



ULI NET ZERO IMPERATIVE

# Three Years of Accelerating Building Decarbonization



Cover photos: NZI technical assistance panels (ULI staff)

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## About ULI

The Urban Land Institute is a global, member-driven organization comprising more than 48,000 real estate and urban development professionals dedicated to advancing the Institute's mission of shaping the future of the built environment for transformative impact in communities worldwide. ULI's interdisciplinary membership represents all aspects of the industry, including developers, property owners, investors, architects, urban planners, public officials, real estate brokers, appraisers, attorneys, engineers, financiers, and academics. Established in 1936, the Institute has a presence in the Americas, Europe, and Asia Pacific regions, with members in 84 countries.

## About the Randall Lewis Center

The ULI Randall Lewis Center for Sustainability in Real Estate leads the real estate industry in creating places and buildings where people and the environment thrive. In collaboration with ULI members and partners, the Lewis Center drives industry transformation, cultivates leaders and champions, and helps foster solutions for sustainable, resilient, healthy, and equitable cities and communities. The center pursues these goals via cutting-edge research, global convenings, community technical assistance, and other strategies. The center's main programs are Decarbonization, Urban Resilience, and Healthy Places.

Discover transformative practices for real estate and land use at [uli.org/sustainability](https://uli.org/sustainability). Connect with the Lewis Center at [sustainability@uli.org](mailto:sustainability@uli.org).

## About the ULI Net Zero Imperative

The [ULI Net Zero Imperative](#) is a multiyear initiative to accelerate decarbonization in the built environment and is a significant aspect of ULI's work to advance its net zero mission priority. The program sponsors technical assistance panels in a select number of global cities per year and is designed to help building owners, cities, and other relevant constituents reduce carbon emissions associated with buildings, communities, and cities. The generosity of Owen Thomas and additional gifts from Lynn Thurber, Joe Azrack, Franz Colloredo-Mansfeld, and Dan Cashdan have made it possible to further support and bolster the Net Zero Imperative program's scale and impact in global cities to help accelerate efforts toward net zero.

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# ULI Net Zero Imperative Executive Summary

The ULI Net Zero Imperative is a global program that leverages ULI's district and national councils (i.e., local chapters) and expert members to advance decarbonization locally. Through technical assistance panels (TAPs), ULI brings together public- and private-sector professionals in the built environment to tackle challenges for local decarbonization, such as advancing affordable housing through financing opportunities or creating new incentives for low-carbon districts. ULI district and national councils also engage a local sponsor to match a portion of the funding and amplify the impact.

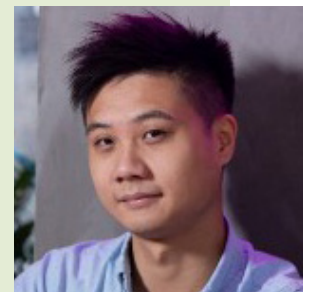
- 1,500+ hours volunteered by ULI members
- 15 technical assistance panels completed
- 2 Advisory Services panels completed
- 375+ stakeholder interviews conducted
- 100+ expert panelists participated
- \$750K+ in grant funding distributed to local communities
- \$300K+ in additional funding leveraged through local sponsor matches

## Net Zero Imperative Program Elements

1. Leverage a two-day technical assistance event in each city to help the public and private sector develop a “pathway to decarbonization.”
2. Run long-term, on-the-ground implementation campaigns in global cities to accelerate decarbonization of the built environment and keep NZI alumni engaged to continue the momentum created during the technical assistance efforts.
3. Build a global cohort that can receive ongoing technical assistance to refine on-the-ground campaigns and work together to share best practices and lessons learned.
4. Create global resources to help all ULI members accelerate decarbonization in their real estate operations and local communities.



Since working with ULI Net Zero Imperative to deliver a report on Landlord–Tenant Decarbonization Engagement, Link REIT has made strides in engaging tenants on decarbonization, from awareness building and offering incentives to building win-win partnerships and improving data collection. As of the end of 2023/2024, we have achieved 42 percent green lease adoption (over 3,000 green leases) in our Hong Kong and Mainland China portfolio and are on track to achieving our target of 50 percent by 2026/2027. We believe this pioneering engagement approach developed with ULI, with its expansive potential across APAC real estate, charts a course towards a sustainable, low-carbon future.”



