January 2025 – Project Monitoring Updates

This document contains the updates provided by each project from the January 2025 monitoring cycle. Innovation Fund projects have now moved to a bi-annual monitoring cycle, so any projects not featured here might not have been required to submit a monitoring form this cycle, or might not be included for the following reasons:

- reached completion of their project
- not yet started the project
- not provided an update this quarter.

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Innovation in Water Challenge (2021)

No project updates to share.

Breakthrough 1 (2021)

AIoT Enabling Autonomous Waste Catchments

Carried out collaboratively between Severn Trent and its delivery partners, the AIoT project has made great advancements for the sector regarding Real-time Control (RTC) design for wastewater catchment management.

Severn Trent's AI integrates three advanced data science models to simulate the Alfreton wastewater network and generate coordinated pumping station control schedules for pre-, during, and post-storm conditions. The project has positively demonstrated through simulation the potential for AI-based pump schedule optimisation to reduce spills by over 20%.

Southwest Water's AIOT trial preparation continues to progress. They are in process of upgrading their SPS asset, OT, flow monitoring and associated software which will allow for trial readiness in late spring/early summer.

Southern Water's dry weather flow and storm calibrations using SLM data have been completed, and the results are being compiled in a final report due to be disseminated to the project partners at the end of January.

Thames Water is progressing well on defining the requirement for integrating the AI model with existing Telemetry and Regional SCADA systems, and are testing the concept of using the existing telemetry outstations for site data exchange and execution of AI model outputs.

The project as a whole has enabled the development of adaptable hardware design options for RTC, soon to be shared in our AIoT sector blueprint document – the template development of which, and led by University of Exeter, has accelerated since October 2024 and is now in the process of collaborative authorship.

CaSTCo

30+ UK partners, sponsored by national water services regulation authority Ofwat, including water companies, local communities, technical experts, academics, NGOs, public and private sectors. Through collaboration initiatives we are:

- Co-creating a standardised national framework of integrated environmental monitoring methods like citizen science, low-cost monitoring, real-time monitoring and modelling. Driving data that can be combined and visualised as insightful information, to drive improved decision-making and better actions and outcomes for water and people.
- Aiming to provide immediate social and human impact: connecting people to nature through engaging local communities to monitor their water environment; transforming people's understanding of the pressures on freshwater and water security issues; influencing behavioural changes; and improving health and wellbeing.

We have pursued extensive collaboration initiatives across 10+ demonstration areas in the UK since 2021, building catchment collaborative monitoring plans, method audit framework, data governance principles and much more information: recently we have published a website with publicly accessible materials and findings: https://castco.org/.

Flexible local water supply schemes pilot

The pilot is testing the commercial viability of using multi-use abstraction licences and package water treatment plans to supply business customers and help solve water resource needs. The pilot will unlock a number of commercial, technical and regulatory blockers associated with market access for small, local water supplies. We are now at the stage of network application for treated water to allow the full commercial case to be concluded and the final report to be completed.

Project Zero

We are delighted to share that we have fully completed our smart rollout to the 908 properties at Bidwell, this has included the meter installation alongside utilising B4T's innovative Jellyfish product. We have seen really positive results regarding connectivity with a 95% success rate. As an IWNL site, we are closely working with them on data integration ensuring a streamlined transition for their customers to a smart solution including access to a consumer app, enabling customers to have full access to their water usage data. Using the above smart network data, we are working with our internal teams to develop and produce a site monitoring dashboard for water neutral developments. We have completed our full offsetting rollout for Bidwell, from surrounding non-household customers. We anticipate final savings from this workstream to be confirmed by the end of the next quarter. We are progressing with producing our evaluation report for this workstream and will be built into our final blueprint document. Our work for site 1 will commence early in the new year, with the latest meter readings being provided by Albion Water enabling use of the most recent data source to analyse the impacts and benefits.

Transforming the Energy Balance of Wastewater Treatment

Thames Water plans to commission their anaerobic pilot plant in January 2025, following on with testing for organic removal and effluent degassing. The Upflow Anaerobic Sludge Blanket (UASB) reactor and Elovac vacuum degassing have already been installed and integrated with the equipment for the trial system, along with an array of sensors and a data logging system that allows monitoring the liquid and gas to understand the system's performance. In the coming months, we will push the technological boundaries of wastewater treatment to transform the energy balance of wastewater treatment in the UK. Dwr Cymru Welsh Water have completed their trial on their anaerobic plant at Builth Wells, and the University of South Wales has completed the testing of adsorbents for the removal of ammonium and phosphate as well. All of the learnings from the

research performed by Dwr Cymru Welsh and the University of South Wales have now been integrated into the plan for the Thames Water Pilot study and will support the project's upcoming trials. Through our collaborative networks we will disseminate the findings to establish most significant design and operational parameters for the UK.

