

The Energy challenge

Energy saving applications
for retail

TESCO
IRELAND
Every little helps.

Save
Energy



Tesco Facts

- Tesco World Wide



Over 100,000 employees
international operation



TESCO
IRELAND
Every little helps.



Tesco Facts

- Tesco Ireland is a member of the international group
- Not part of UK operation
- Separate accounts and budgets
- 11,000 employees in Ireland
- 100 stores and three distribution depots



TESCO
IRELAND
Every little helps.



Energy strategy

- Fundamental design.
- People and process solutions.
- Engineering solutions



TESCO
IRELAND
Every little helps.



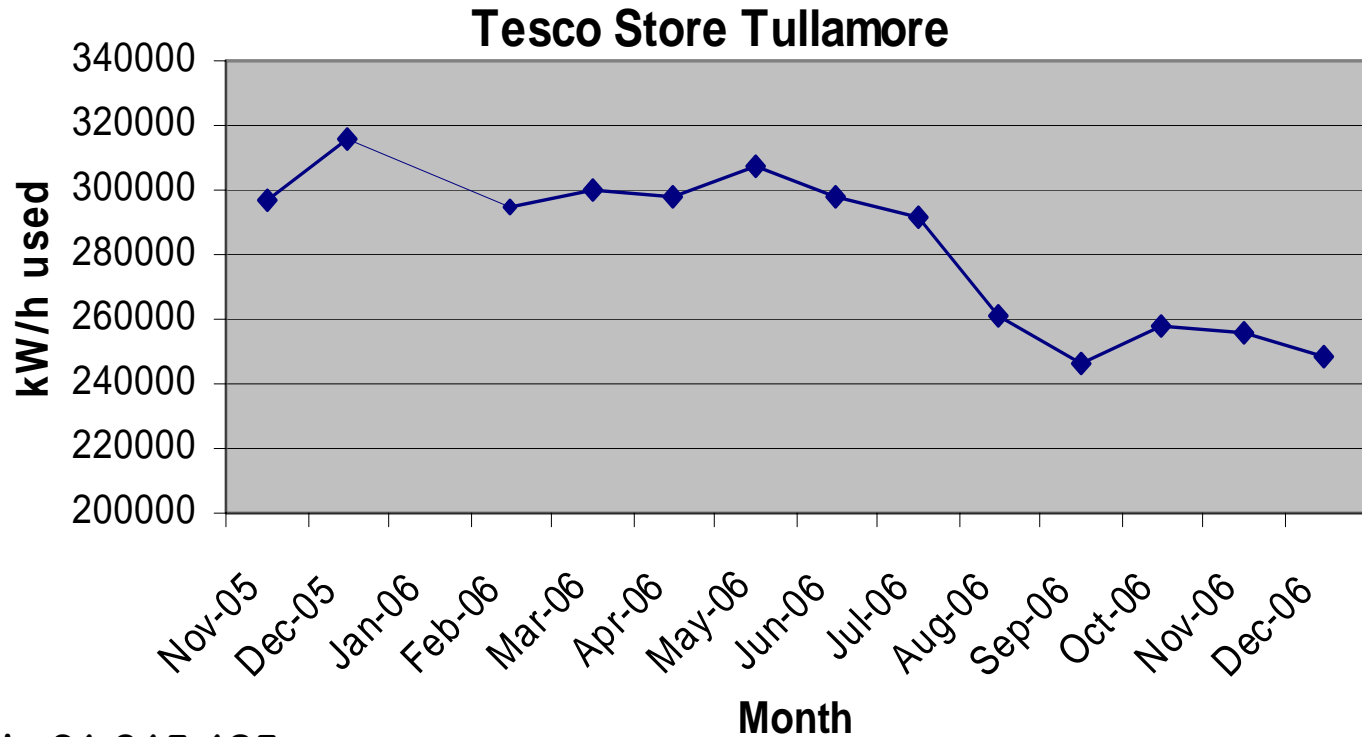
Engineering solutions



TESCO
IRELAND
Every little helps.



