

Conners Creek Power Plant

BUILD LAB - Tactical Preservation for Detroit's Industrial Legacy



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Partners





About BUILD - Urban Innovation and Leadership Dialogues

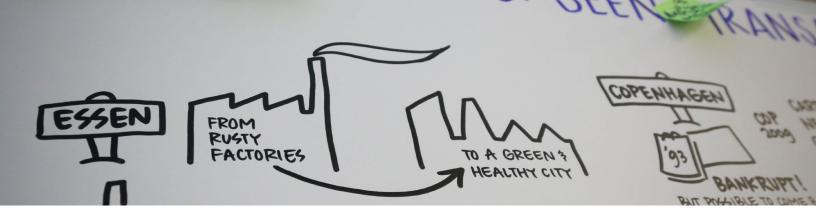
At the inaugural convening of BUILD in 2014, GMF launched a unique forum for leading transformative change in cities that supports greater sustainability, inclusion, and global engagement. The diversity of voices and experiences represented at BUILD facilitated a rich transatlantic policy dialogue, while also focusing on the specific leadership tools needed to advance change at a local level. This combination of policy and leadership dialogue shaped two cohorts of BUILD participants and created a transatlantic learning bridge between cities on both sides of the Atlantic. BUILD 2014 introduced these themes and established a transatlantic framework for understanding the opportunities and challenges of leading sustainable, inclusive, and globally engaged cities. At BUILD 2015, the exploration of these themes deepened by exchanging concrete policy tools and leadership tactics to move from ideas to action. BUILD 2016 added a new dimension to the exploration of urban transformation — the impact of the digital age on the people, places, and economies of transatlantic cities. BUILD 2017 highlighted how transatlantic cities have proven resilient despite disruptive dynamics challenging established paradigms in the global political and economic order. While there is a greater urgency to respond to challenges at home, there is also an increased opportunity for cities to play a more prominent role on the global stage by advancing sustainability, economic inclusion, security, and democracy.

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Tactical Preservation for Detroit's Industrial Legacy

At this year's BUILD Conference in Detroit, the Urban and Regional Policy Program (URP) of The German Marshall Fund of the United States (GMF) organized, in partnership with the City of Detroit and DTE Energy Foundation, a BUILD Lab: "Tactical Preservation for Detroit's Industrial Legacy." The Lab leveraged an international network of 42 policymakers, architects, urban planners, and practitioners to reimagine one particular space in the Conners Creek Power Plant and brainstorm on-site tactical preservation strategies that could spur further development throughout the main buildings and the site in general.

Conners Creek Power Plant is a DTE Energy-owned property in Detroit's Lower East Side near the historic Jefferson Chalmers neighborhood. The 75-acre site used to be home to a coal-fired power plant with nine units that fueled development in the city. When construction of the low-pressure side known as the "Seven Sisters" was completed in 1915, it doubled the generating capacity of the Detroit Edison company. The plant was expanded in 1951 with the construction of the high-pressure side known as the "Two Brothers," but due to increasing energy needs farther from the city and the construction of new plants at the time, production ended in 1988.

The Seven Sisters were demolished in 1996 and the Two Brothers were converted to gas prior to decommissioning in 2008. The Two Brothers boiler house remains standing today and offers 400,000 square feet of redevelop-able space on about 45 acres of riverfront property.

As city planners, policymakers, and developers explore strategies to direct iconic places to new productive and sustainable uses, the task can often seem daunting. Project timelines can span an average of 15–20 years, from conception to project build-out, as might well be the case for Conners Creek Power Plant. The project's complexity, the collaboration needed, and the costs involved for such endeavors can be beyond the reach of municipalities and private stakeholders, making short-term social, environmental, and economic responses more challenging.

For this reason, tactical preservation was spearheaded as a means to strengthen attraction to the site, and demonstrate how small-scale, incremental, targeted adaptive reuse can spur further development. The city of Detroit is a place of iconic buildings and Conners Creek Power Plant certainly contributes to Detroit's undisputed character, with multiple tangible assets and a cultural narrative rooted in the neighborhood.

