CO₂ to fill a double-decker bus.

Switch it off and you'll make all the difference.

For more ways to help combat climate change at work visit www.carbontrust.co.uk

Office lights left on overnight use enough energy in a year to heat a home for almost 5 months.

Switch them off and you'll make all the difference.

For more ways to help combat climate change at work visit www.carbontrust.co.uk

CO₂ 100g

Photocopier left on standby overnight wastes enough energy to make 30 cups of tea.

Switch it off and you'll make all the difference.

For more ways to help combat climate change at work visit www.carbontrust.co.uk

100g CO₂

Category	Value (Tonnes)
Total Carbon Produced - Assuming no CHP	4945
Actual Carbon Produced using CHP in 2008	2998
Carbon Save for 2008 in Tonnes	1815

Legend:
 ■ Total Carbon Produced - Assuming no CHP
 ■ Actual Carbon Produced using CHP in 2008
 ■ Carbon Save for 2008 in Tonnes

A 1°C increase in office temperature creates enough CO₂ in a year to fill a hot air balloon.

Reduce it and you'll make all the difference.

For more ways to help combat climate change at work visit www.carbontrust.co.uk

VOTE EARTH!

YOUR LIGHT SWITCH IS YOUR VOTE

60 YEARS

A chiller door left open for 30 minutes a day wastes enough energy in a year to power a lighthouse for nearly 4 days.

Close it and you'll make all the difference.

For more ways to help combat climate change at work visit www.carbontrust.co.uk

5. Stating our successes - focussing on positive results.



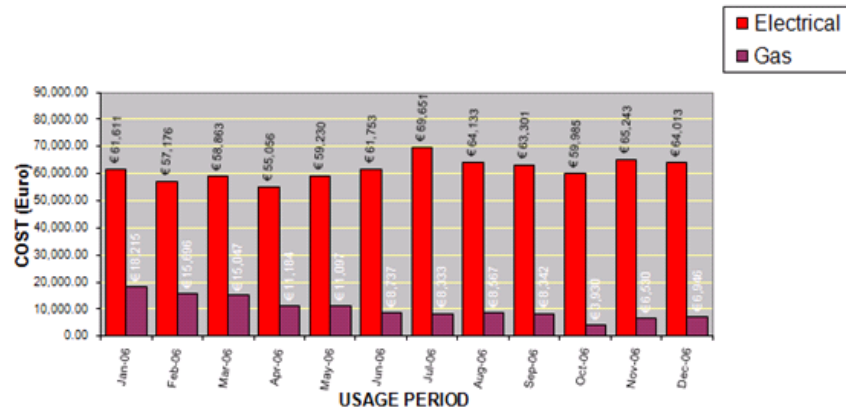
- Overall energy reduction of 14%!
- Over €350k returned to the business through rebate!
- Awards received include Green Financial Institution of the Year and SEAI Outstanding Energy Manager of the Year!