Phase 1 Results



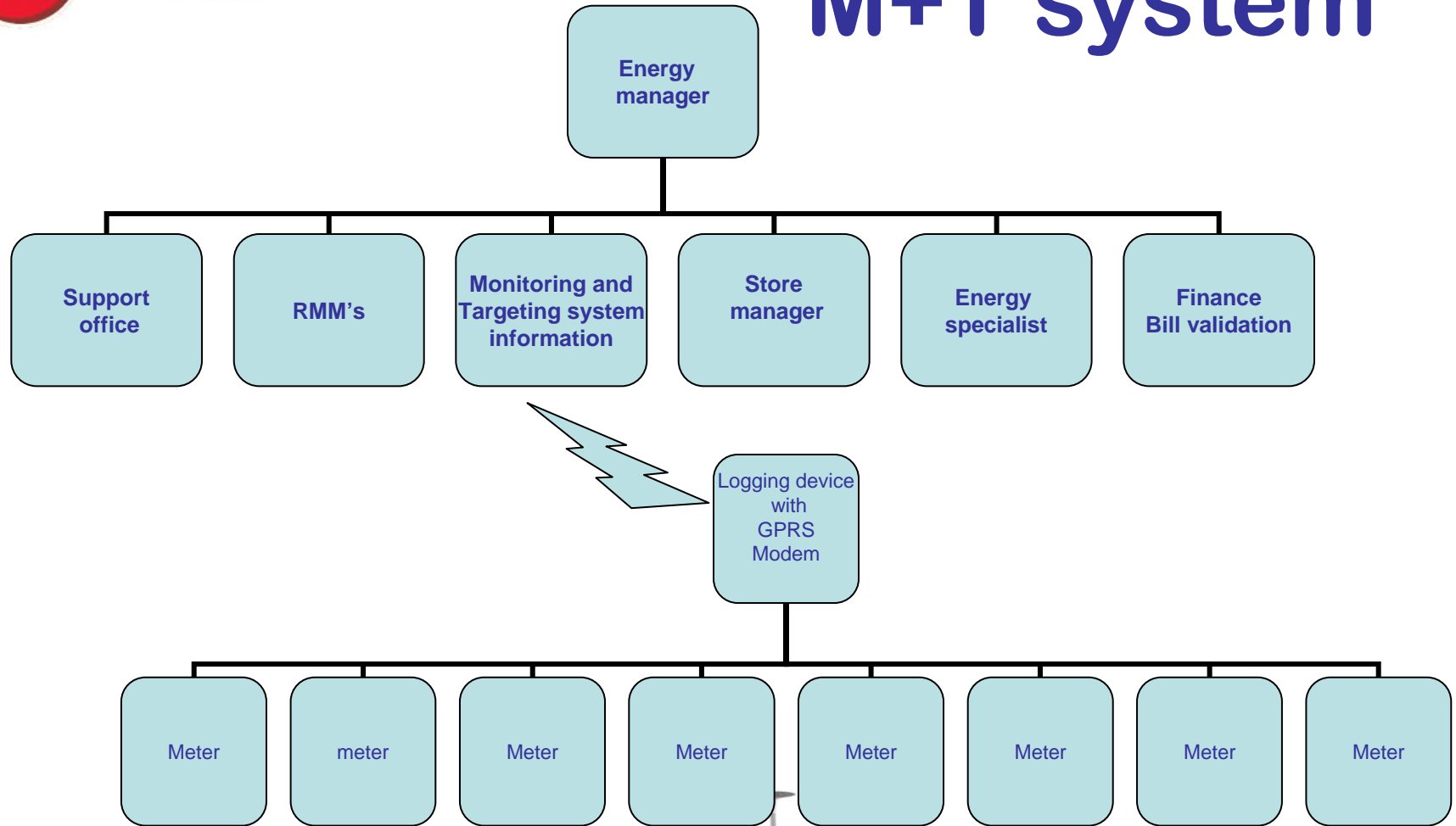
- Total spend - €1,315,125
- Current projected savings - €1,890,600
- Energy reduction 12% P.A.
- Carbon emissions reduced by 4021 tons



TESCO
IRELAND
Every little helps.