—WOODY CHAN  
Link REIT NZI sponsor, ULI Hong Kong, NZI Cohorts 2 and 4

# Introduction

The ULI Net Zero Imperative (NZI) program, which entered its fourth year and cohort in 2024, has engaged over 20 ULI district and national councils globally, bringing together public- and private-sector stakeholders to advance efforts to decarbonize buildings. Each year, several ULI district and national councils are accepted into the program and are connected together as a program cohort. The ULI NZI is a growing, collaborative network of ULI district and national councils, including ULI staff, local governments, real estate leaders, and community stakeholder groups focused on decarbonizing cities and real estate.

The conversations, ideas, challenges, and solutions shared by ULI member experts through the program have addressed each facet of real estate's journey to net zero, depicted in the diagram to the right, with lessons learned and best practices shared among the global cohort network of NZI participants and throughout the ULI membership.

This mid-program synthesis and impact report spotlights both lofty ideas and practical solutions to decarbonize buildings, communities, and cities that have been shared throughout the past three years of NZI efforts. To set the stage, the report begins with an overview of the NZI cohort program and its goals, followed by stories of impact, key recommendations distilled from the cohorts, and relevant and scalable resources. The report wraps up with a forecast for the future of the program and opportunities for further exploration.

The NZI program has shown that change is possible—small changes immediately and big changes over time. Successes and challenges are integrated throughout the report and spotlight both impact stories and useful or unique recommendations that surfaced throughout these three years of NZI efforts to date.

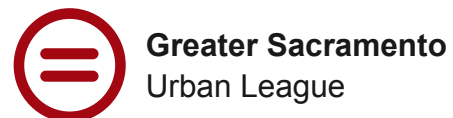


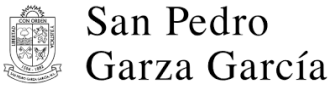
# ULI Net Zero Imperative Sponsors and Partnering Organizations

The ULI NZI provides grants to ULI district and national councils with the requirement that district and national councils find a local sponsor to match a portion of the grant funding. This requirement ensures local buy-in and collaboration with critical partner organizations. The NZI grants have spurred more than \$300,000 in local matches.



Beijing Municipal Commission of Planning and Natural Resources







# Program Overview

The ULI NZI is a multiyear initiative to accelerate decarbonization in cities by facilitating cross-sector collaboration, dialogue between real estate and public-sector leaders, and joint action. NZI is a significant aspect of ULI's work to advance its net zero mission priority.

ULI adopted its organization-wide mission priorities in 2021 to respond to the most pressing challenges communities are facing. The following are the top priorities identified:

- Decarbonization and Net Zero
- Increasing Housing Attainability
- Educating the Next Generation of Diverse Leaders

All three priorities are underpinned by a commitment to diversity, equity, and inclusion (DEI), which recognizes that our communities can be successful and sustainable only if they work for everyone.

NZI started in July 2021 with the overarching goal to accelerate actions toward decarbonization of the built environment, focusing primarily on buildings. NZI leverages ULI's core strengths and activities, including the following:

- Local action through identifying challenges, convening stakeholders, executing technical assistance, and encouraging implementation
- Connecting and convening for network building, learning, and sharing among participants
- Distilling insights for ULI member-wide sharing and best-practice identification

Together, these activities are helping building owners, cities, and other relevant constituents identify and take action on effective strategies to reduce carbon emissions associated with buildings, communities, and cities.



## What Is a Technical Assistance Panel?

Technical assistance panels (TAPs) provide expert advice to local governments, public agencies, and nonprofit organizations facing complex land use and real estate issues.

Multidisciplinary teams of 5–10 real estate professionals tour the area under review, interview local stakeholders, and meet to develop recommendations that are presented publicly at the end of the session and in a follow-up report.

ULI serves as the “honest broker,” bringing all stakeholders together in an environment free of politics and preconceptions.

