



www.whsmith.co.uk

Energy Consumption Reduction and Communication Plan - AMR

February 2008



WH Smith Retail Limited

- 550 Retail stores in the High Street
 - 125 Half Hourly Metered
 - 417 Non Half Hourly Metered
- 300 Travel stores
 - 70 are franchised motorway services
 - Only 40 are grid supplied (2 Half hourly metered)
- 3 Distribution/Offices (half hourly metered)



Energy monitoring

- In 417 high street stores electricity meters were read manually. Of these 185 are profile class 03 or 04 and therefore carry a high level of estimation, making it difficult to accurately monitor the stores energy performance, along with the previous benefits discussed.
- AMR (Automated Meter Reading) is now installed in all but a hand full of stores.
- Only 198 stores are CT metered, the rest required power outage to change metering, this had to be when the store was not trading.
- A common WEB based system is being used for both AMR & HH stores.
- Each stores has direct access to the daily electricity data.
- The reports will allow staff to see how and when there electricity is being consumed and a breakdown of there cost.

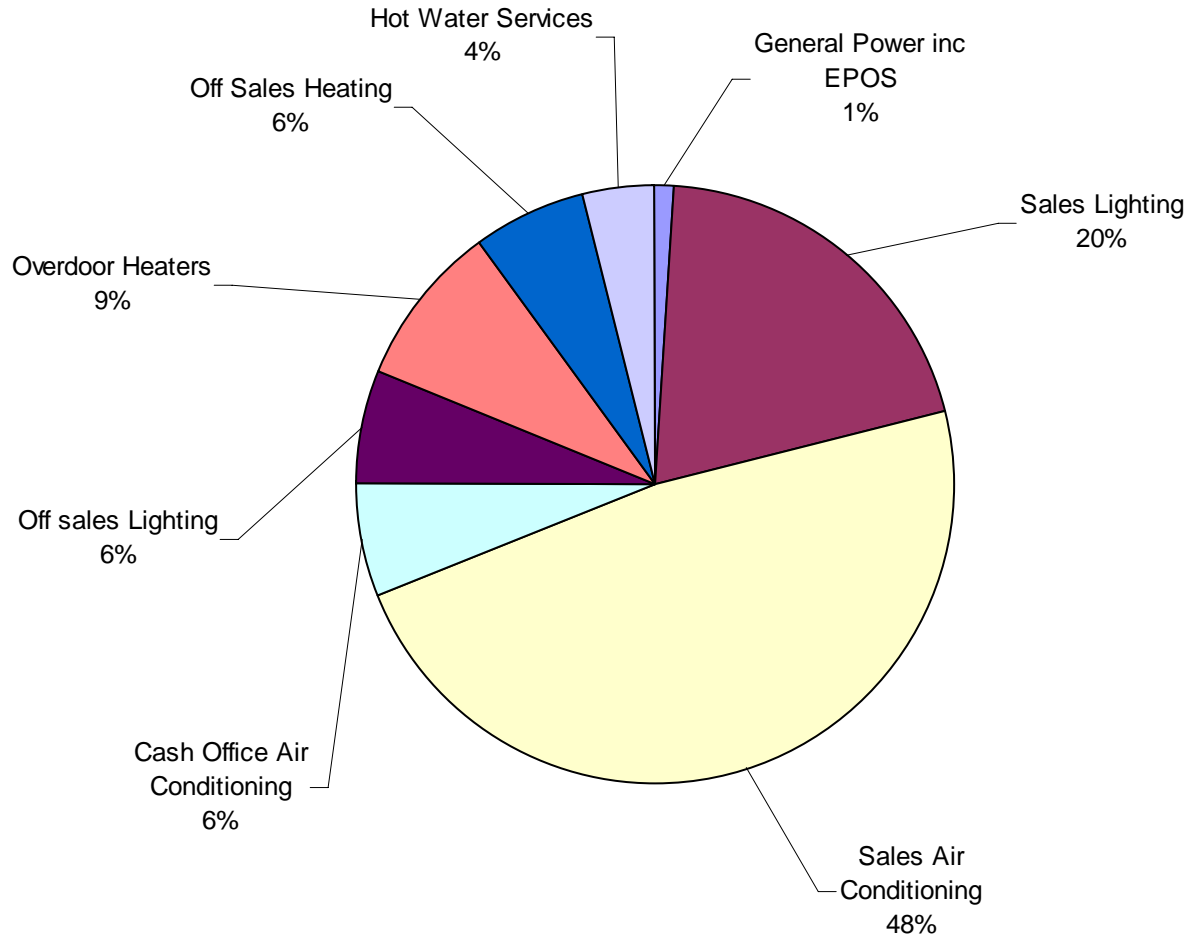


Energy monitoring

- At the centre the system will help in bill validation, performance monitoring, and accruals delivering the energy cost target.
- Worked with the supplier from the start to maximise benefit of automated meter readings in billing.
- Amount of estimation did increase during the installation phase.
- 03 & 04 profiles remain as quarterly billed.