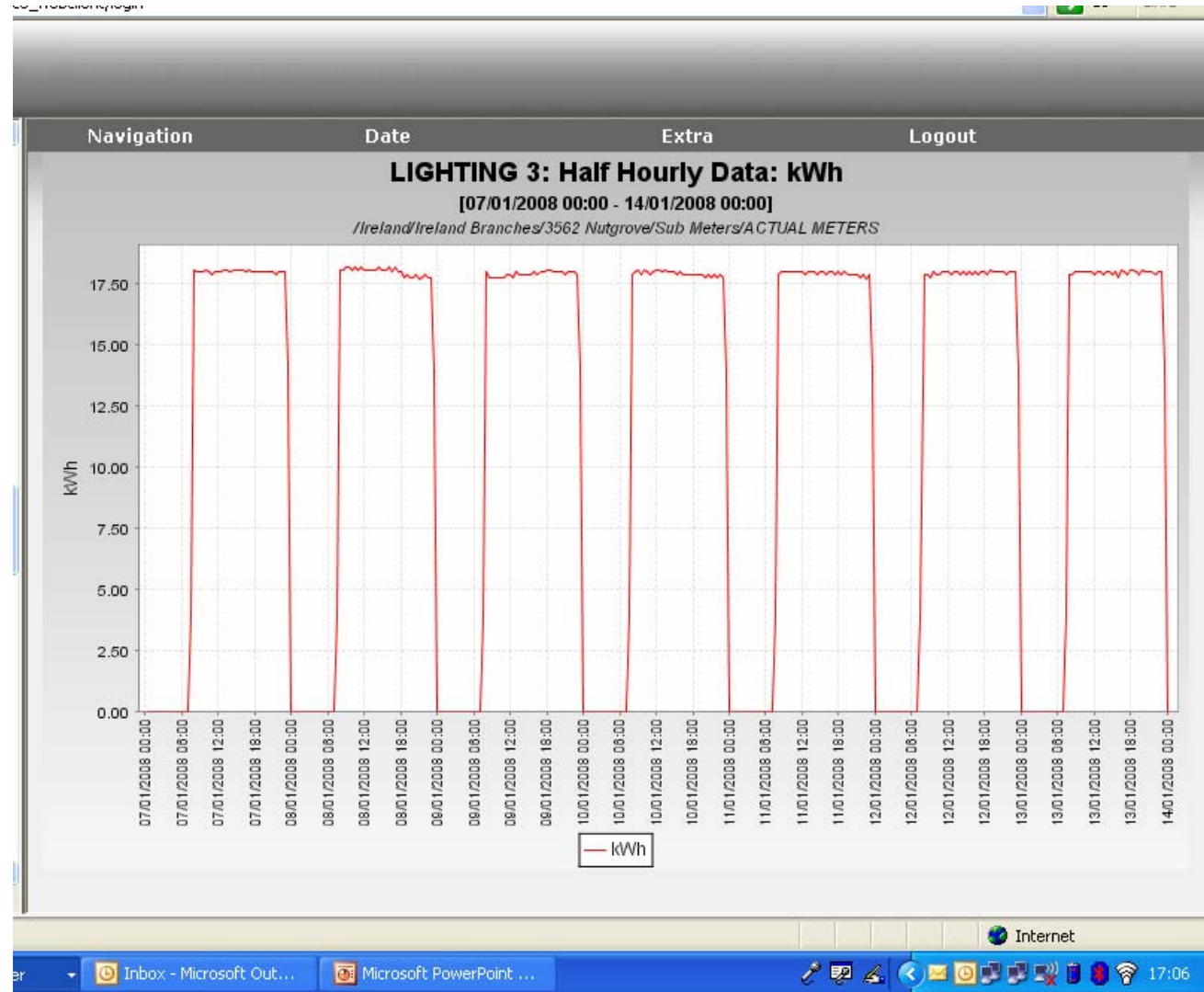
M+T system



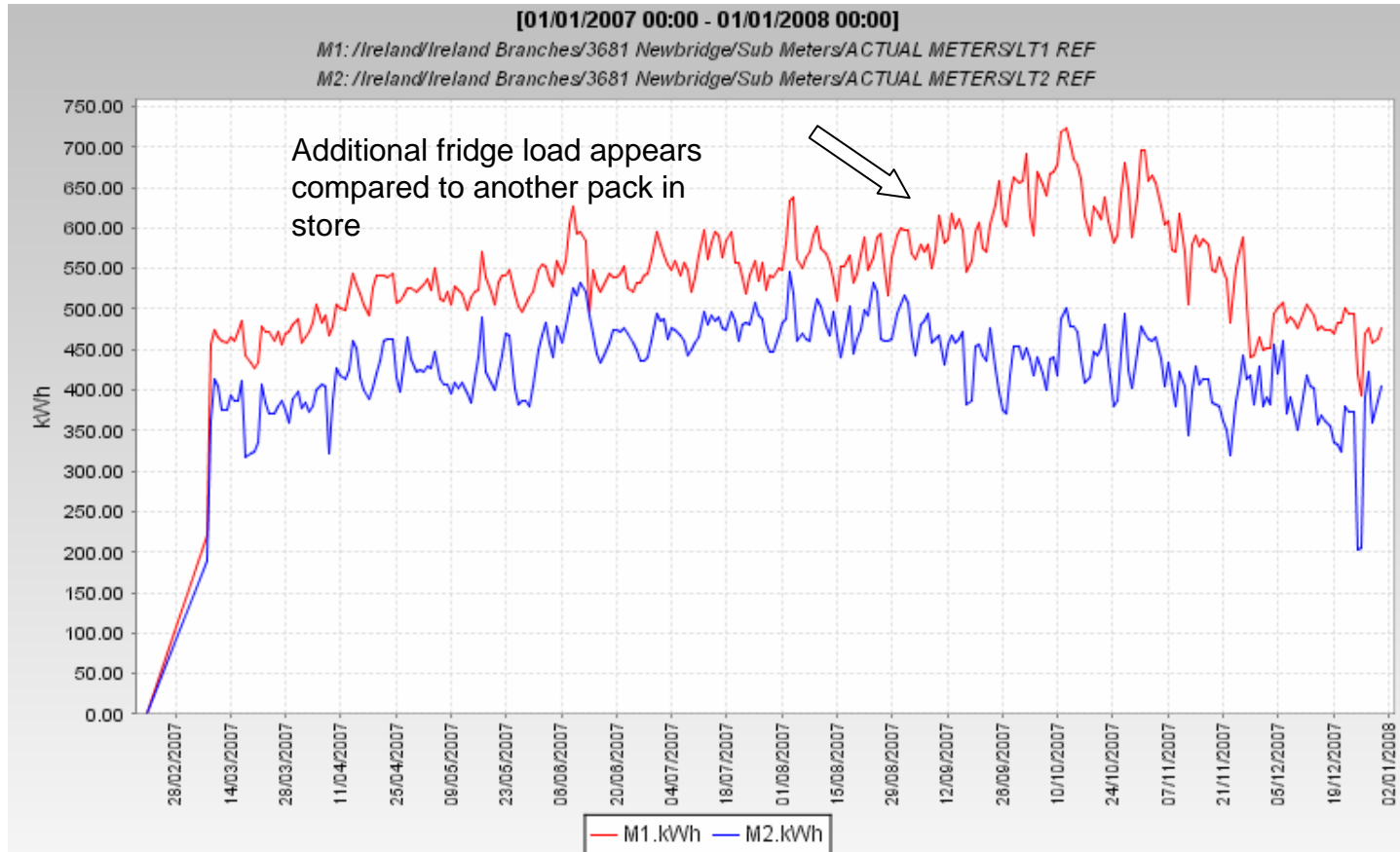
TESCO
IRELAND
Every little helps.



TESCO
IRELAND
Every little helps.



TESCO
IRELAND
Every little helps.



TESCO
IRELAND
Every little helps.