Conners Creek Power Plant is in Detroit's Lower East Side, near the historic Jefferson Chalmers neighborhood. "This area is Detroit's next great place; a welcoming community for all Detroiters to live, work, and play. Building on its prominent location and rich cultural heritage, this area is ready and positioned to become a free and open waterfront for all," said Kimberly Driggins of Detroit's Department of Planning and Development.

How can this resource be preserved and activated for new purposes? Tactical preservation offers some possibilities to move forward.



Tactical Preservation allows for smaller investment opportunities, taking **one single area** within the building to **adaptively reactivate the space**. For example, this may involve the grand lobby of a bank building, the auditorium of a school building, the nave of a church, or the turbine hall of a power plant. In Detroit, the city is committed to an approach to tactical preservation that follows certain key principles:

- Seek creative solutions to solve long-standing urban issues.
- Encourage design excellence throughout the built environment.
- Respect and revere the past for its architecture, places, and people.
- Define place-keeping that promotes social interaction.
- Activate the public realm.
- Explore new ways to live, work, and play together in the 21st century city.
- Balance function and beauty.



"Tactical Preservation comes from tactical urbanism. It is a way to zoom into a building, activating it and helping to view a neighborhood with the vision and attraction for development and investment", explained Jacqueline Taylor of Detroit's Department of Planning and Development. "It's not just about preserving an individual part of the building, but about how it connects with the area, with the rest of the city and internationally. If we can do it here, we can show we can do it somewhere else."



While new development is essential for the Jefferson Chalmers neighborhood, the preservation of historic assets that contribute to local character such as Conners Creek Power Plant equally important. "Respecting the inherent values of this heritage helps to target public investment and to catalyze responsible, private development that advances a comprehensive vision worthy of this one-of-a-kind waterfront," noted Taylor.

The Conners Creek Power Plant's 75-acre site was once home to nine coal-fired units that provided energy to the city. When construction of the low-pressure building, known as the "Seven Sisters" for its seven chimneys, was completed in 1915, the generating capacity of the Detroit Edison company doubled. The plant expanded in 1951 with the construction of the high-pressure building known as the "Two Brothers" for its two chimneys, but increasing energy needs farther from the city and the construction of new plants led production to be terminated in 1988. The Seven Sisters building was demolished in 1996 and the Two Brothers building was converted to gas before eventually being decommissioned in 2008.

The Two Brothers boiler house remains standing today with 400,000 square feet of space available for redevelopment in about 45 acres of riverfront property. Also remaining are the coal conveyors and outbuildings for the fuel supply chain, and the Edison Boat Club. Nancy Moody, vice president of public affairs at DTE Energy highlighted that DTE Energy is interested in "working with a developer to ensure the highest and best use of the Conners Creek Power Plant site as a catalyst for community and economic development in the lower east side of the city. This site provides an incredible opportunity."

How do we begin to imagine a future in which a community and its obsolete buildings can reconnect with the rest of the city? How might we activate this space to promote the tactical preservation and adaptive reuse of the Power House structure's (boiler house and two turbine decks) to complement a future DTE learning center and serve as a catalyst for mixed use development while securing the remaining structure in the interim? The Seven Sisters building was demolished in 1996 and the Two Brothers building was converted to gas before eventually being decommissioned in 2008.



The BUILD Lab Ideation Exercise

1. Conducting a SWOT Analysis: "What are the Major Strengths, Weaknesses, Opportunities and Threats Related to the Site?

Strengths	Weaknesses	
Location: near the riverfront, panoramic views.	Location: far away from Downtown.	
Environment: asset from a climate change and resiliency standpoint.	Environment: environmental remediation, environmental contaminants (asbestos, soil load, coal fly ash).	
Structure: sturdy, spacious, cool, great size for redevelopment.	Structure: size, challenging expensive to heat and cool due to high ceilings, safety.	
Urban Planning: potential for the site reuse to be integrated within eastside master planning.	Urban Planning: no density of development, lack of public transportation and accessibility, lack of visibility from main corridor (Jeff. Avenue).	
Role: iconic place, rooted in the area, industrial legacy.	Finance: adaptive reuse might become cost-prohibitive.	