Energy Consumption





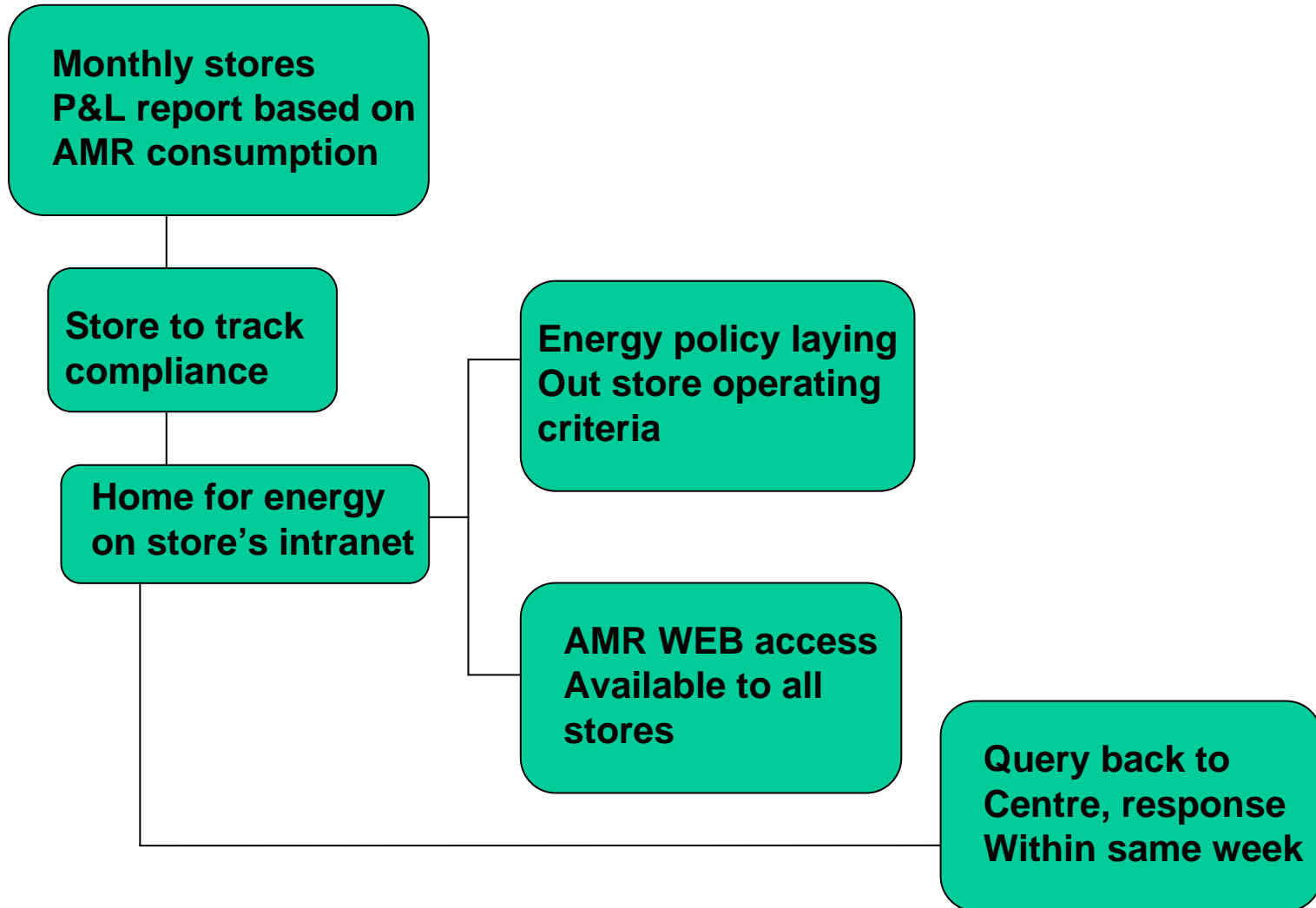
Energy Policy

In response to rising prices there are some changes to the energy policy and the Store Manager is accountable for ensuring there is a process in store and the policy is adhered too at all times. This includes taking a monthly meter reading. (See below)