Benchmarks

kW/hr per Square foot/metre

Electricity

Gas/Oil

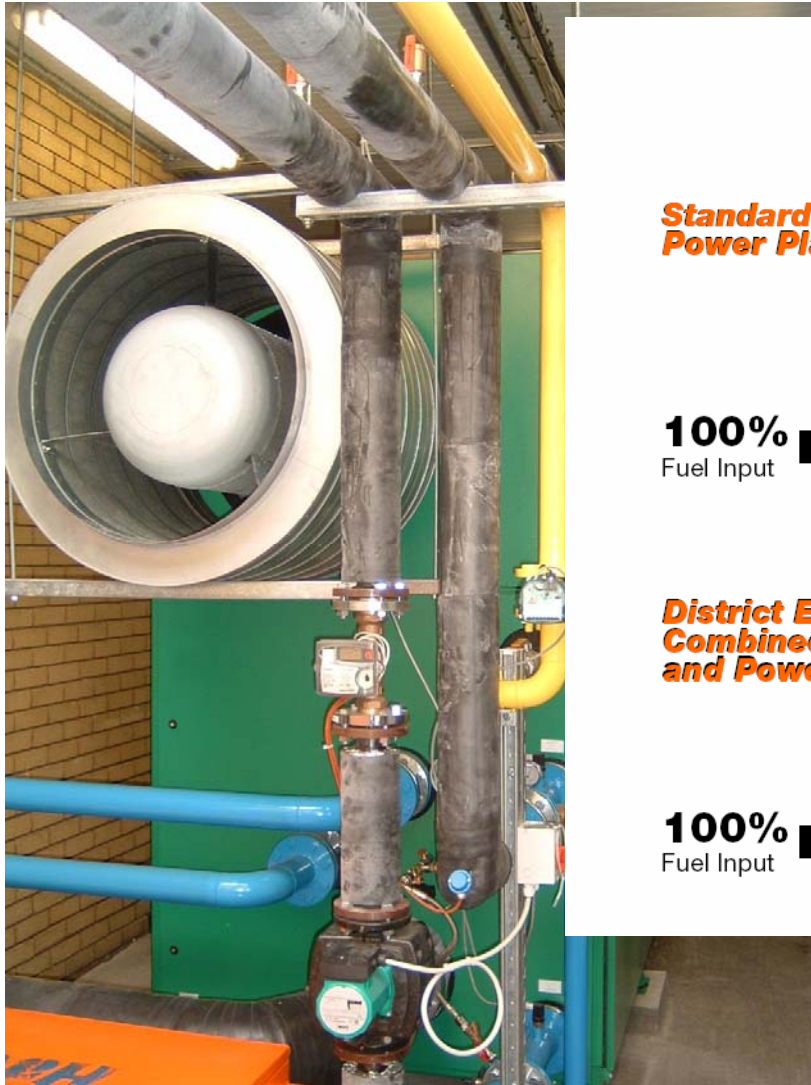
Percentage turn down off peak



TESCO
IRELAND
Every little helps.