Opportunities	Threats
Location: access to the riverfront, connecting portion of the rehab building to landscape (physically and visually).	
Role: provide an identity to the neighborhood, opportunity for change in Detroit, DTE Energy as ignitor, energy metaphor, vocational component, node.	Role and buy-in: identifying a development partner with adaptive reuse expertise that will work with the public and local stakeholders.
Structure: plenty of space for multiple uses.	Environment: environmental remediation, environmental contaminants (asbestos, soil load, coal fly ash).
Urban Planning: potential connection of the site by water (kayak, boats, ferry).	Urban Planning: regulatory context, zoning (heavy use right next to residential – may have been acceptable in the past but not today).
Finance: tax credit for historic preservation, EPA funding for redevelopment, collective regional efforts.	Finance: limited capital for the reuse of the site.



Work Best?"

Turbine Room (first to be activated)



*Participants highlighted that the turbine room needs active connection to the rest of the structure



Turbine Room



Boiler House

Boiler House

Activities	Exhibitions and Convening	Manufacturing, Innovation and Workforce Training	Businesses & Co-working
Extreme Indoor Sports	Museum – Sciences, Art, Design, Industrial History — & Sculpture Park	Makerspace – design pavilion, retail, light-manufacturing, artisan goods, community makers	Food Hub
		Pioneer space for health and sustainability - education, training and businesses	
Fitness Park (i.e. Rock climbing, free falling, swimming pools)	Butterfly conservatory		Fish market
			Exciting repository
		Water sports manufacturing (i.e. boat manufacturer)	Flagship sporting store
	Convention Center/ Urban sport center	Manufacturing work- force training	Co-working space – tech, energy and jobs — and industrial playground
		Drone Flying Training Center	Co-working space – tech, energy and jobs — and industrial playground

Surrounding area

Outdoor Water sports (kayak, sailing, zipline)

Outdoor water sport training

Cruise Terminal

Leisure Path:
Pedestrian and Bike
paths, greenways,
swimming and diving

Farming

Aquarium; Flooding mediation; Blue/Green Laboratory

New Housing

3. Selecting an idea and developing it

Since participants divided into six groups, the "SWOT Analysis" and "Big Idea" exercises undergone by each group resulted in six different ideas listed below:

Idea 1: "The Two Bros Power Palace"

- Proposal: The Conners Creek Power Plant could be turned into multi-mixed destination focused on the opportunities to produce economic revenues and opportunities, and the management capacity of DTE Energy. More specifically, The Two Bros Power Palace could become a cool place dedicated to activities such as events and performance space; brewery; drive-in movie; green laboratory (water fishing and water farming); and extreme sports.
- Audience: metro and global; (inclusive and economic all ages, all kinds, all workers).
- Hopes: mobility, connect suburbs, catalyze investment (hotels, businesses). Having a destination like this in the area gives identity and could provide a chance to the suburbs to be connected to the city and also to catalyze development related to B&B and activities connected to the potential offered by the waterfront.
- Hurdles: limited transportation (might be overcome with a water bus along the river connecting the waterfront), financial restrains, pollution of the site, existing neighbors. But the proposal is to start off with a huge event hall (which would allow for the place to remain cold), as well as with additional ideas to spur further development (as a restaurant in the terrace or a brewery).

Idea 2: Energy Demonstration Plant

- Proposal: Conners Creek could be used as an Energy Demonstration Plant. An education, training and production place focused on industrial grade composting, solar PV and river front wind turbine, setting up an educational and training center on renewable energy and heavy equipment; with different uses for the workweek and weekends. DTE Energy owns a structure of the 20th century energy production, and readapting it would provide the opportunity to adapt it to the 21st century renewable energy production model and to show the opportunities ahead.
- Audience: city and regional residents and businesses.
- Hopes: The region is in real need of an industrial grade composting facility. It will support the local food economy (Eastern market, growers, restaurant and institutional food waste). Existing pipes could be reused to collect heat, steam and methane off the compost. This could offset heating for the site. DTE Energy also has enough gravel yards to collect, sort and later distribute raw compost inputs and the resultant soil enrichment. The production of renewable energy, together with an Education Center can show the legacy of power production, from coal to gas to compost, wind and solar. A Detroit training center on heavy equipment can teach the skills DTE Energy needs in its future jobs pipeline. Partnering with the city of Detroit might improve public access transportation and connection to Jefferson Chalmers, Belle Isle and East Riverfront.
- Hurdles: this project faces three major hurdles, namely: investment, safety and accessibility. However, if DTE Energy uses the site as an Energy Training Center during the day and devotes the site for showcase and riverfront amenities during the weekend that might garner more interest and attract further investment. Further, if DTE Energy keeps the interior in quasi-industrial use and activate the riverfront, the internal safety concerns are much lower. Lastly, the accessibility hurdle could be improved by connecting the Riverwalk and creating a greenway.