DO	DO NOT
Do Operate your heating system at 19°C.	Do not continually adjust heating and air conditioning systems increase your cost. A 1°C rise in temperature settings equals 8-10% increase in cost.
Do set air conditioning systems at 19°C in the heating mode during winter months and 23°C cooling mode during the summer.	Do not use over door heaters and cash and wrap heaters unless necessary during trading times.
Do switch lighting and heating off in unoccupied areas of the store, it is not cheaper to leave lighting on in empty rooms.	Do not leave heating on overnight in any area of the store.
Do switch off non-core lighting in stockrooms when it is not required.	Do not put on Police lighting when the store is closed, as this is no longer a requirement.
Do switch sales areas to half lighting outside of trading times.	Do not use escalators outside trading times.
Do set time clocks to reflect store-trading times.	Do not trade with doors open.
Do use night blinds on refrigeration cabinets	
Do switch PC monitors off over night.	
Do report faults through premises action line.	



Store Reporting Process



Calendar Month Profile - Electricity

Site Name 2020 - Dallas

Period Ending 12/02/08 at 00:00

Consumption Totals

Weekday Units 1291 kWh
 Night Units 275 kWh
 Peak Units 235 kWh
 Other Units 958 kWh

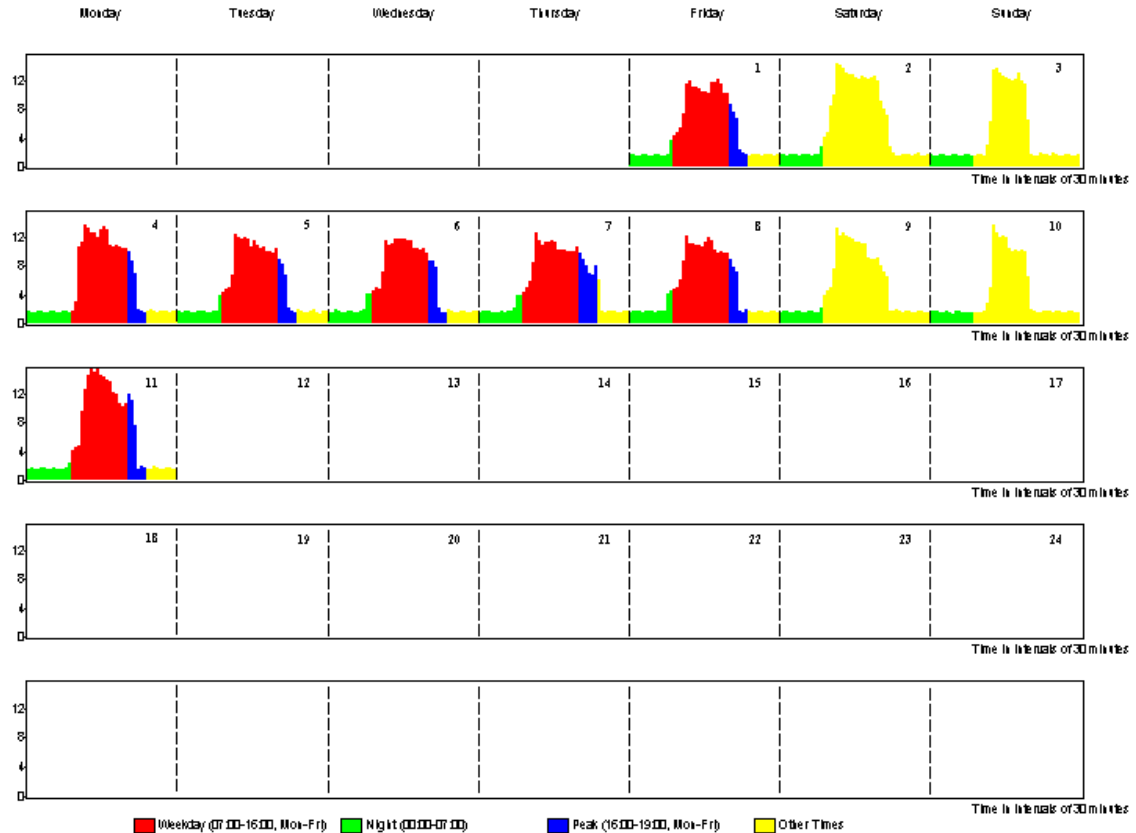
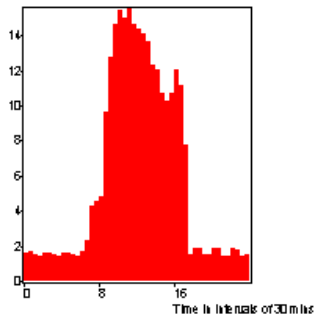
Total Cons 2759 kWh