CHP at Nutgrove



Energy-Efficiency Comparisons

Standard Power Plant

100%
Fuel Input



60%

"Waste" heat rejected to environment

40%

Useful energy produced for electricity

**District Energy/
Combined Heat
and Power Plant**

100%
Fuel Input



20%

"Waste" heat rejected to environment

40%

Useful energy produced for heating and/or cooling via district energy system

40%

Useful energy produced for electricity



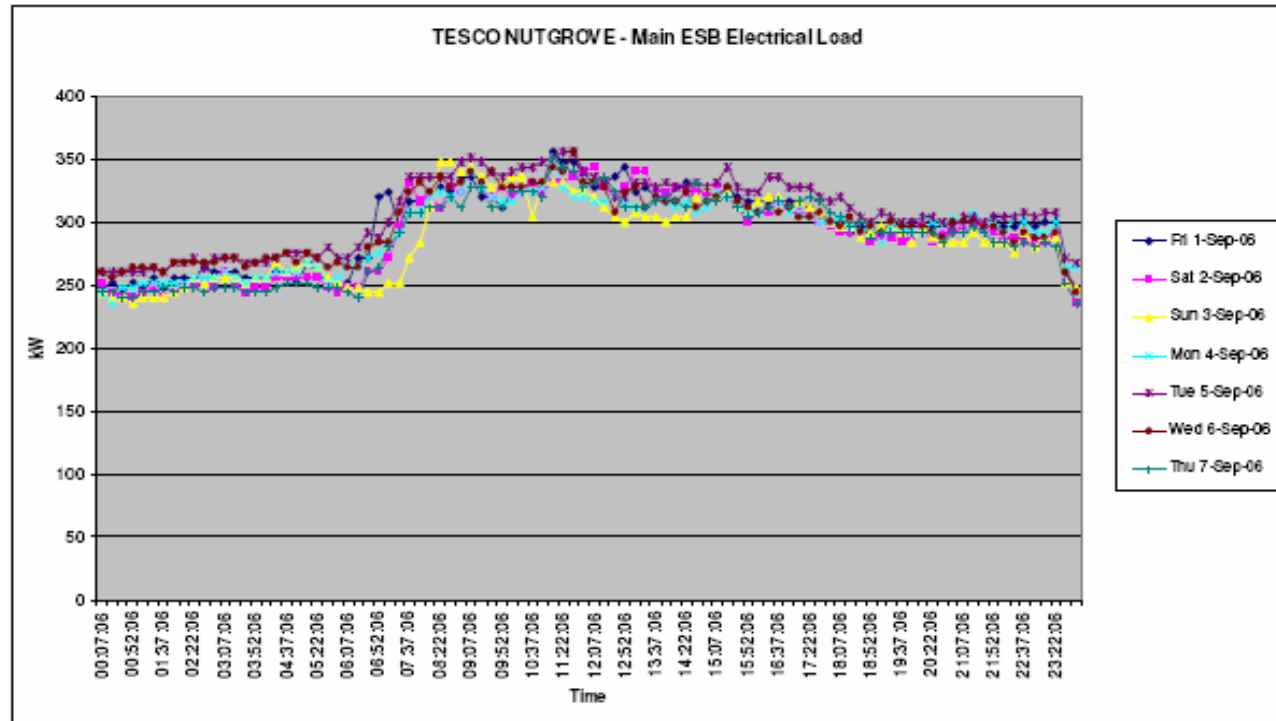
TESCO
IRELAND
Every little helps.



WHY CHP AT NUTGROVE?



TESCO
IRELAND
Every little helps.



	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Avg Daytime Thermal Load	328	408	228	369	398	0	0	5	4	1	68	398
Avg Nighttime Thermal Load	390	415	244	385	393	0	0	0	0	0	174	387
												<i>estimated</i>
Equip Daytime EI Output	229	286	159	258	279	0	0	3	3	1	47	279
Equip Nighttime EI. Output	273	290	171	270	275	0	0	0	0	0	122	271
												<i>estimated</i>

**Modulating Set with Maximum
334kWe/497kWt Output**



TESCO
IRELAND
Every little helps.



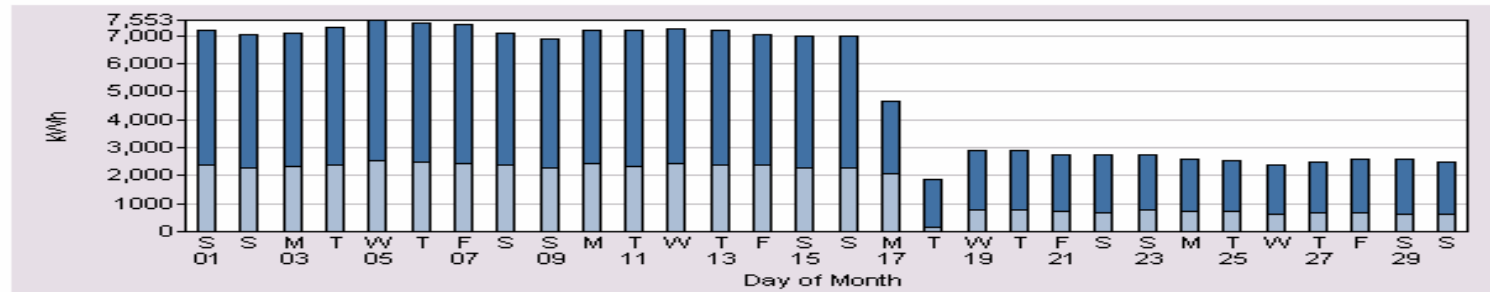
210009781 TESCO IRELAND LTD, 3562/33 NUTGROVE SHOPPING CENTRE, NUTGROVE AVENUE, DUBLIN 14 .