Idea 3: Museum of the Energy: Past to Future

- Proposal: Conners Creek has the potential to be transformed into a Museum of Energy. This use would enable the site to capitalize on and learn from the past, while moving to the future. The Museum of Energy would combine the cultural, education and recreational dimension of a museum with energy-focused innovation and startups, as well as a public waterfront.
- Program: Energy Innovation Center, Start-up Incubator (R+D for DTE Energy), involving universities, Vocational Training / Learning center, Arts Exhibition (Mass MOCA), Rooftop restaurant, Viewpoint (Roof)Waterfront access (recreational and educational).
- Focus: Cultural, physical, social, connections, recreational, generation of Renewable Energy (turbines, solar, etc.), business and economic development for renewable energy.
- Audience: university, businesses, startups, and local community.
- Hopes: Energy Innovation Center will connect DTE Energy with startups and generate growth; and Energy Training Center will connect DTE Energy with the community and improve their knowledge skills; a Museum of Energy will attract visitors and investment; natural pool (improving connection with the city through paths and bike lanes).



• Hurdles: remote and difficult access. It is very important to consider ways to bring visibility to this new place and regional attraction to the main commercial corridors of Jefferson Chalmers. Here it is key to ensure access for all to the waterfront, not only recreational (kayak, diving) but also directed toward biological (water-farming and water-fishing).



Idea 4: The Beacon

- Proposal: Conners Creek offers great potential to become the new iconic and visible destination for all; an 18-hour mixed-use location, with would establish strong authentic local identity through place-making. This would include rethinking the site around different uses such as a farm-to-table restaurant and brewery, with roof-top terrace and beer garden; a museum about Detroit's Industrial Legacy; or after-school and community programming, offering activities such as rowing, urban farming, food preparation, healthy eating, and team building for at-risk kids.
- Audience: East Riverfront residents, Detroiters and visitors.
- Hopes: The farm-to-table restaurant and brewery will rely on and support local products, hospitality and service training. An Industrial history museum will be a new draw for tourism, an authentic source of local pride and identity; Visually striking: exterior lighting will highlight the building from downtown.

Idea 5: Innovation Maker Space

- Proposal: The Plant could be turned into an incubator pop-up retail for makers, featuring an artisan large sculpture and electrified in the garden and green space waterfront connected to larger riverfront walk. The Innovation Maker Space could also serve as a light industrial manufacturing co-working, where artists and makers would provide skills training workforce development to the community, with specific skills that are related to the activities taking place in the site.
- Audience: DTE Energy, workforce, local and regional residents, artists, entrepreneurs, partners using the space.
- Hopes: This idea will enhance the area history, stimulate the creative economy, enhance green space and waterfront amenity, as well as increase visibility of DTE Energy, while connecting the site with the surrounding communities and other areas of the city. The idea is to build on the area's history to utilize the space and foster the connections.

Idea 6: The Beacon

- Proposal: The Conners Creek Power Plan could become a place for cultural, public and realm events, a museum depicting the first and second Industrial Revolution, and a fourth industrial revolution vocational training and incubator on emergent practices and technology (i.e. 3D printing and renewables).
- Audience: Local residents, makers, and innovators.
- Hopes: this idea revolves around the site as a representation of first and second Industrial revolution and the notion that its future might skip to the fourth industrial revolution. It will exploit spatial qualities, as well as the flexibility and uniqueness the Conners Creek Power Plant provides. It will focus on and honor the past, the present and the future of the utility company, the site and the city (reaching out to Canada), while being respectful of the neighborhood to open up the site, utilize the waterfront and take the advantage of the natural elements of the site and geographical position. Each space has its unique use and intention, thus the place would be suitable as well for multi-functional events place, allowing the public to circulate in and through.
- Hurdles: Accessibility.

