

passive
house
buildings

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Pennsylvania WILDS Goes Passive



Rendering Courtesy of Moshier Studio; photos on opposite page courtesy of WPPSEF



The existing building, pictured in the middle, had been vacant since 2015.

In northern Pennsylvania, in the midst of the Allegheny National Forest, sits the small town of Kane—"A Star in the Forest" reads the town's slogan. That star has many attractions, and now one more is being added: a gem of a small commercial Passive House building. Retrofitted from the shell of an 1897 structure, the reimagined building will be used to support organizations such as the PA Wilds Center for Entrepreneurship, whose mission is to integrate conservation and economic development in a way that strengthens and inspires communities across the 12½ counties in the Pennsylvania Wilds. PA Wilds, as it is colloquially known, encompasses over 2 million acres of public land—more than Yellowstone National Park.

The existing three-story masonry building had been vacant since 2015. It was purchased in 2019 by 63 Fraley Street, LLC, in collaboration with the West Penn Power Sustainable Energy Fund (WPPSEF), a nonprofit founded to promote clean power and sustainable energy technologies. Passive House was chosen as the performance goal fairly early in the process, and the consortium brought in Gary Moshier of Pittsburgh-based Moshier Studio to steer that effort. A local firm, Inscale Architects, has helped with analysis of the existing structure. The retrofit is envisioned as a learning opportunity for the local workforce and a chance to feature local and low-embodied-energy materials whenever possible.

Joel Morrison, director of the WPPSEF, says that this Passive House project is a centerpiece of the organization's mission, which embraces leveraging sustainability for the revitalization and enrichment of communities. "WPPSEF believes it is time to change the conversation about sustainability and sustainable energy to a more robust discussion centered on a regenerative way of thinking," he notes. WPPSEF is managing the documentation of the project, including developing video segments of the building's history, its revitalization, and its operations.

The project is proceeding in two phases. The first phase is the renovation of the core and shell. The second is the finishing of the interior once prospective tenants have been identified. Anticipated uses are retail for the ground floor, offices on the

second, and educational services on the third. Key considerations in tenant selection will be engagement with sustainability practices, according to Barbara Robuck, who manages marketing and communications for the WPPSEF. "The town and PA Wilds region are excited about this project, so it won't be a huge challenge," she says. The building faces onto Kane's main street, affording maximum visibility for the tenants. Although Kane is a small town, interest in the region's recreational opportunities has been growing, and a major new trailhead is opening there soon.

From the front, the building will look thoroughly updated, with an entirely new façade featuring extensive glazing and a Passive House-quality curtain wall that extends from the daylight entranceway to the roof. Behind that façade, in a solid nod to prioritizing low-embodied-energy materials, a good portion of the building is being reused, including the foundation, the party walls, and the three-story brick wall at the back. The interior was gutted except for the floor structures.

The new front wall, which faces east, will feature a 2-inch-thick stone cladding. "We're excited that we were able to source a locally quarried stone for the front," says Moshier. The handrails and stair treads of the