### Process:

- Develop scope
- Invite panelists
- Prepare briefing book
- Schedule interviews
- Hold two-day panel
- Publish recommendations
- Encourage stakeholder action



NZI has cultivated a growing, collaborative network of ULI district and national councils, including ULI staff, local governments, real estate leaders, and community stakeholder groups focused on decarbonizing cities and real estate. Through its learnings, the program has inspired a suite of resources created for the global buildings community.

NZI is advised and guided by the Randall Lewis Center for Sustainability in Real Estate Advisory Board and the Net Zero Imperative Steering Committee, which is composed of global subject matter expert members across the real estate value chain.

The competitive grant program is open to ULI’s global network of local chapters: district councils in the Americas and national councils in Europe and Asia Pacific. NZI funding is available for technical assistance efforts (up to US\$35,000) or implementation efforts post-TAP (up to US\$10,000). The District and National Councils network is the embodiment of ULI’s global mission in local communities—it is where ULI members act and interact with one another, the broader community, and public and private leaders to shape the future of the built environment where they live, work, and play. There are over [50 district councils in the Americas](#) (United States, Canada, and Mexico), [13 national councils in Europe](#), and [eight national councils in Asia Pacific](#).

NZI Statement of Interest grant applications are submitted to the Lewis Center by ULI district and national councils in partnership with a prominent local stakeholder sponsor or partner with a scope that aims to tackle a local decarbonization or net zero challenge in the community. The program also requires a local match of a portion of the funding to ensure long-term buy-in and impact. Each year, a new cohort is formed of 5–10 district or national councils that are accepted into the program.

## Program Goals

NZI’s overarching goal is to accelerate decarbonization of buildings. This bold goal will take time to achieve. Through connecting communities and sharing best practices, the program is advancing the incremental changes necessary for longer-term impacts. Just as development cycles require careful investment and time, so do efforts to shift business-as-usual processes and advance decarbonization efforts globally.



### GOAL 1

Accelerate the decarbonization of buildings



### GOAL 2

Chart a cost-effective path to net zero for the real estate industry.



### GOAL 3

Leverage the power of ULI’s global network to drive development and investment that supports this path to decarbonization.



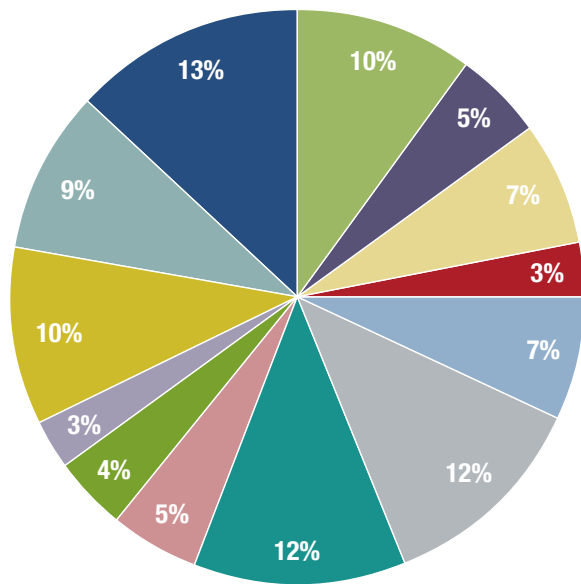
### GOAL 4

Get the private sector working hand-in-hand with cities on policy and incentives that can help accelerate investment in decarbonization.

## Program Participants

Over the past three cohorts, and three years, ULI district and national councils have focused on a wide swath of net zero topics including decarbonization roadmaps, decarbonizing affordable housing, and creating net zero districts. This technical assistance work engaged both the local public and private sectors to create novel, actionable progress toward net zero. The chart and cohort descriptions that follow provide a high-level overview of the types of scopes and topics that the NZI cohorts have tackled over the past three years.