What Comes Next?

From the perspective of the experts engaged in the BUILD Lab, the next steps needed to move beyond reimagining the site and bring it back to use should include:

- Connect with Detroit stakeholders and residents to gather input. Understanding local priorities and needs, how Conners Creek Power Plant can meet them through its tactical preservation strategy, and what role Detroit's stakeholders and residents can play will be essential to choosing the right idea to execute.
- Exchange with Peers. Peer-to-peer engagement between DTE and experts (such as other utility owners experiencing similar conditions) could offer unique insights on the challenges and opportunities for power plant reuse ranging from the technical to the financial.
- Plan with academics and practitioners. Workshops with academic experts and practitioners could continue the urban planning and reuse visioning initiated at BUILD to inform ongoing conversations at the Conners Creek site and broader Jefferson Chalmers community.

The combination of these three steps would support the city of Detroit and DTE Energy in their ongoing exploration of reuse options for the main buildings, the full site, and its connection to the broader Jefferson Chalmers neighborhoods.



Conclusion

The 2018 BUILD Lab generated a diverse set of ideas for the future of Conners Creek Power Plant. However, participants did form consensus around several key observations and themes.

Strengths exceed weaknesses. The site poses challenges to tactical preservation. Safety the location near the riverfront, the sturdy and spacious structure, and the building's iconic role in Detroit's industrial legacy create potential for the site become an anchoring point. The opportunities for tactical preservation outweigh the obstacles.



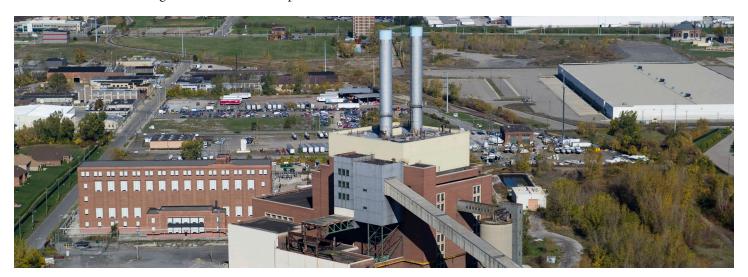
Honoring the past and capitalizing on the site's assets and opportunities in the present is important to move to the future.

For many participants, this suggested energy should serve as the focus of the transformation. Possibilities include using the structure for exhibitions, education, training, and production of renewable energy (such as compost, solar, or wind turbines) conducting bioremediation and green storm water management, or hosting events promoting start-ups and the green economy. All these ideas are rooted in the site's original purpose, but recognize its current context and society's future needs.

Each space in the site has its unique use and potential. The turbine room could be repurposed as a space for techno events, concerts, festivals, pop-up art exhibitions, a restaurant with panoramic views, a brewery or distillery, a green roof and observation deck, or an experimental green lab, among other possibilities. The boiler house could be reconfigured for indoor athletic activities, as a center for convening and exhibitions, a space for manufacturing, innovation and workforce training, or for businesses such as a food hub or fish market. The terrace could become a rooftop terrace and observatory platform — activating the rooftop is key to enhancing the visibility and popularity of the site, given its location and great views of the riverfront. Given the variety of spaces within Conners Creek Power Plant, its successful redevelopment hinges on recognizing its multiuse potential.

The wider context of the building presents opportunities. As part of the incrementalism embedded in tactical preservation, the reuse strategy should not only connect the areas within building (turbine room, boiler house, and terrace), but also extend to the building's wider context: the waterfront, the community's residents, the city, and the region. For this, it is important to be respectful of the neighborhood and mindful of local needs, interests, and concerns, in order to ensure the waterfront benefits all stakeholders, not only through recreational opportunities but also through commercial and research purposes.

Acting on these recommendations will require leadership and commitment on all levels to reactive the space, safeguard and build on its legacy, connect it to the surrounding area (both physically and figuratively), and contribute to the riverfront revitalization and development of historic Jefferson Chalmers. With determination, inclusion, and creativity, the tactical preservation of Conners Creek could allow the site to become an asset of great value, and a source of identity and local pride. Conners Creek Power Plant could serve as a model for other postindustrial sites in the United States, Europe, and elsewhere, demonstrating the value of tactical preservation.





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