

Roll out of advanced and smart meters & using metered data to eliminate waste

Presenter

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Domestic = Smart meter + Real time display

Key features

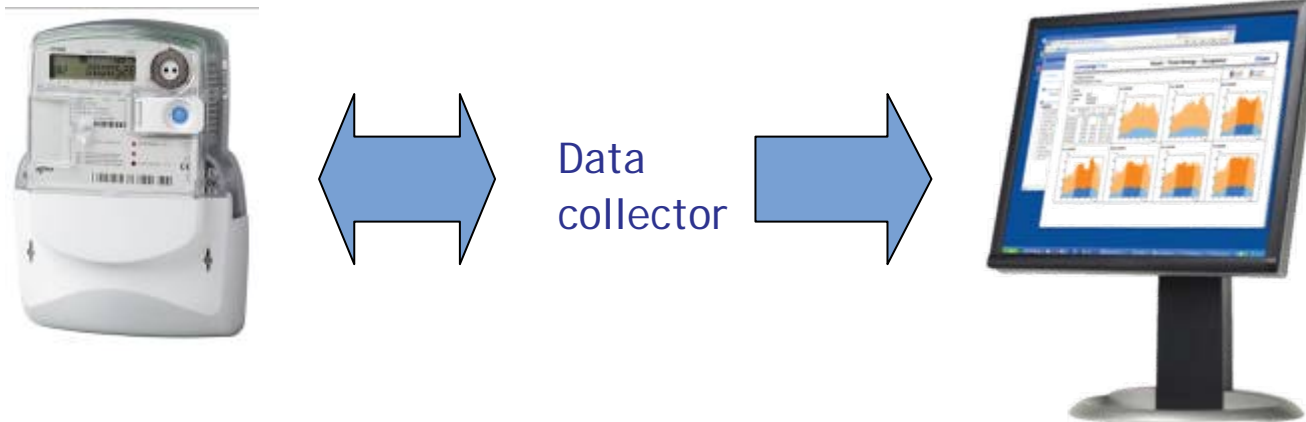
- Half hourly data ✓
- Multiple TOU billing registers ✓
- Remote disconnect ✓
- Remote configuration for credit or pre-pay ✓
- Two-way communications ✓



Non domestic = Advanced meter + online data services

Key features

- Half hourly data ✓
- Multiple TOU billing registers ✗
- Remote disconnect ✗
- Remote configuration for credit or pre-pay ✗
- One-way communications ✓



Sector	Customer Segment	Profile Class	Metering Class	# Meters, 000s
Electricity	Half Hourly >100kW	00	CoP5 CoP3 CoP2	110
	Non Half Hourly <100kW	5 - 8	CoP10	170
		3 - 4	Three Phase (likely CoP10)	700
			Single Phase (likely CoP10)	1,500
Gas	>732MWh	N/A	ATEX approval	40
	<732MWh	N/A	ATEX approval	1,500

HH

- Advanced metering **mandatory since 1994** under the Supplier Licence Conditions

NHH 5-8

- All advanced meters **mandatory by 2014**, and all new meters from March 2009
- Required under Government amendment to Supplier Licence conditions, March 2009
- Government pushing for interoperability (CoP10), final EU approval pending

