

Fuelstretcher Ltd

Smart Optimisation for Leisure Centres

Sporta Member FD Conference

Peterborough 5th September 2018

Sporta message to Members last month.....

- Fuelstretcher Ltd – Optimised Boiler Controls since 2001
- 15% heating savings demonstrated in 90 “Wet” Centres
- Algorithms still unique but Optimisation has moved on
- Remote data acquisition – key to further energy savings
- Accessible from most existing building control networks
- Smart Optimisation = Algorithms + Data + The “IOT”

Even modern heating control systems require continuous optimisation

Smart Optimisation – The Benefits

Comfort, Health and Efficiency

- Remote monitoring of key comfort temperatures
- Targeted 20-25% reduction in heating consumption
- Automatic Legionella pasteurisation and monitoring
- Comfort at affordable prices for Centre Customers

Smart Optimisation – The Benefits

Duty Management

- Optimisation delegated to Fuelstretcher Remote Bureau
 - Monitoring of Heating Energy use and comfort set-points
- Simple access to Web-based “Optimisation Dashboard”
 - Real-time key temperature display
 - Optimisation “Traffic Light” display
 - Green means “system is optimised” – good for next heating bill!
 - Yellow - improvement needed – actions for routine maintenance visit
 - Red coincides with SMS alert – Comfort threatened - action needed


Duty Manager's Web page

5:10:36 10/05/2018

Heating Optimisation Overview

| | Flow Act | Pool Cal | Pool Air | HWS | | OAT |
|---|------------------|-----------------|----------|-----------------|-------------|-----------------------------|
| | 67.2 | 29.2 | 30.1 | 60.3 | | 14.6 |
| | Primary Flow | Pool Temps | | HWS | System | Graphics |
| Pre Heat <input type="checkbox"/> | Flow Actual OK | Pool Air OK | | DHW temp OK | Comms OK | <input type="checkbox"/> B1 |
| Referencing <input type="checkbox"/> | Flow SP in range | Pool boost OFF | | DHW boost OFF | Watchdog OK | <input type="checkbox"/> B2 |
| Occupancy <input checked="" type="checkbox"/> | Boilers OK | Boost count OK | | Boost count OK | fault reset | <input type="checkbox"/> B3 |
| Set Back <input type="checkbox"/> | | Boost length OK | | Boost length OK | | |

powered by



For further information contact info@fuelstretcher.co.uk

Smart Optimisation – The Benefits

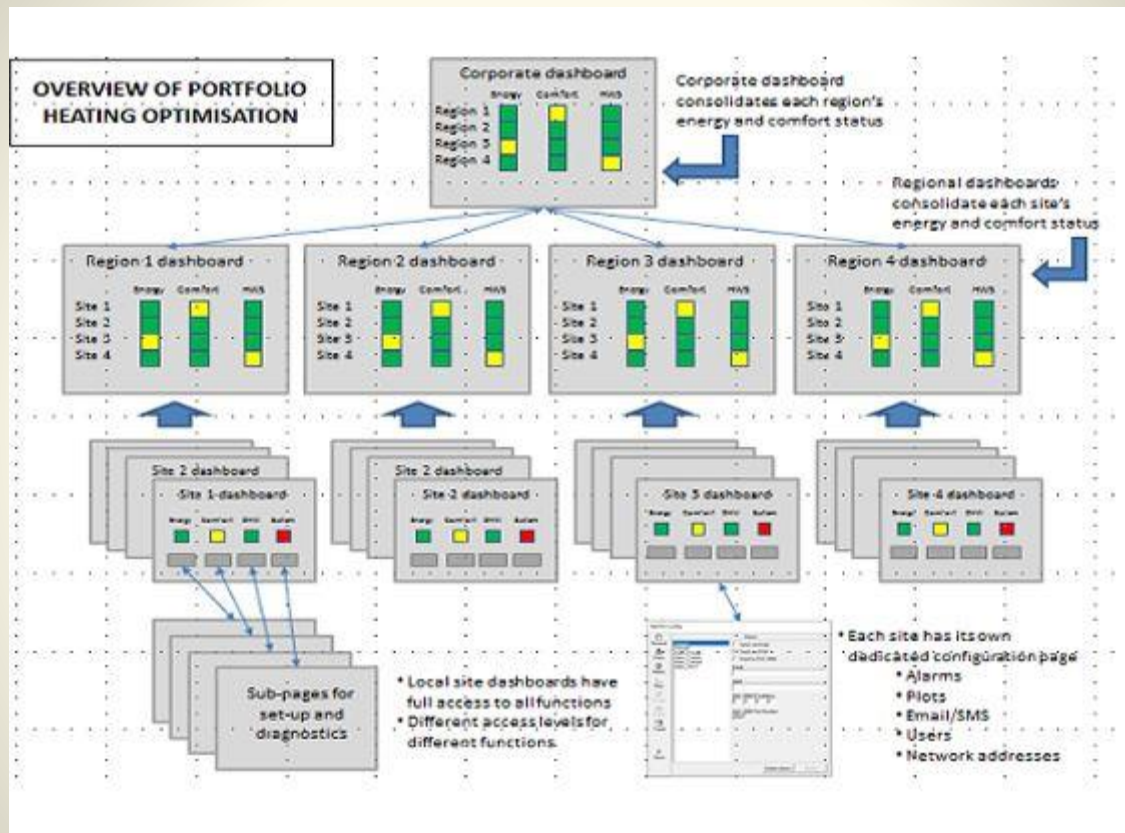
Informed System Support for improved Maintenance

- Fuelstretcher – Provides Remote Optimisation Bureau
- Shared performance reports for maintenance contractors
- Informed & more targeted routine maintenance visits
- Optimised Primary Heating will help CHP cooling.

