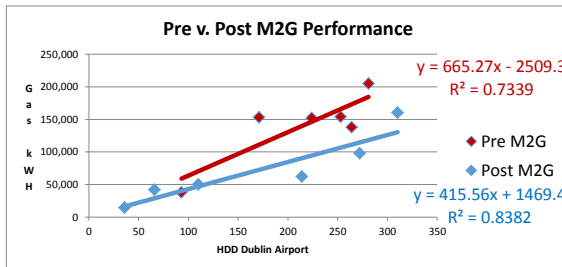
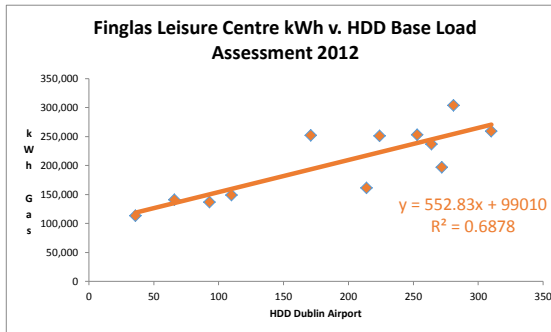


# M2G Boiler Load Control Performance & Savings for Dublin City Council (Finglas & Ballymun)



## Finglas Leisure Centre

		HDD		kWh -Base
		15.5	kWh	
2012	Jan	281	303,919	204,909
	Feb	253	253,156	154,146
	Mar	224	251,145	152,135
	Apr	264	237,096	138,086
	May	171	252,189	153,179
	Jun	93	137,039	38,029
	July	66	141,068	42,058
	Aug	36	113,620	14,610
	Sep	110	149,186	50,176
	Oct	214	161,403	62,393
	Nov	272	197,106	98,096
	Dec	310	259,376	160,366
	Base	99010	2,456,303	1,268,183
Annual		1188120		
%		48.4%		51.6%



<b>Base Load</b> = all non-weather related gas consumption e.g. CHP, DHW, Pool HEX	
Base Load % of total gas consumption =	48.4%
Cost of base load with AUP of 0.02919 cent/kWh =	€34,681
Cost of heating load i.e. 51.6% =	€37,018
Total est. annual cost of gas =	€71,699
Using 191.2 HDD average for 2012 M2G savings =	35%
M2G Project Costs =	€4,500
M2G annual Project Savings =	€12,956
M2G Project ROI Month =	4.2
5-year net profit after costs =	€60,282
kWh Saving =	2,219,320
Ton Co2 Saved per annum =	4,390

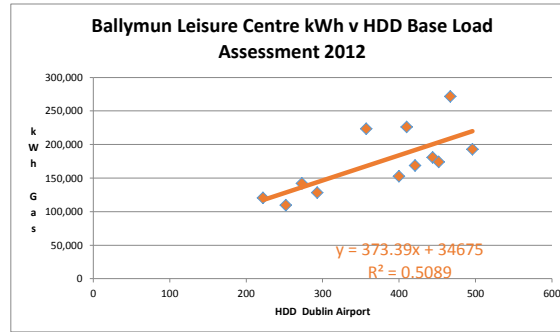


For further information on Finglas Leisure Centre energy design and efficiency please see link below  
[http://www.seai.ie/Archive1/Files\\_Misc/CaseStdyFinglasPoolNo19.pdf](http://www.seai.ie/Archive1/Files_Misc/CaseStdyFinglasPoolNo19.pdf)

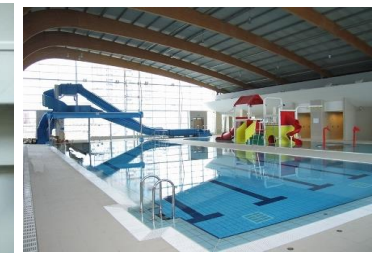
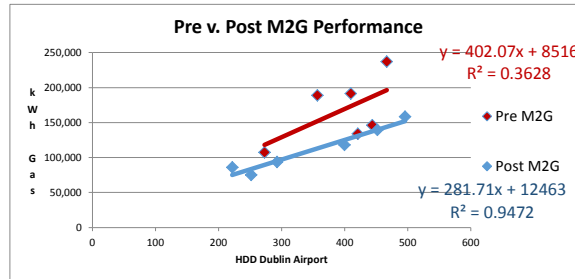
# M2G Project Performance

# Ballymun Leisure Centre

HDD		21.5 kWh	kWh - Base
2012 Jan	467	271,675	237,000
Feb	421	168,704	134,029
Mar	410	226,131	191,456
Apr	444	180,818	146,143
May	357	223,526	188,851
Jun	273	142,000	107,325
July	252	109,778	75,103
Aug	222	120,635	85,960
Sep	293	128,363	93,688
Oct	400	152,695	118,020
Nov	452	174,149	139,474
Dec	496	193,018	158,343
<b>Base</b>	<b>34675</b>	<b>2,091,492</b>	<b>1,675,392</b>
Annual	416100		80.1%
%		19.9%	



<b>Base Load</b> = all non-weather related gas consumption e.g. DHW, Pool HEX
Base Load % of total gas consumption = 19.9%
Cost of base load with AUP of 0.02919 cent/kWh = €12,146
Cost of heating load i.e. 80.1% = €48,905
Total est. annual cost of gas = €61,051
Using 191.2 HDD average for 2012 M2G savings = 22.3%
M2G Project Costs = €4,500
M2G annual Project Savings = €10,906
M2G Project ROI Months = 5
5-year net profit after costs = €50,029
kWh Saving = 1,868,062
Ton Co2 Saved per annum = 3,695



**M2G Project Description:** At the end of June 2012 4# M2G boiler load controls were installed at Dublin City Council Finglas & Ballymun Leisure Centres. The M2G controls will inhibit any boiler response to conditions of dry cycling/short cycling or short circuiting. This study examines the 6-months kWh building gas performance Pre v. Post M2G installation. Savings for both buildings delivered were in excess of 20%. Even modern boiler plant (condensing/modulating) with incorporated BMS control is not exempt from this type of boiler activity. For more information on boiler nuisance activity which can be eliminated through M2G boiler control logic please see the following link [http://www.gem.ie/html/why\\_m2g.html](http://www.gem.ie/html/why_m2g.html)

# M2G Project Performance