NHH 3-4

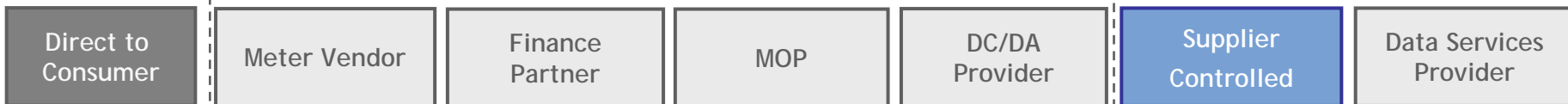
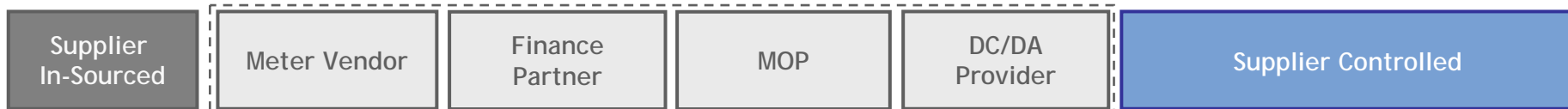
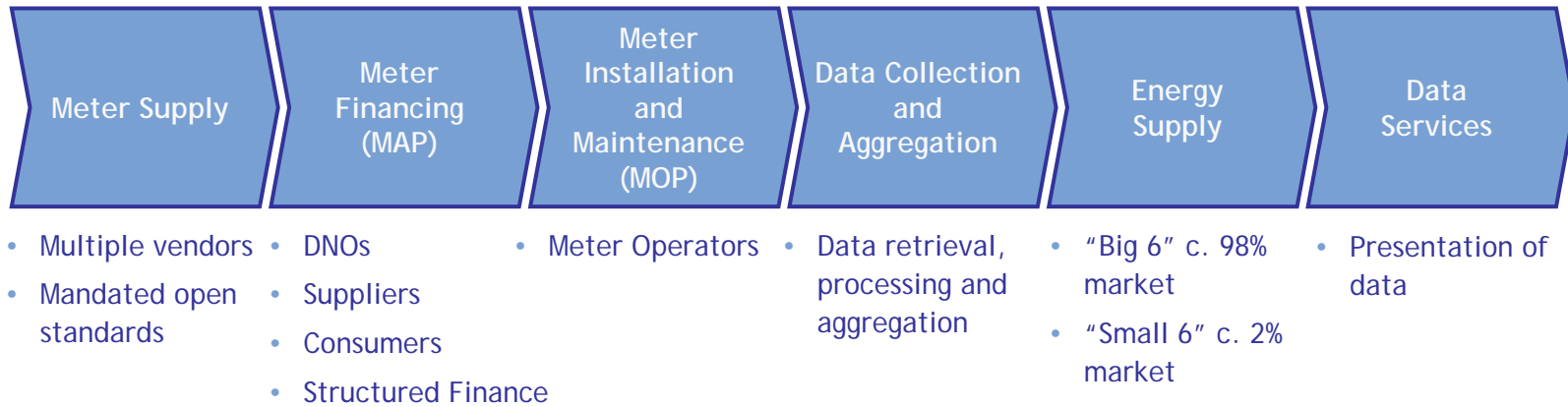
- Ongoing Department of Energy and Climate Change consultation process proposes making **all meters mandatory by 2020**
- There is a good case for all 3 phase sites to be included in NHH 5-8 roll out

Gas >732MWh

- All advanced meters **mandatory by 2014**, and all new meters from March 2009
- Required under Government amendment to Supplier Licence conditions, March 2009

Gas <732MWh

- Ongoing Department of Energy and Climate Change consultation process proposes making **all meters mandatory by 2020**



Services often bundled

Smart metering - consumer benefits

Bill management

- Eliminate estimated bills
- Receive accurate closing and opening reads
- Reduce administration costs

