

# **ASSET MANAGEMENT**

**DRIVING DELIVERY THROUGH OPTIMISATION & EFFICIENCY**

# PENNON'S APPROACH

## ASSET MANAGEMENT

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**THE RIGHT PEOPLE  
WITH THE RIGHT  
EXPERIENCE, EXPERTS  
IN MANAGING LARGE  
ENVIRONMENTAL  
INFRASTRUCTURE  
ASSETS**

**PROCESSES  
DELIVERING RELIABLE,  
PREDICTABLE  
PERFORMANCE**

**USING TECHNOLOGY &  
INNOVATION TO DRIVE  
EFFICIENCY**

**SHARING BEST  
PRACTICE, RESOURCES  
& EXPERTISE ACROSS  
THE GROUP**

# THE INPUT, THROUGHPUT, OUTPUT OPTIMISATION PROCESS

PERFORMANCE & EFFICIENCY OPTIMISED TO DRIVE RELIABLE DELIVERY

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# INPUT

FOCUSING ON ALIGNING FEEDSTOCK TO ASSET CAPABILITY AND CAPACITY



# THROUGHPUT

## IMPROVING PLANT PERFORMANCE & AVAILABILITY

### IMPROVING PERFORMANCE

- Enhancing production rates, yield and product quality through process optimisation
- E.g. hydro-cyclone at Walpole AD increases gas yield by 8%



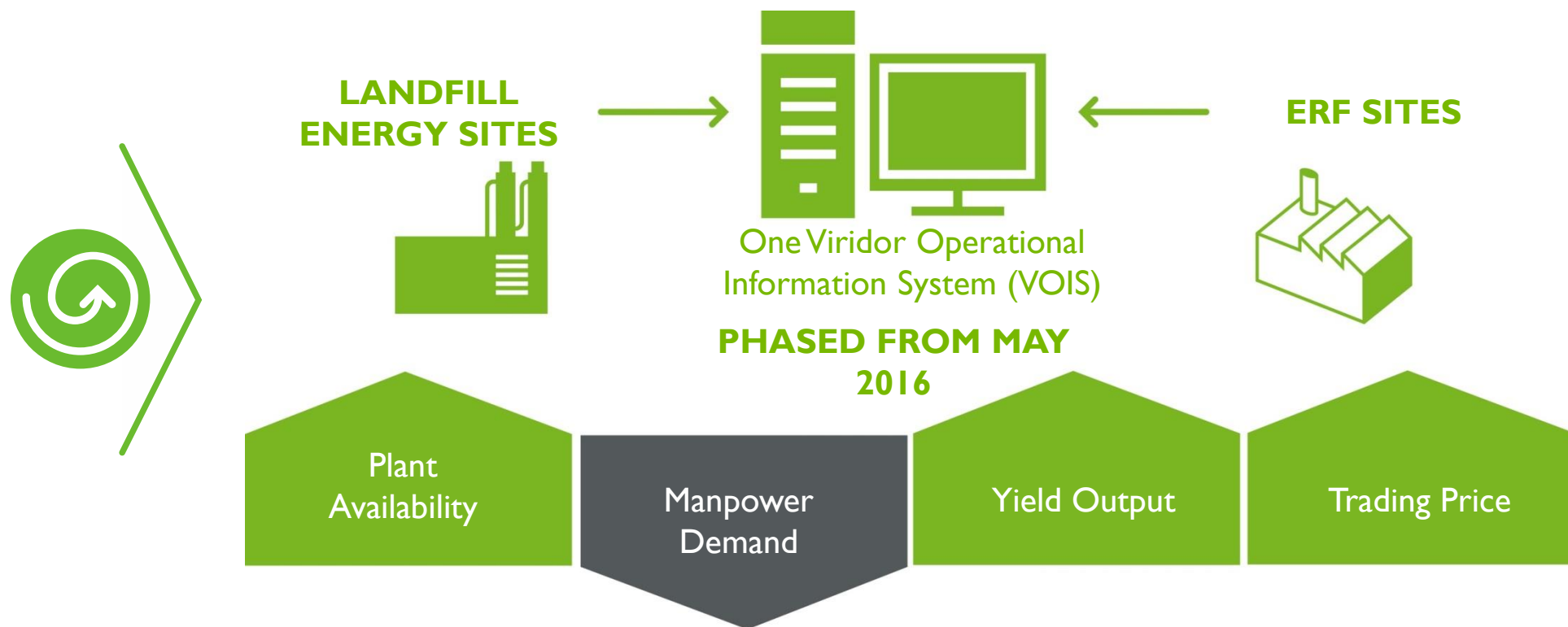
### IMPROVING AVAILABILITY AND YIELD

- Proactive, risk-based maintenance deployed to reduce service interruptions
- Availability increased by 9% over FY 14/15