Breakthrough 2 (Catalyst) (2021/2022)

Catalysing a NET-ZERO future

The project is progressing well. An interim review has been carried out against the technical and LCA objectives, to ensure we are on track to deliver the outcomes of the trial. Following the review we have developed a more detailed plan of the laboratory testing being carried out. Laboratory testing is progressing well and we are reviewing the outputs of this regularly with the suppliers. We have continued to develop trial specification including detailing the trial phases and methodology. This will be finalised and signed off in the coming months.

Tap Water Forensics

Phase 2 – Sampling and data generation. For the samples completed genomic sequencing has progressed well and we have developed a working data science analytical model that is able to identify abnormalities from samples taken at a range of points through the water treatment process. We are also undertaking experiments to simulate the impact of ingress on the genomic sequence of water in the distribution system.

The Use of Sub-Seasonal Forecasting to Improve Operational Decision Making

The project has continued to progress well and is on target to meet the revised completion date of end of March 2025. The trial service of the Risk Assessment product for both the Water Demand and Wastewater Alarm volume streams has continued to be delivered twice weekly uninterrupted throughout the trial period.

Water Demand forecasting stream: Although the Summer 2024 weather was rather benign without long, dry, hot spells, enough confidence in the performance of the product has been gained to declare that a commercially available service will be made available at the end of the project. The details around this will be discussed with the Partner Water Companies during the project closure procedure.

Wastewater Alarm volume forecasting stream : The "added value" Wastewater Alarm volume forecasting stream has proved insightful with a clear link between rainfall volume and alarm volumes established. Differences in each partners classification and alarm handling processes have shown that a "one size fits all" product similar to the Water Demand forecasting product may not be

possible, and learnings have resulted in a further Project submission (WBC5) in order to build on current findings.

Water Quality As-A-Service Treatment-2-Tap

The Project is now in critical validation stage focusing on a number of insights discovered through the project to demonstrate the benefit to water quality management and ultimately customer experience. This includes a particular focus on reservoir mixing, flushing operations and mains conditioning. Benefits workshops have been held to document and outline evidence to support a wider business case industry wide use. Our scaling of this as a business model is now developing well following the NWG Innovation Festival sprint in July 2024 and have held several workshops to develop business processes to enable a smooth transition into a business-as-usual environment.

Breakthrough 2 (Transform) (2021/2022)

CHP Exhaust Carbon Capture and Utilisation (CECCU)

The design of the Carbon Capture Machine is substantially complete including CHP interfaces. Most long lead time items are delivered and in storage awaiting construction. The location of the project has recently been moved to Strongford Sewage Treatment Works, where it will be integrated into the works for the Net Zero Hub and where there is an existing Severn Trent Water framework contractor already in place to carry out the works.

Enabling Water Smart Communities

The project has made significant progress with enabling action projects, academic research, and with the addition of an economic modelling project focused on water scarcity. Outputs are being shared on our website and Medium page. Recent publications include:

- Reuse CAPEX business case
- Reuse roadmap
- Stewardship: exploring the 'software' for water smart communities
- People's perspectives on the future of water and housing
- Engaging communities for water smart futures: insights and innovations
- The Ripple Effect short film - Eddington

In the past 6 months, communication and engagement have increased through:

- Delivering a webinar series – recordings here and write up to follow.
- Presenting at key events including Future of Utilities Summit, WRM Expo 2024, HBF 'Water Matters' meeting and Industry & Parliament Trust breakfast.
- Letters to the new environment and housing ministers.

- Responding to NPPF and the Environment incentives for developers consultations
- Hosting a roundtable to share findings on economic impacts and public perceptions of water scarcity – write-up coming soon.
- Maintaining an active LinkedIn presence with 1,012 followers and 25,720 views.

Our priorities for 2025 will be to:

- Select the final Tranche 2 enabling action projects ensuring impactful delivery of our bid outcomes.
- Effectively close out projects and share key learnings.
- Maximise the long-term impact of our findings, ensuring our outputs continue to deliver value beyond the project's conclusion.

