



Can a Warehouse be Green?

Our compulsion with online shopping has spawned an evolving landscape dotted with giant warehouses strategically placed to get products to your doorstep within two days.

The trade-off for all that convenience is the worry by many that these giant boxes along the highway, and the trucks they bring with them, are detracting from the character of a region known for its farmland, open space and natural resources.

But would some of the impact be mitigated if warehouses were greener, more sustainable structures? Can developers be enticed to include solar panels? Or more green infrastructure? Or designs that better fit the landscape?

The answer to all of those was yes, among many of the developers, designers, planners, municipal officials and private citizens who attended the Sustainable Warehouse Forum, hosted by Green Building United in partnership with the Lehigh Valley Planning Commission at Lafayette College's Rockwell Integrated Science Center.

"Warehouses are not going away," said LVPC Chairman Steven L. Glickman, an Easton architect as he opened the forum. "But there's a better path to the future."

The first question often asked when a warehouse is proposed is "Can't we just say, no?"

Well, no, said LVPC Executive Director Bradley, explaining that Pennsylvania is a “right to development state” in which an applicable project can’t be denied, so long as it abides by zoning and planning rules.

When most Lehigh Valley residents hear warehouse, they think of giant, non-descript white boxes that can change the character of a neighborhood if put in the wrong place.

But the builders, architects and developers who attended the forum said communities – and investors – can do better.

The region’s location within reach of 100 million consumers has led municipalities to approve more than 30 million square feet of new warehouses, just since 2016. The fact that so many warehouses have been built so quickly, has brought a backlash from residents across the region.

Scott Kelly, a partner, architect and sustainability consultant with Philadelphia-based Re:Vision, said these behemoths can be built energy-efficient and better for the planet. He talked about designing buildings that include piping that funnels 55-degree air from beneath the ground, to save on cooling energy, and making structures out of wood that better fit into the surrounding community.

Mostly he talked about designing buildings with the worker in mind.

“In a typical workplace, you spend \$10 on energy, \$30 on building operation and \$300 on people. Makes a lot more economic sense to make those people happier and more productive,” said Kelly, whose company has designed several Lehigh Valley buildings. “Our priorities are people, plant, prosperity, in that order.”

Jason Cattelino, a technical consultant with Rotho Blaas USA talked about building a 65-foot-tall all-wooden warehouse at the base of the Alps in Northern Italy. Rotho Blaas, which produces engineered timber products, built the full-automated “high cube warehouse” entirely from wood to support the mass timber industry. It was done not only to promote sustainability, but to make a statement that almost anything is possible if you refuse to accept the norm, Cattelino said.

“We’re committed to designing and building differently,” said Cattelino, who works from Rotho Blaas’s office in Orefield. “We don’t need to build giant boxes. We can build things that, when people go there to work, they’re proud.”

And people don’t have to look to Europe to find instances of people building warehouses with an eye on being sustainable, said Charlie Stocks, Vice President of Project Management for W.P. Care. The company recently redeveloped the 500,000-square-foot former Bon-Ton site in Whitehall Township, with energy efficient lighting and solar panels that provide 95% of utility consumption. It’s still a building that increases the kind of truck traffic that most Lehigh Valley residents oppose, but’s not the typical warehouse, with LED lighting, energy efficiency and an entrance looks more like an office building than a warehouse, Stocks said. So why strive for sustainability?

“We have a unique opportunity to make an impact on climate change,” Stocks said.

By the forum’s end, there was no magic bullet to force developers to stop proposing warehouses, and no consensus on best practices to build better, but there was an

understanding that Valley municipalities can demand greener, more sustainable buildings, whether they be warehouses, office buildings or homes.

“We feel it’s the smart way to think for the future,” Glickman said. “It may well be the only way to think.”