Monthly Consumption for

Sep-2007

Go

[View Monthly Tabular Report](#)

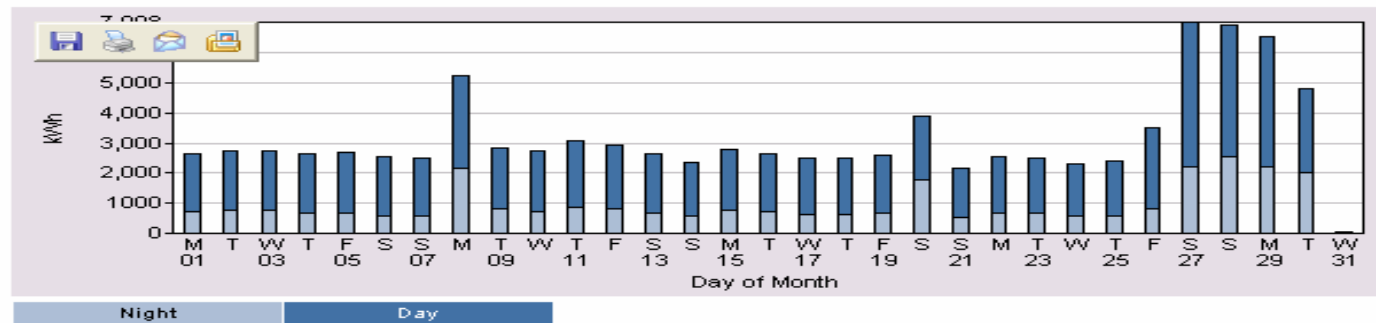


Monthly Consumption for

Oct-2007

Go

[View Monthly Tabular Report](#)



Night

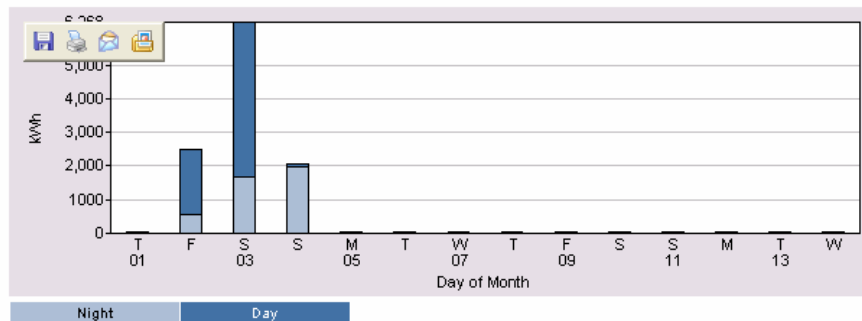
Day

Monthly Consumption for

Nov-2007

Go

[View Monthly Tabular Report](#)



