

FOUR MACRO TRENDS

DRIVING ADOPTION OF SMART PUMP TECHNOLOGY AND MODULAR DESIGNS

A growing population compounded by shrinking mechanical building and occupational space, as well as consumer and regulatory pressures, means a need for compact, integrated designs in the commercial building landscape. What all these themes point to is massive opportunity for growth for smart pump technology, but what are the converging macro-trends informing this growth? **In short, we can break it down by integration, efficiency, intelligence and connectivity.**

 **Bell & Gossett**
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Integration

Integration in the context of any pump or solution refers to its ability to be integrated seamlessly within existing systems. In the context of smart pump technology, however, this refers to integration within existing systems, plus an emphasis on efficiency, energy conservation and installation flexibility that is mission-critical for today's modern buildings—both new build and retrofit.



According to a World Economic Forum panel on circularity in the built environment, **demand for low-carbon buildings could be three times higher than supply.** By leveraging impactful solutions that already exist today, such as smart pump technologies in retrofit buildings, the **built environment can advance cost-effective, resource- and eco-friendly designs.**



Solutions like Bell & Gossett's hydrovar® X-enabled smart pumps — the industry's first and only system with a modular design — can result in:

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LOWER INSTALLATION AND COMMISSIONING COSTS	A SMALLER FOOTPRINT USED IN MECHANICAL ROOMS	SIMPLIFIED SUPPLY CHAIN
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02 Efficiency

All signs point to more efficient building design, both on the operational and regulatory level. With legislation increasingly mandating sustainable design and rebates incentivizing it, more and more building professionals are seeking out equipment that has both a sustainability and efficiency play.



75% of buildings already in use today will still be standing in 2050. **Building efficiency upgrades like retrofits and digitization of management systems could reduce global energy demand by 12%.**

In addition to energy rebates, smart pump technology that emphasizes efficiency results in:



LOWER LIFECYCLE COSTS

IMPROVED ASSET EFFICIENCY

03 Intelligence

Consumers have an increasing desire for more and more end-to-end solutions that address the full spectrum of market and resource challenges, which include aging infrastructure, skilled labor shortages and siloed data that makes decision-making challenging. Smart pump technology backed by intelligent, interoperable platforms and advanced application software enables proactive decision-making and efficient resource management.



The global smart building market size is projected to reach **\$108.9 billion by 2025.**



Key features of the hydrovar® X smart pump family that boost intelligent performance include:

→ EASY BUTTON SETUP | CONDITION MONITORING | SYSTEM OPTIMIZATION

04 Connectivity

From the materials used to a network of HVAC, mechanical and electrical systems and sensors, a building's ecosystem is vast and complex. As a result, real-time connectivity is critical to drive operational efficiency and is often at the core of both smart buildings and the smart pump technology within them.



Connected solutions like Xylem's optimize[®] condition monitoring sensor **monitors the health of the pump proactively to provide early warnings of potential issues and minimize downtime.**



As a driving force for new solutions, many smart pumps now feature onboard connectivity as standard, as well as:



SMART DEVICE INTERFACE
FOR SETUP AND OPERATION

SIMPLE BMS
INTEGRATION

INTERESTED IN LEARNING MORE ABOUT SMART PUMP TECHNOLOGY?

Explore Bell & Gossett's line of industry-leading pumps powered by
Xylem's innovative hydrovar® X motor: a one-of-a-kind compact package.

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