National Leakage Research & Test Centre (NLRTC)

We have now substantially completed the detailed design of the NLRTC and completed work to develop the planning application. We have a meeting scheduled with Ofwat in January to discuss ownership and operation of the NLRTC post construction. We will be issuing the tender package to 3 contractors for the purpose of understanding the construction cost of the centre as designed.

Breakthrough 3 (Catalyst) (2022/2023)

Dark Fibre 2

The Dark Fibre 2 project has installed five Indus units on fibre networks at two Severn Trent Water sites, two Welsh Water sites and one site in Northumbrian Water. Calibration and commissioning of the sites is ongoing, with the first operational and reporting leakage locations for investigation. As we move into the new year, the project aims to identify specific points of interest for our leakage teams to investigate. Each point will be assigned a confidence rating, and detailed information will be gathered from the leakage team to further refine the system's accuracy. Additionally, we plan to create controlled leak scenarios to rigorously test the efficiency of our technology. This proactive approach will help ensure that our leak detection system is both reliable and effective in real-world conditions.

Hydro-powered Concentric Smart Meter

We have now moved from the Alpha phase of the project into the Beta Phase. From the Alpha phase of the project, we had 2 concepts that were being evaluated. We have now chosen the concept to be taken forward into the Beta phase.

Water Industry Printfrastructure

The WIP project is on schedule with the agreed plan. In the past quarter we have been testing printed assets in operational environments and drafting the outcomes of our carbon assessments and commercialisation studies. Reports are currently being reviewed and will be finalised in the first quarter of 2025. We have also been sharing the findings of our project across multiple industries through different platforms. For example, we presented at the European Wastewater Management Conference in Manchester attended by representatives from organisations across the water industry. More recently, In November 2024 88 people joined us for our online Spring Showcase. The session was very well received and attracted positive feedback. Once available we will share the video of the event across the water industry.

Water Literacy

The Water Literacy Programme is progressing really well and is currently on track in relation to the project plan. The programme now fully mobilized, and the regional pilot delivered. The pilot allowed the project team to test the course content, delivery and accreditation process, with rich and constructive feedback provided by the 50 learners. The project team is currently implementing a range of changes based on the feedback and delivering the next key phases of work (i.e. website development, pre-course content and communication strategy) prior to launch of national programme delivery in February 2025. As we approach the national rollout of the Water Literacy Programme, we have focused intensively the development of a communications strategy, working closely with our creative communications partner. This workstream will be key to generating interest, engaging future learners and delivering the programme target of 2,000 accredited learners by the end of 2025.

Water Net Gain

WNG has developed a trading mechanism which details the marketplace for the operational WNG scheme where water is stored in smart ponds and farmers can sell this water to buyers such as water companies. Legal and tax implications as well as permissions associated with pond construction and water use were explored. The outcomes of this work will guide the drafting of a water trading contract in 2025. Smart pond design work included pond design, construction, deployment methods as well as smart monitoring technology and maintenance. In 2025, we will focus on delivering a Willingness to Accept study to farmers, preparing a cost assessment for WNG, as well as preparing to create our demonstrator pond site.

Breakthrough 3 (Transform) (2022/2023)

Biopolymers in the circular economy (BICE)

The BICE project is delivering to the agreed schedule. In the past quarter we have focused on the procurement of enabling works contractor services and planning for the receipt of samples from the demonstration plants once they are operational. We have confirmed Costain as our enabling works contractor through their existing framework agreement with United Utilities, which has helped us to keep risks and costs as low as possible. We plan to start site works in January 2025 allowing us to be on schedule for installation (February) and commissioning (March). This required discussions with our site Operations Team and our Environmental Regulations Team to align to project requirements and not adversely impacting on the Blackburn site. Work has continued of how to process and analyse samples from the demonstration plants. We now have a detailed list of determinands and which partners are best placed to complete the analysis. Where gaps in capability exist we have engaged the University of Manchester to understand where they can support. We have also completed a two-day testing facility visit to CPI in Teeside to plan the refinement assessments required for the different product streams the water industry could potentially supply with our biopolymers.

Designer Liner 2

The Designer Liner project will deliver a lining solution fit for a 21st century potable network. The project partners have discussed the load cases applicable to the project for modelling of the host pipe and liner. NCC and BCI are down-selecting the materials and lining processes for initial screening.