Night

Day



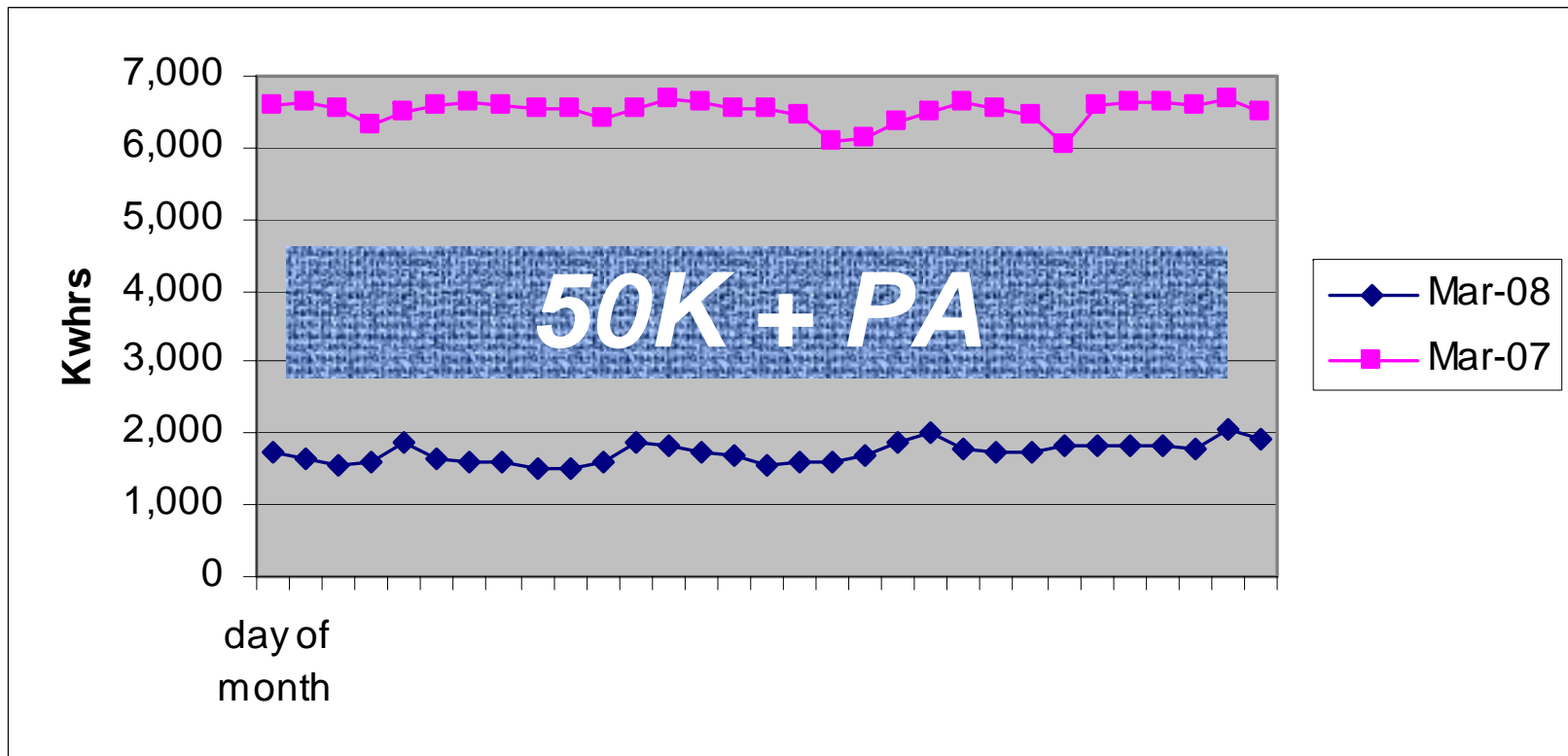
TESCO
IRELAND
Every little helps.



TESCO
IRELAND
Every little helps.



CHP at Nutgrove



TESCO
IRELAND
Every little helps.



CHP Grants

Minister Dempsey announces
30% Capital Grants for Combined
Heat and Power Generation

Government grant scheme to reduce business energy costs



Minister Noel Dempsey, Eamonn O'Reilly (Technical Services Manager, St. Patricks Hospital, Dublin) and Aidan McDonnell (Business Manager, F4energy) at the announcement of the Capital Grant program for Combined Heat and Power, pictured at the CHP installation at St. Patricks Hospital, Dublin. The hospital's annual energy cost savings delivered by F4energy's CHP plant are in excess of €50,000 per annum.

- Phased
- Case study
- Inspection
- Finite fund



TESCO
IRELAND
Every little helps.



Thank You



TESCO
IRELAND
Every little helps.