# THROUGHPUT

USING TECHNOLOGY TO INCREASE PERFORMANCE & EFFICIENCY



# OUTPUT

## ENSURING PRODUCT QUALITY & ALTERNATIVE OUTLETS



Enhanced product quality at Sheffield MRF secures customer & End of Waste PRNs<sup>(1)</sup>

RFID<sup>(2)</sup> tagging delivers quality assurance for customers

(1) Packaging Recovery Note  
(2) Radio Frequency Identification

# INPUT

## IMPROVING RAW WATER QUALITY WITH UPSTREAM THINKING SCHEME



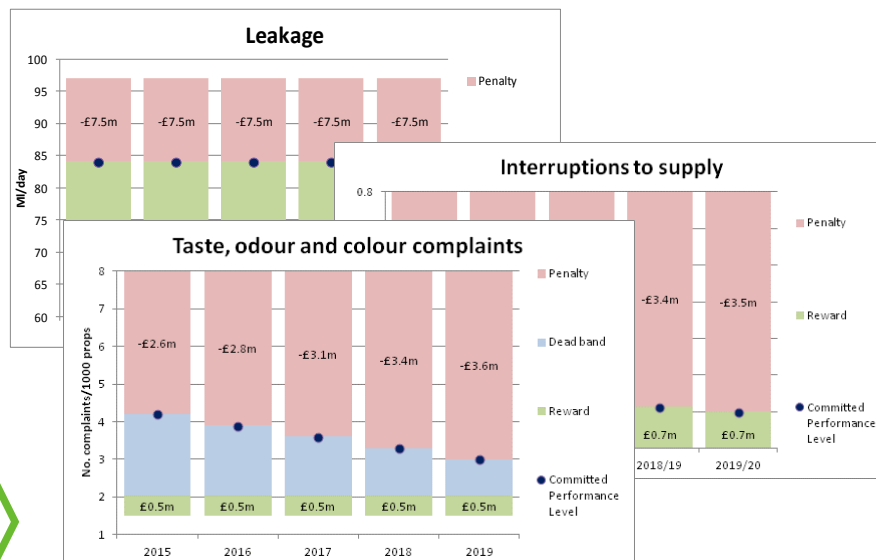
Programme designed to improve raw water quality and natural storage in the landscape over 9 catchments across the region

Using LG Sonic's MPC<sup>(1)</sup> Buoy technology to reduce algal bloom numbers in reservoirs

(1) Monitor Predict Control Buoy

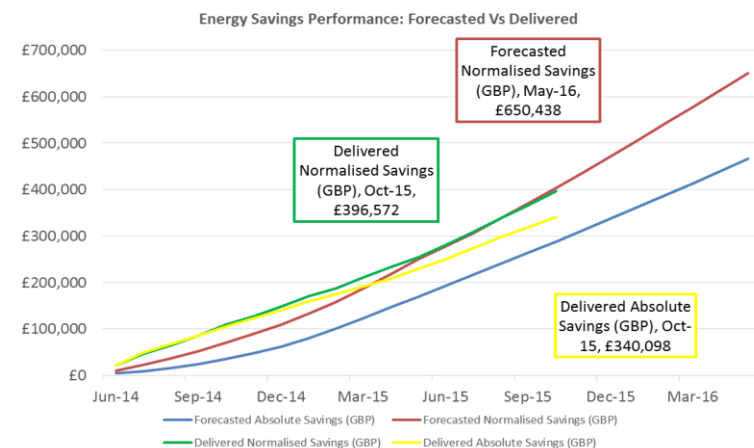
# THROUGHPUT

## FOCUS ON SERVICE, COMPLIANCE AND VALUE



### SOUTH WEST WATER

- Good management results in a stable, resilient and calm network
- Burst mains and leaks reduced, resulting in fewer interruptions to supply and discolouration events
- Extensive monitoring and analytical techniques used across the network with PUROS and iOPs



### BOURNEMOUTH WATER

- Delivering energy optimisation through five key savings types
- Current performance since June 2015 is running at 16.5% savings with additional measures identified