Time of Use Breakdown

Weekday Units 46.79%
 Night Units 9.97%
 Peak Units 8.52%
 Other Units 34.72%

Profile of the Day with the Highest MD
 MD occurred on 11/02/08 at 11:30

MWh



Calendar Month Profile - Electricity

Site Name

Period Ending

01/11/07 at 00:00

Consumption Totals

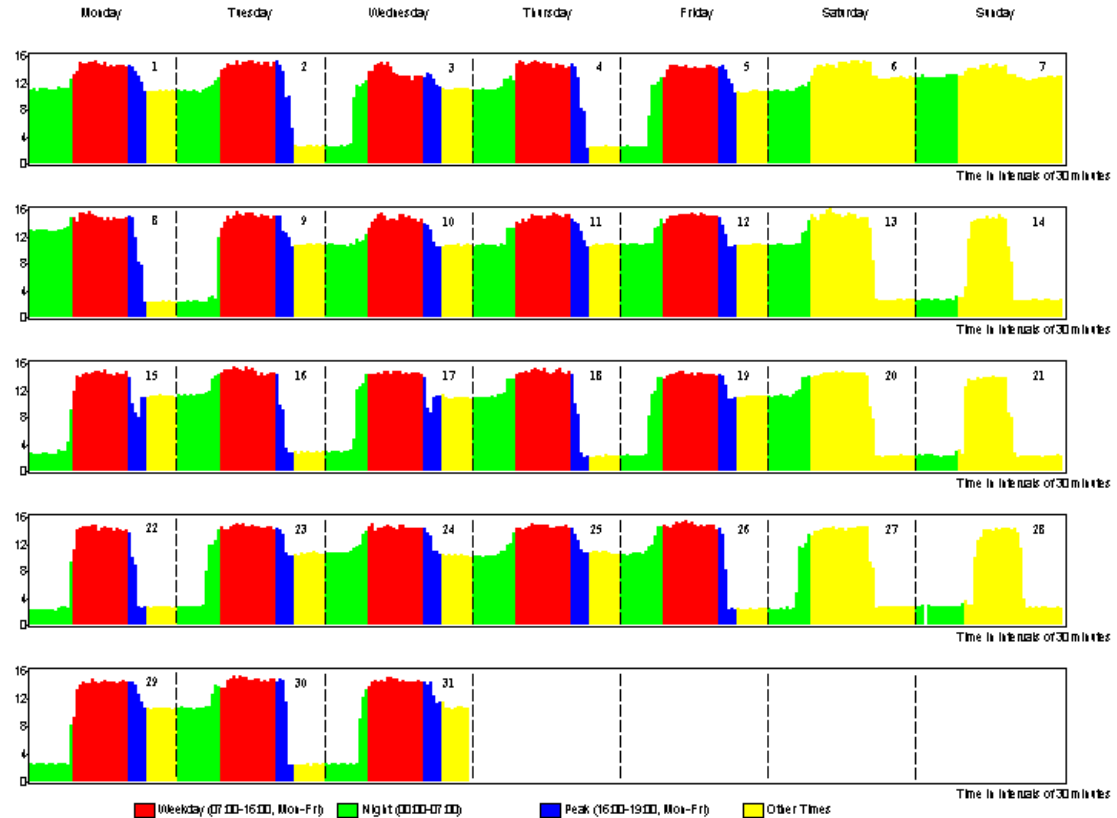
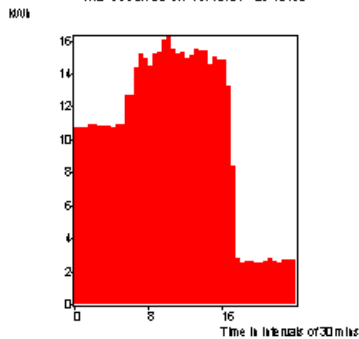
Weekday Units 6059kWh
 Night Units 3591kWh
 Peak Units 1528kWh
 Other Units 4533kWh