Mainstreaming Nature-based Solutions to deliver greater value

The MNbS programme is on track; we reached the first key milestone in September with the close out of the Initial Scoping and Review stage. This stage focused on extensive research and engagement to understand the current state of the NbS landscape across the regions and workstreams. The process deepened understanding of the barriers to mainstreaming NbS and informed refinement of the programme scope. Findings from this review are now available (see briefing notes attached). We built essential collaborative relationships across programme partners, wider stakeholders, regulators, and Government. Collaboration has been actively driven (as with all UU-led Ofwat projects) through workshops and the roll out of a collaboration survey. Key insights from the first survey have been implemented to improve programme delivery, showing benefits in the second. The project undertook a collaborative review of NbS in the PR24 Draft Determination, and provided recommendations for how NbS could be upscaled at Final Determination. We note the value of NbS in AMP8 increased from £2.2bn at DD to £3.3bn at FD. We have now entered the next stage of the programme, focused on identifying barriers and enablers to NbS and setting up to test recommendations in Phase 2, which begins in October 2025.

Breakthrough 4 Catalyst (2023/2024)

ALL-Streams HTO

The ALL-Streams HTO project kicked off on the 1st of September 2024 with meetings between the key partners Cetogenix - HTO technology provider, Cranfield University, Atkins Realis and Anglian Water. Partners had already attended a showcase on HTO at Cranfield University on the 4th of July. A Horizon Scan report (Deliverable 1.2) investigating valorisation and routes to market for the various product streams from HTO is currently under First Draft review. In parallel, the procurement of the HTO unit, which is a critical item for the experimental work due to begin in March 2025, is under tender by Cranfield with support from Cetogenix. Atkins Realis are leading the wider Project Plan development (Deliverable 1.1), which includes knowledge exchange throughout the project, supported by Spring. With the Collaboration Agreement now signed by all partners, recruitment for post-doctoral staff to operate the pilot plant between March to November 2025, undertaken by Cranfield, is commencing.

Developing a market-based approach to deliver SuDS through street works

The premise of this project is to develop and test a market-based approach to significantly scale up delivery of SuDS by seeking to install them in some of the 160,000 planned streetworks in London on an annual basis. Ultimately, this project empowers us to reimagine street works delivery, creating greener, more flood-resilient neighbourhoods, directly benefiting Londoners and the environment.

Significant exploratory work was undertaken during 2023 to create a proof of concept and engage with wider stakeholders on this work including utilities, London boroughs and the Environment Agency.

Since we were announced as winners, we have been setting up the project and planning. Both TW and GLA have been advancing with the procurement of suppliers for the workstreams (P1 – data platform, P2 – specialist advice and P3 – technical deep dives). GLA have appointed Arcadis LLP to deliver the data workstream and Arup and Partners Ltd to deliver the technical deep dive workstream. The ambition is to launch pilots next year and test the proof of concept.

We are delivering this project in collaboration with our stakeholders and interested parties. A project launch event will take place at the City Hall in December and plans for this are underway.

PFAS - A whole system approach to an impossible problem

We are currently in Phase 1 (PFAS treatment process selection) of this project. Where we have undertaken an extensive horizon scan of both PFAS removal and destruction technologies. This has enabled us to understand the characteristics of the waste streams generated by the PFAS removal technologies likely to be used by the water industry. By assessing the underlying approach to PFAS

destruction, we have been to develop a long list of potential technologies/suppliers for consideration in the project. The development of the final selection criteria is in progress, and this will be used to shortlist the technologies that will be invited for participation in the next phase of this project.

Pipebot Patrol

The Pipebot Patrol project is making great progress in its preliminary phase, we are on track to achieve the objectives outlined in our project bid. At the Innovation Festival, we conducted an accelerator sprint that provided us with invaluable insights, giving us a clearer understanding of the challenges and opportunities ahead. We engaged with our customer base during the festival and received overwhelmingly positive feedback. With their continued support, we will strive to deliver on our promises and ensure the success of this initiative. This has allowed us to refine our approach by reallocating tasks to make them more measurable and achievable, further enhancing the efficiency of the project. While we've made a slight adjustment to the project timeline to optimize our process, we're more confident than ever in our ability to deliver the project successfully. The project team is committed to achieving our goals, and we're excited about the positive impact this project will have.

Pipebots for Rising Mains – Technology Development Phase 2

The Winner's Agreement was signed and the project publicly announced as a winner at the end of May 2024. This Phase 2 project follows a previously completed OFWAT Catalyst Project, namely Pipebots for Rising Mains Research & Feasibility Study. The partners and project team have remained the same, so good continuity will be maintained through the project. A kickoff meeting was held in July, although detailed project work did not really begin until September. As such, the effective project start was shifted from July to September. Governance arrangements, team members and roles were clarified and the Steering Group and Technical Working Group meetings scheduled. The draft Collaboration Agreement was sent out to all the partners in August 24. Minor changes to the agreement have been required since, so the final version will now hopefully be signed in January.