# THROUGHPUT

## USING TECHNOLOGY TO INCREASE PERFORMANCE & EFFICIENCY



### SOUTH WEST WATER

- Reducing sewer flooding and pollution events through lower blockage rates
- Love your Loo campaign reducing unflushables
- Technology like SewerBatt enables us to reduce blockages in the wastewater network

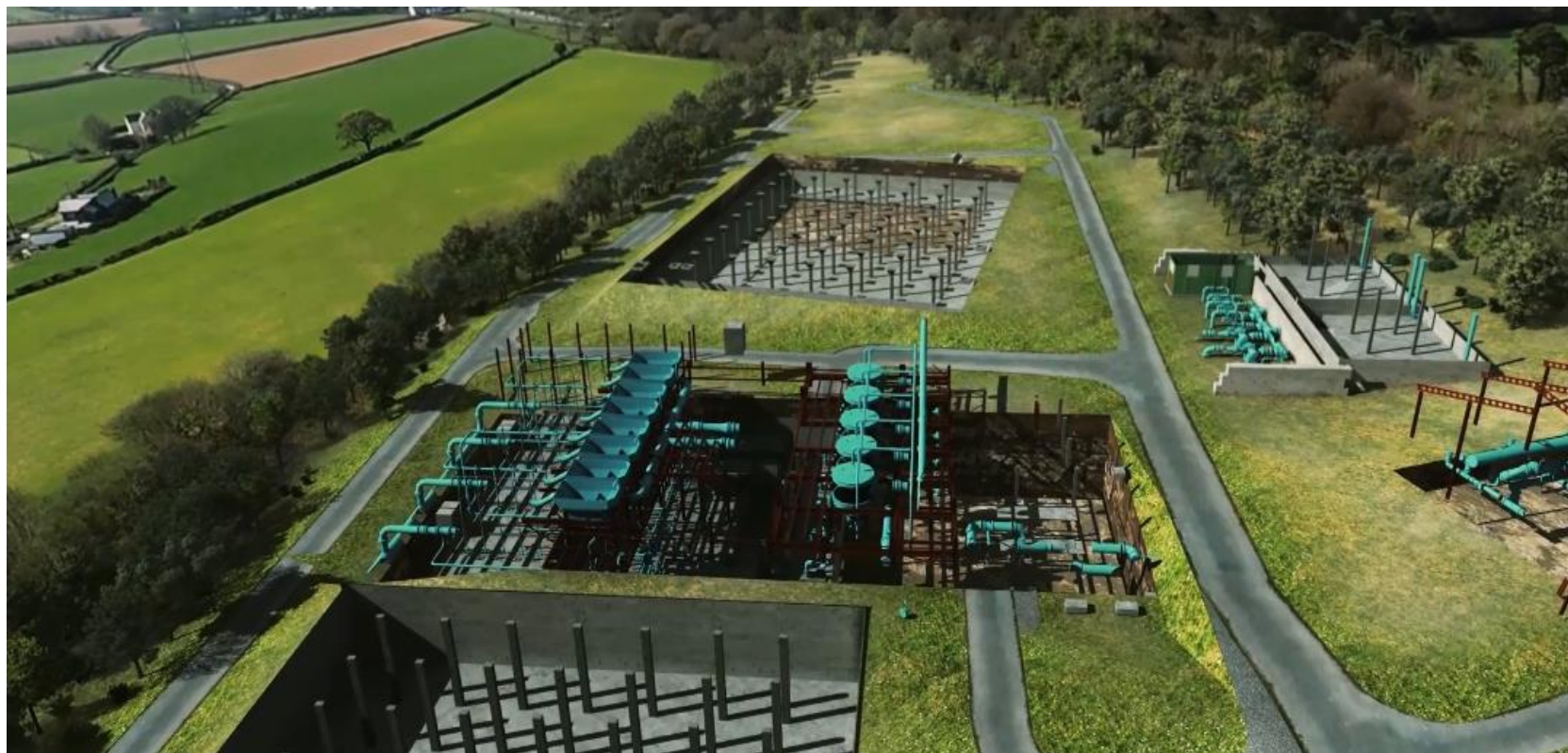


### BATHING WATER

- Reward position given our performance in 2015/16
- Opportunity for further rewards if we achieve excellent status
- Undertaking aerial surveys to identify diffuse pollution risks
- Working with Environment Agency to tackle and remove diffuse pollution sources

# NORTH PLYMOUTH WATER TREATMENT WORKS

FIRST IN THE UK, USE OF CUTTING EDGE TECHNOLOGY



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