Smart Optimisation – The Benefits

Corporate/ Regional Management

- Corporate hierarchical overview of portfolio optimisation
 - Traffic Light Dashboards by Region
 - Traffic Light Dashboard by site
- Cross portfolio comparisons of optimisation performance
- Ongoing equipment reporting for Asset Management
 - Life and replacement
 - Investment planning
- Maintenance history reports – Contract planning



Corporate Asset Management...

- Heating Plant Rooms are expensive assets.....
 - “Cost centres” with no contribution to revenue generation
 - Visibility - important to Corporate Finance and Governance
 - Contains high value assets which are expensive to
 - Energise - at gas prices which must increase
 - Maintain – controls - boilers – valves –pumps
 - Replace - at end of life
 - Performance is inextricably linked to system efficiency
 - Equipment can be remotely monitored and reviewed
 - Potential for improving maintenance is considerable

Procurement Proposals for Sporta Members



Scope

- Facilities served by boilers with gas or oil bills of at least £20,000 p.a.
- Proposed Contracts drawn up for 5 Years with Year 1 as “Hold Year”.
- Target is to achieve a minimum target of 20 Member sites in 2018/19

Hold Year 1

- Provides Member with free trial of Smart Optimisation for one year
- Fuelstretcher bears all equipment, installation and optimisation costs
- Member agrees to credit Fuelstretcher with 100% savings in Year 1
- Enables bespoke Optimisation Dashboards to be explored & developed
- Members may cancel, change or confirm contract at the end of Year

Procurement Proposals for Sporta Members

Model A (After Hold Year 1)

- Member may choose to purchase Fuelstretcher's equipment
- Capex price based on 12 months payback @ Year 1 savings
- Capex price will be capped at £9000

Model B (After Hold Year 1)

- Fuelstretcher retains equipment ownership for 5 years
- Member retains 60% savings Years 2 - 5 or beyond
- Equipment offered to Member after Year 5

Annual Optimisation Fees (Hold Year 1 – Free)

- 5% of last Annual Gas or Oil heating Bill

PROCUREMENT PROPOSALS FOR SPORTA MEMBERS

MODEL A £20,000 p.a. spend on gas or oil

Fuelstretcher absorbs all equipment installation and Year 1 Optimisation in Hold Year

MEMBER CHOOSES TO BUY OPTIMISING EQUIPMENT AFTER HOLD YEAR

| Contract Years | 1 (Hold) | 2 | 3 | 4 | 5 | Totals |
|--|----------|-------|-------|-------|-------|--------|
| Total Est Savings (15% Yr1) - (20% Yrs 2-5) | 3000 | 4000 | 4000 | 4000 | 4000 | 19000 |
| Member Savings Benefit | 0 | 4000 | 4000 | 4000 | 4000 | 16000 |
| Fuelstretcher Savings Benefit | 3000 | 0 | 0 | 0 | 0 | 3000 |
| Member Capital Investment | 0 | 3000 | 0 | 0 | 0 | 3000 |
| Optimisation / M'tce (Free in Hold Year) | 0 | 1000 | 1000 | 1000 | 1000 | 4000 |
| Member Cumulative Cash Benefit | 0 | 0 | 3000 | 6000 | 9000 | 9000 |
| CO2 Savings (Kg/Year) | 27537 | 36716 | 36716 | 36716 | 36716 | 174401 |

Procurement Proposals for Sporta Members

MODEL B £20,000 p.a. spend on gas or oil

Fuelstretcher absorbs all equipment installation and Optimisation Cost in Year 1(Hold Year)

AFTER HOLD YEAR 1 MEMBER RETAINS 60% SAVINGS - YEAR 5 END MEMBER IS GIVEN EQUIPMENT

| Contract Years | 1 (Hold) | 2 | 3 | 4 | 5 | Totals |
|--|----------|-------|-------|-------|-------|--------|
| Total Est Savings (15% Yr1) - (20% Yrs 2-5) | 3000 | 4000 | 4000 | 4000 | 4000 | 19000 |
| Member Savings Benefit | 0 | 2400 | 2400 | 2400 | 2400 | 9600 |
| Fuelstretcher Savings Benefit | 3000 | 1600 | 1600 | 1600 | 1600 | 9400 |
| Member Capital Investment | 0 | 0 | 0 | 0 | 0 | 0 |
| Optimisation / M'tce (Free in Hold Year) | 0 | 1000 | 1000 | 1000 | 1000 | 4000 |
| Member Cumulative Cash Benefit | 0 | 1400 | 2800 | 4200 | 5600 | 5600 |
| CO2 Savings (Kg/Year) | 27537 | 36716 | 36716 | 36716 | 36716 | 174401 |

Proposed Next Moves ?

- Expression of interest by Members?
 - Nomination of Facilities Management or Operations “Champion”
 - List of target “wet sites” with gas or oil kWh consumption history
- Review of individual 5 year cash flow projections
 - Selection of target sites
- Draft 5 year contract – Reviewed after Hold Year 1