In October, a hybrid project Workshop session was held at Synthotech's offices at Harrogate, with team members meeting face to face and online. This was a valuable session for WaSC partners to provide details of their rising main assets and the needs and challenges for inspection. Outputs from the workshop have fed into the Baseline Technical Requirements document compiled by Synthotech. In addition, Synthotech have also prepared questionnaires for the partners to complete regarding current rising main operations and asset data. Feedback from these documents will help define the form of the inspection system for development going forward. Site visits to pumping stations and rising main sites have been undertaken by Synthotech within the Thames and Wessex Water networks. The project is progressing very well with the first deliverable D1. due at

the end of December, namely the Optimisation & Operation Process Report. This will outline the concepts for the inspection system for the next stages of development and testing.

Reducing Water Demand through Behavioural Incentivisation

Severn Trent has now launched its new water reduction incentive trial in partnership with Nectar. The trial will encourage customers to reduce their water consumption and will incentivise them for doing so. We're currently in the initial recruitment phase and the first group of eligible customers have been invited to join the trial. Customers that choose to sign-up and link their Nectar and Severn Trent accounts will receive Nectar points for doing so. We encourage customers to log into their account regularly to see their weekly water reduction target. As we're trying to firstly drive engagement in water reduction, we also reward customers with Nectar points just for logging in. If customers achieve their target, they'll be awarded Nectar points. The more consecutive weeks they achieve their target; the more points we'll award them – this seeks to drive more enduring behavioural change. Customers who are signed up will receive monthly and quarterly communications on points accrued, collecting more points, and plenty of engaging water saving tips. As the trial progresses, we'll adapt both our target and reward methodology and communications strategy as needed to ensure we're engaging with customers in the most optimum way and driving water saving benefits.

Self-Calibrating Sensor Networks for Sustainable Water Management (SCSN)

Since the project was confirmed as a winner of the OFWAT Innovation Fund Breakthrough 4, the team have been working closely with partners to review the original proposal and secure suitable legal agreements between all partners. The Agreement now has been finalised and shared with the partners for review. Southern Water has also assigned an Associate Project Manager to support with the project delivery. Together with the Procurement team, the project team has conducted a market review to identify potential suppliers for water quality sensors; ensuring efficiency and value for money. The procurement strategy has thus been reviewed and confirmed and the trial designs delivered.

SuDS-iQ - A National SuDS Collaboration & Evaluation Platform

Prior to contract agreement and project start-up, HR Wallingford have undertaken a number of early preparatory activities: Development of the SuDS-iQ logo (June 2024) Development of dissemination flyers for distribution at the CIWEM Flood & Coast conference 2024 (June 2024) Initial draft of the SuDS-iQ Impact & Engagement Plan (September 2024) Initial draft of the SuDS-iQ Technical Scoping Document (September 2024) Industry survey on SuDS research needs (September 2024) Southern Water has been working on the collaboration agreement, writing the baseline report and organising the kick-off meeting. Currently at the stage of project set up.

Support for All 2

The project launch meeting was held in September and with almost 30 participants from the 18 partners working together it showed just how enthusiastic the industry is to work together on behalf of their customers with vulnerable circumstances. With a Governance structure in place and positive licence discussions with Ordnance Survey ongoing the project is off to a great start. Multiple workshops have taken place with the Avanade (Technical Supplier) Solution Architect, and selected utility partners. Enhancements to the pilot system were explored to ensure all partners can provide the best customer service possible. Both major and incremental changes were also worked through to understand how we can make sure that customers have access to, and control of the service they would like to receive. Privacy work is already underway, with an independent Data Protection expert appointed to guide the utilities through the necessary safeguards required for such sensitive data, with tight data agreements controlling how information will be shared and processed. These include a Data Processing Agreement, a Data Sharing Protocol, and an overarching Data Privacy Impact Assessment. Data Protection Officers from all the utility partners are working to ensure an agreed approach.