Total Cons 15712kWh

Time of Use Breakdown

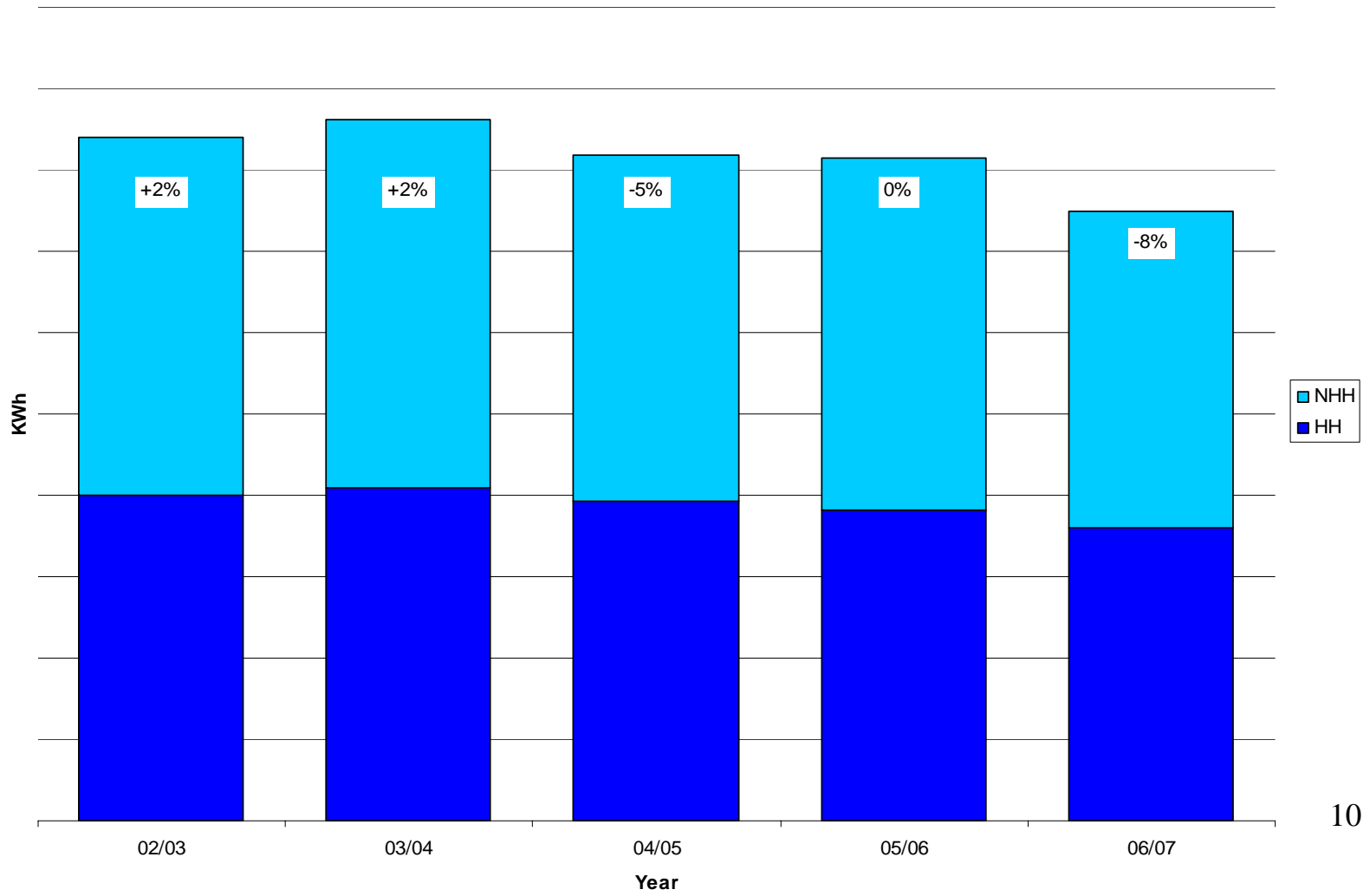
Weekday Units 38.56%
 Night Units 22.86%
 Peak Units 9.73%
 Other Units 28.85%

Profile of the Day with the Highest MD
 MD occurred on 13/10/07 at 10:30





Annual Electricity Consumption High Street Stores





Development

- Data fully embedded into accrual process.
- Change WEB from industry standard to retail trading graphs.
- Benchmarking standard.
- Pier grouping for store comparison, by AC type
- Raise awareness of system and energy function amongst store staff
- Review extension of AMR into Travel stores
- Improved Exception Reporting.