

RES / BUILD BACK BETTER AND SMART

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# **Build Back Better and SMART**

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Rich Matthews, managing director of Siltbuster Process Solutions, talks about being more strategic and thinking smarter in a post-Covid world.



As the construction industry looks towards a road map for recovery pos-Covid, the emphasis is on Building Back Better. This will focus the attention on a number of practices and methodologies that have previously presented large barriers that can now be overcome in a more timely manner. Initiatives that continually encourage collaboration models with the supply chain are essential for reform, facilitating the transferable knowledge from wider construction and delivery models.

For the water industry, this presents an opportunity to implement the changes it has been seeking for some time. As the post-Covid journey now beings, we will go through a Restart, Reset and Reinvent evolution, all of which offer leverage for real transformation. However, Build Back Better requires inspiration and acceptance, so it is important to recognise that innovation is not necessarily invention, but the creativity of an existing approach or technology in a novel manner.

This is highlighted through the discussions around offsite build and how it can work for the water industry. Once the practice is accepted it becomes not about how much can be built offsite, but what can minimised onsite, and the real benefits that can be achieved – such as programme, safety, efficiency. Therefore, the real step change is engaging with suppliers that are often working across multiple sectors, utilising their transferable knowledge in this field. There is an abundance of experience to be nurtured from the wider industrial, rail and manufacturing environments.

Packaged plants embrace a 'SMART' delivery concept - Standard, Modular, Agile, Responsive, Treatment. As such, modular systems are well aligned to the ambition of the industry to drive for efficiencies and prove that AMP7 can be achieved in a sustainable manner – Building Back Better.

### **Environmental performance**

The delivery of SMART solutions for wastewater requires increased engagement and collaboration with the supply chain. It will enable the water industry to draw on and benefit from experiences of other industries that are deploying responsive modular solutions. As an example, the use of Dissolved Air Flotation in the food and beverage sector provides a SMART outcome for not just FOG applications, but also highly loaded TSS; the use of a packaged plant in this manner is proven in reducing the load on existing processes. If this type of process is proven, flexible and readily deployable, then it has a place in the water sector's SMART delivery chain. It can then be coupled with other packaged plants and become a complete works solution.

With the focus on environmental performance for the UK water industry, now is the time to evaluate resilience strategies to demonstrate the capabilities of the sector working together with the supply chain.

## Resilient and responsive

Packaged modular water treatment systems can be deployed rapidly. This is often seen when such systems are installed to assist with compliance during essential capital maintenance activities, such as biological filter refurbishments using package biological plants, bridge scraper refurbishment using mobile clarifiers or reed bed refurbishments using package tertiary plants.

The role of the modular plant in these applications provides both programme and consent reliability, removing constraints that may well have prevented proactive maintenance from taking place in a timely manner to provide a more resilient asset.

Further merits of responsive modular systems allow additional capacity to be provided when needed, and flexing, therefore offering asset efficiencies by not having to over size treatment capacities at the initial stages in the development of a site. The merits of this can be seen on large new residential sites as the treatment capacity grows with the development.

If these principles for package plant solution provide flexibility and resilience, then there is no reason why packaged plant solutions cannot be installed for wider capital programmes, allowing development of asset investment in an incremental and sustainable way.

### Thinking differently

We need to be prepared to rethink where and how we invest our efforts and finances; particularly through the post-Covid recovery. The fact is, that a modular outlook towards minimising site works will bring rewards if applied in the right way. The need to adapt will not only prove how responsive the

industry is to meeting the challenging targets, but will also be an opportunity to deliver resilient services to the customer in a more cost effective way.

The adoption of modular solutions doesn't have to simply mean new technologies and processes; it can involve simply thinking about things differently and thus using familiar technologies in smarter, more strategic ways. It is essential that any investment in water treatment is best placed to support current needs, as well as those in the future. This might mean building asset bases in an incremental manner or bolting on assets to optimise asset bases. The important thing is that it all adds up to achieving a more sustainable outcome for the industry and environment. With the focus on Building Back Better in a post-Covid economy, we have the opportunity to deliver investment the SMART way.

Topic: Innovation

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