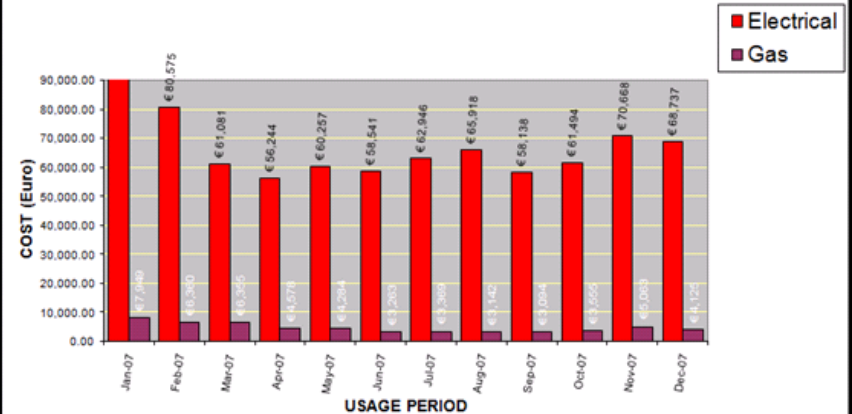
Energy Savings



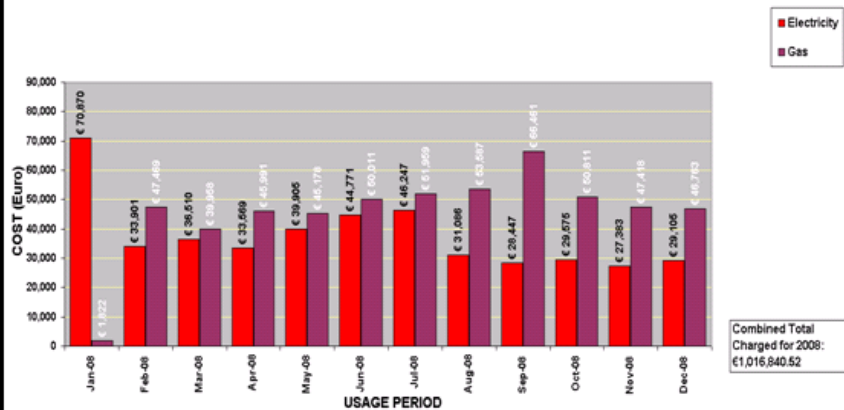
COMBINED CHARGES TO 2006



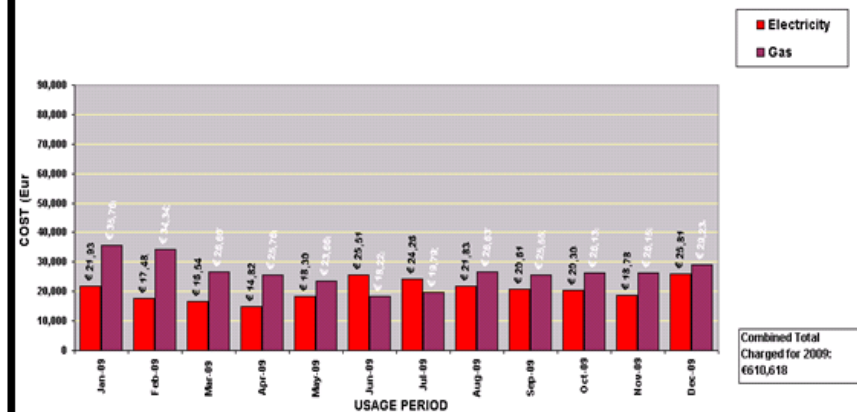
COMBINED CHARGES TO 2007



COMBINED CHARGES TO 2008



COMBINED CHARGES TO 2009



CO₂ Savings for 2009



CO₂ Saves

CHP as our primary source of energy rather than importing directly

Save - 1747 Tonnes over 12 month period

Save due to Electrical Consumption Reductions over 12 month period

Save = 487 Tonnes over 12 month period

Save due to Boiler reduction-

Reducing Boiler activity average 8 hrs per day to 2 hrs per day `

Save = 248 Tonnes over 12 month period

Save - 213 Tonnes over 12 month period

Save due to reduced Thermal Consumption

Direct Carbon Save = 47.37 Tonnes over 12 month period

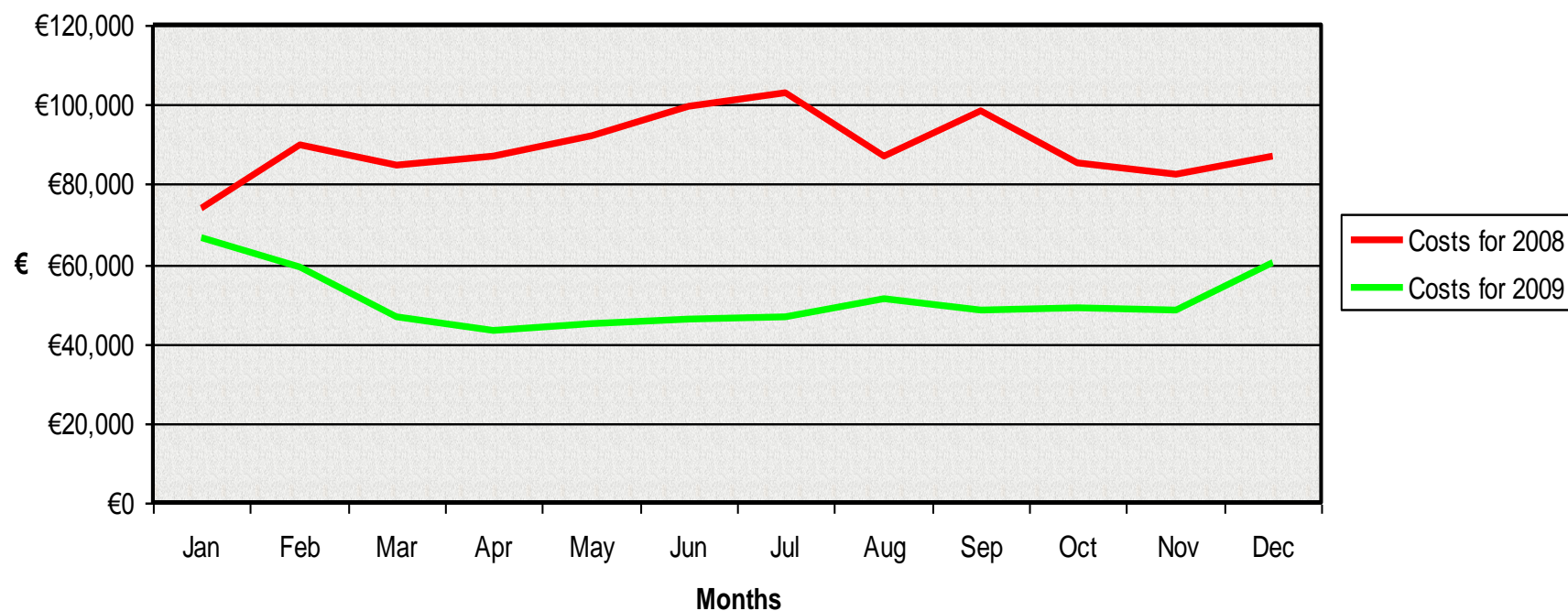
Total Combined Carbon Save = 2,495 Tonnes