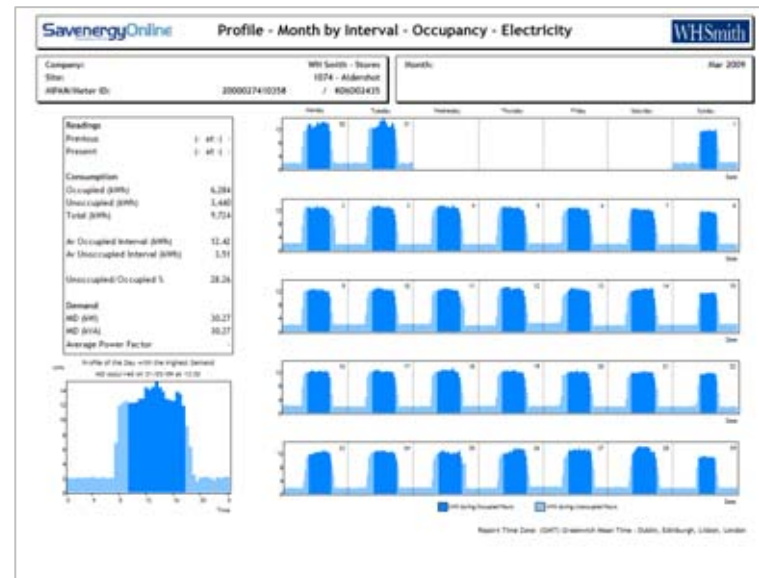
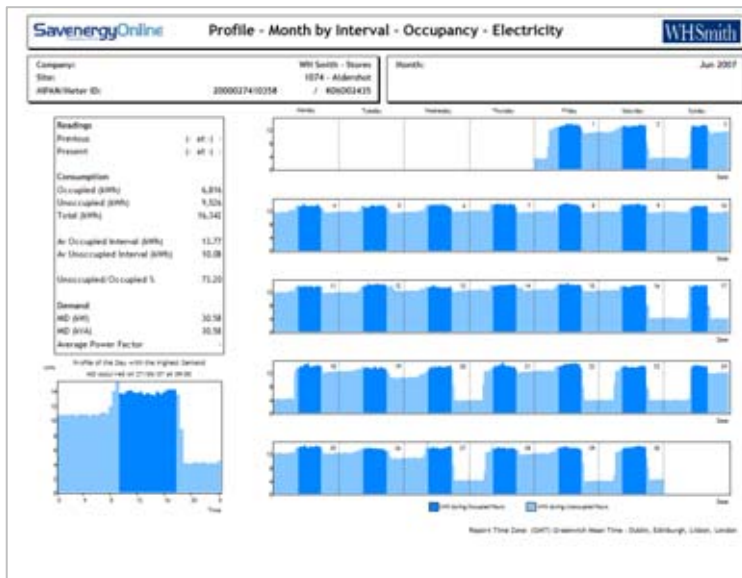
Procurement

- Validate site profile class
- Elect for a change of measurement class
- Adopt TOU tariffs

Carbon & energy savings

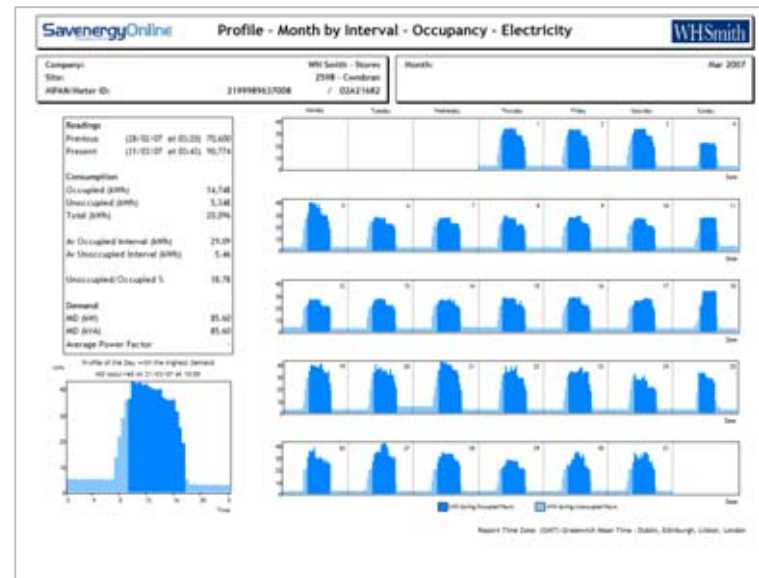
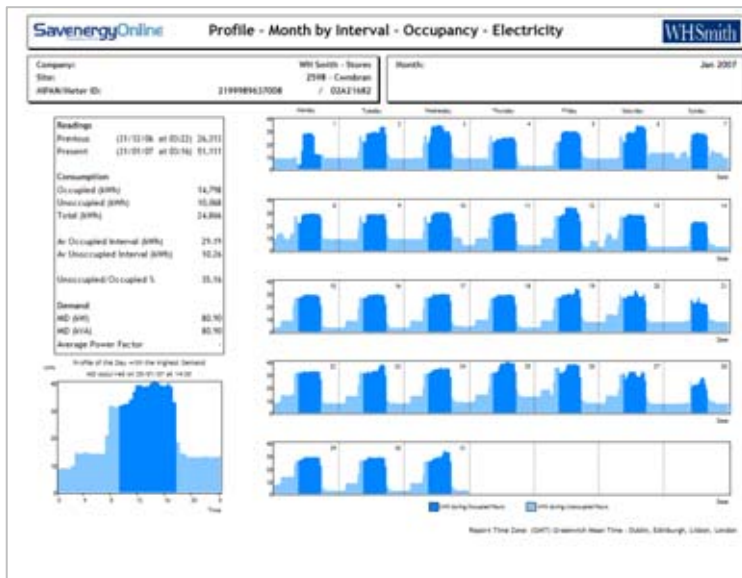
- Eliminate waste
- Cut costs
- Reduce emissions