Tapping into Sewer Heat

It was not possible to install the heat exchanger ahead of the new sewer being completed and flows turned on. This means over-pumping will now be required in order to install the heat exchanger in the sewer. The contractor working on the sewer has agreed to work with the supplier in Germany to install the heat exchanger. We are progressing with commercial arrangements to complete the temporary and permanent works design, which will then enable a contract to be agreed for the installation and construction. The collaboration agreement is expected to be signed off in the next few weeks and HORIBA MIRA and E.On are refining costs for the installation of the energy centre, including the trenching for utilities and the connection pipes between the heat exchanger and the heat pumps. E.On have also been working with the supplier in Germany to ensure the heat exchanger and energy centre designs are compatible.

Transforming Bioresources - the Benefits of Biochar

Having started the project, the original plan had to be amended and now it is planned to produce biochar by using an advanced pyrolysis reactor located in the UK. To date, we have engaged with two pyrolysis reactor suppliers to produce biochar from biosolids and assess the potential of pyrolysis to remove emerging contaminants (such as PFAS) from biosolids, and to be used for other applications (e.g. as a fertiliser). The produced biochar will be fully characterised (e.g. textural properties, PFAS content, heavy metals, etc.) by our partner, who is in the process of securing resources (e.g. a post-doc) to help to deliver this work. We have held meetings with CCm to plan the amount of biochar needed to produce and test biochar-based fertiliser. The plan is to start the fertiliser production from February 2025 to carry out some tests in pot in a laboratory. Exhaust gas from the pyrolysis reactor will also be collected and characterised to assist in the fate of

contaminants (e.g. PFAS) assessment. It is expected that biochar and fertiliser will be produced, characterised, and tested from February 2025. Technical and economical assessment will also be carried out for the biochar production in order to assist the market assessment.

Breakthrough 4 Transform (2023/2024)

No Dig Leak Repair – from concept to reality

Since the announcement, Thames Water started to work on the Pre-Kick Off stage of the project, presenting at the No-Dig Reading Roadshow and signing the Winners Agreement.

The kick-off meeting was held on 16th October 2024.

After kick-off a detailed project plan is being created and Thames Water internal governance processes are being implemented.

Proving the concept of sewage sludge pyrolysis

Since the announcement Thames Water has started to work on the Pre-Kick Off stage of the project. A Project Plan has been created and Thames Water Internal Governance processes have been followed and the Project Sponsor has been updated. The project is being started on 2nd September but the official Kick Off will be In November 2024.Thames Water have been engaging with potential delivery partners for the Pilot Plant with the external Procurement Exercise due to start imminently.

River Deep Mountain AI

The five building blocks below reflect progress across modelling efforts, focused on pollution detection: BB1A: E.coli Model Development: The first draft of the E.coli Model v1.0 has been completed, with performance evaluated across multiple metrics. Sensitivity analysis will be conducted to assess the model's robustness, and GIS landcover data is being prepared for integration. BB1B: Flow Estimation: The initial version of the flow estimation model (LSTM 1.0) and its code has been finalized. Data from multiple sources (Estreams, EA, and CALS) has been collected, and reviews of the Neural Hydrology Library have been completed. Further work includes improving model performance through additional layers and compiling observational data for refinement. BB1C: Phosphate Analysis: A framework to retrospectively assess phosphate data has been developed by condensing 2959 determinants to 900 and integrating 25 years of rainfall data. The implementation of the framework is underway, with standardized metrics being introduced to minimize bias and enhance data reliability. BB2A: Spill and Diffuse Pollution Sources: Models are being built to identify spill hotspots in pilot catchments and detect agricultural pollution sources using remote sensing images. BB2D: Monitoring Station Optimization: Criteria identified to build a model for determining the optimal locations of monitoring stations

Sewage Sludge Gasification

Upgrades and modifications to the gasification plant are progressing well, focussing on upgrading and configuring the plant to be fully commissioned to perform the operational sludge testing program to be executed in Phase 2. Preparatory work commenced in August and has focused primarily on the Gasification unit with several significant upgrades to the core reactor, control system and emissions measurement and monitoring system being implemented. Work on the sludge reception and drying has commenced and has focused on sourcing providers of expert services to support the recommissioning and undertaking initial condition surveys. Discussions have been held with the Carbon Trust to agree the scope and costs for the development of a full carbon assessment model for the end-to-end process. We have also been in discussion with WSP who we intend to contract with to provide insightful reporting of project outcomes. Scottish Water have agreed to provide sludge for the commissioning and testing phases. A draft MoU has been issued to the 6 supporting Water Companies to cover their input to the project. The project is liaising with the CIP4 project to ensure that sampling and analysis aligns with the work being carried out as part of the CIP4 initiative.