Energy Savings for 2009



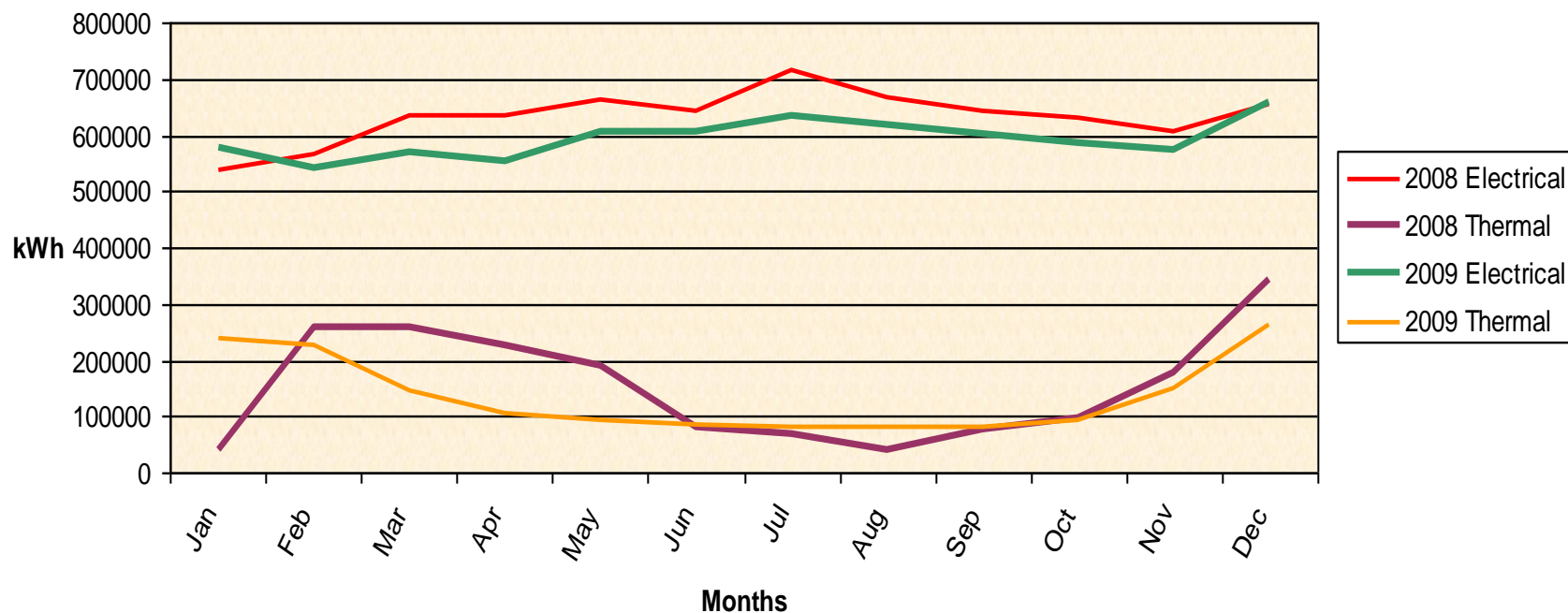
Cost Comparison 2008 v 2009



Energy Savings for 2009



Energy Comparison 2008 v 2009



2009 Targets



1. To reduce energy consumption per head by 10%.

Actual: Achieved 9.53%. ✓

2. To reduce overall energy consumption by 10%.

Actual: Achieved 14%. ✓

3. Reduce energy costs by 10%.

Actual: Achieved 35.49%. ✓

4. Reduce carbon production by 20%.

Actual: Achieved 35.22%. ✓

The Additional benefits



- **Corporate Social Responsibility**
We have significantly reduced our impact on the environment and in doing so have made a difference to society as a whole.
- **Company Profile**
We have engaged other organisations, clients, neighbours, all of which believe that our Green Initiatives have had a very positive impact on Citi's Company Profile.
- **Employee Morale**
Citi employees are proud of their environmental achievements. Over 80% of our employees are proud to be a part of an organisation that demonstrates a willingness to engage in sustainability.
- **Green Agenda** - In the 80's it was the "Qmark". In the 90's you needed ISO. In the "Naughty's" a Health & Safety policy was essential.
If you want to do business in the "Teenies", you need to be thinking about a Green Agenda.

Key Points



-
- Challenge – Be different, creative and innovative!
 - Remember... Technology is your friend!
 - Engage key players early!
 - Remember a Green Agenda may lead to business opportunities!
 - Keep to the basics!

Finish