Eliminate waste - Example 1



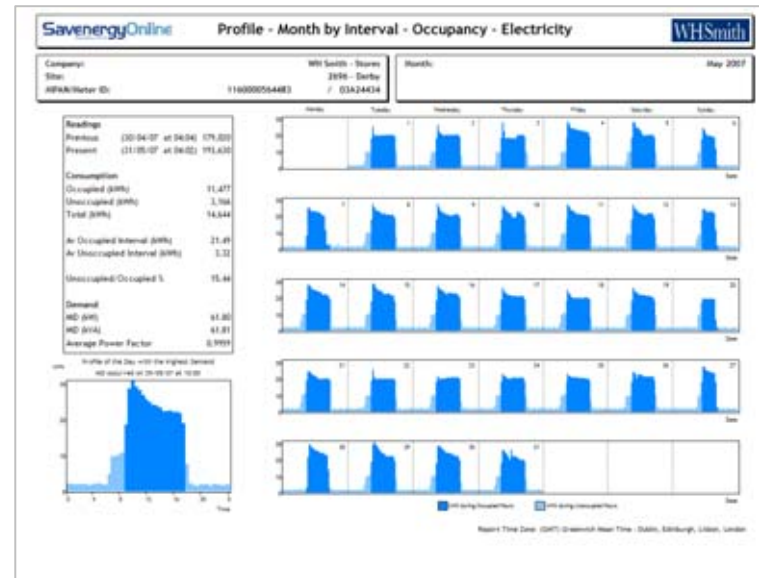
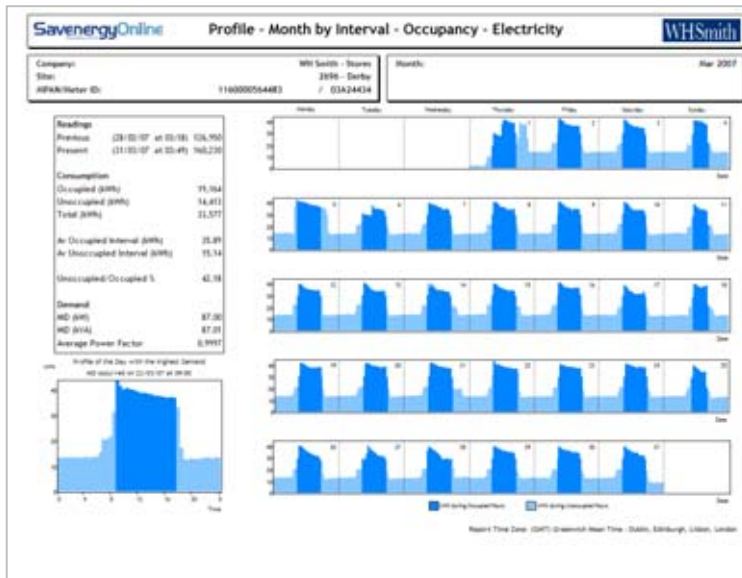
It was discovered that the 'early morning team' who come in to sort the newspapers were using the override facility on the BMS when they arrived for work. This override facility was meant for emergency use only and, by using it, they were switching on all the plant and lighting. If no-one reset the override (which happened frequently) the plant and lighting stayed on 24/7.

Eliminate waste - Example 2



An energy audit found there was a time switch controlling the over door heaters that had been set incorrectly, allowing the heaters to run overnight. A second time switch was found to be controlling the off-sales ventilation plant. Re-setting time switches produced significant savings.

Eliminate waste - Example 3



At this brand new store, however, the interface link between the intruder alarm and the building management system had never been installed. This meant the lights were left on all night in error.