NZI TOPICS



- Green Finance
- Embodied Carbon
- Affordable Housing
- District Energy
- Deep Retrofits
- Tenant Engagement
- Electrification
- Transition Risks
- Property Technology
- Transit-Oriented Development
- Decarbonization Roadmaps
- Asset Renewal
- Policies and Incentives

### COHORT 1 (2022)

- **ULI Austin:** Increase the local real estate sector's awareness and buy-in of electrification, energy efficiency, and on-site renewable energy in commercial and multifamily buildings, in line with net zero initiatives in the City's Climate Equity Plan.
- **ULI Beijing:** Develop a roadmap to net zero development in China and explore deep energy efficiency by piloting solutions in a Beijing mixed-use site to reduce operational costs and increase economic savings.
- **ULI Kansas City:** Advocate for a net zero economy by identifying best practices for a regional Energy Efficiency Investment Fund to provide lending tools for the real estate sector and maximize community impact through building decarbonization improvements for affordable housing.
- **ULI Los Angeles:** Identify both technical and market strategies to decarbonize the Bunker Hill neighborhood with a district energy system across assets with multiple private owners.
- **ULI Minnesota:** Develop a framework for policymaking and development strategies to evaluate climate impacts and drive net zero in the equitable redevelopment of a 115-acre district.
- **ULI San Francisco:** Build upon existing ULI efforts to bring the public and private sector together to unlock the benefits of building electrification and renewable energy in market rate and affordable housing assets.
- **ULI Shenzhen:** Explore how Shenzhen can incentivize the private building sector to integrate new and innovative technology to decarbonize while still sustaining profitability.
- **ULI Toronto:** Build upon existing ULI efforts to support the city of Toronto in encouraging retrofits of aging, privately owned multifamily rental towers to reduce their carbon emissions.

## COHORT 2 (2023)

- **ULI Atlanta:** Conduct 5–6 different net zero-themed mini-TAPs as capstone projects for ULI Atlanta’s Center for Leadership program.
- **ULI Charlotte:** In partnership with a private developer, Crescent Communities, the City of Charlotte will establish a development incentive program using the River District as a pilot to create a net zero road map for development.
- **ULI Chicago:** Build resilience from climate change impacts and strengthen the Chicago region as a climate refuge by leveraging current strategies and proposing bold new measures to create a net zero future that includes residents, municipalities, and the real estate industry.
- **ULI Germany:** Identify assets in Berlin that could be stranded, based on a common methodology developed by the ULI C Change program that assesses climate transition risks as part of real estate valuations.
- **ULI Hong Kong:** Create a toolkit focused on tenant engagement in high-density central business districts that will draw on existing strengths and address areas of growth that will aid in major reduction in carbon emissions for owners and their tenants.
- **ULI Mexico:** Engage the public and private sectors in the creation of a citywide roadmap to net zero. Result in actionable recommendations of potential incentives, education, or code amendments to achieve energy-efficient, net zero carbon buildings.
- **ULI Minnesota:** Build upon existing ULI NZI efforts to bring the public and private sector together to refine the current draft of the Equitable Framework Guide for developing a 115-acre site into a transit-oriented, net zero district.

## COHORT 3 (2024)

- **ULI Australia:** Develop a precinct scale decarbonization model, with measurable outcomes, that can be replicated across the city of Melbourne and Australia more broadly to build critical mass toward pilot and action.
- **ULI British Columbia:** Decarbonizing older, below-market buildings is key to an electrified, equitable, and stable housing market.
- **ULI Germany:** Identify potential solutions to decarbonize buildings at risk of climate-related stranding in close collaboration between all stakeholders including the private and public sector.
- **ULI East China:** Bring together important stakeholder groups including developers, building material manufacturers, construction companies, and service providers and identify areas where improvements are needed to enhance transparency, reliability, and efficiency of embodied carbon estimation.
- **ULI Los Angeles:** Explore opportunities to connect “satellite” district cooling plants to the existing Bunker Hill Plant and bring down costs by piggybacking on existing subterranean infrastructure projects including the local subway.
- **ULI Greater Bay Area:** Expand the influence of prior NZI work through decarbonization tech tours, environmental, social, and governance (ESG) tech roundtables, and showcases to empower the decarbonization tech ecosystem, connect stakeholders, and attract tech firms to the Greater Bay Area.

## COHORT 4 (IN PROGRESS, 2025)

- **ULI Atlanta:** ULI Atlanta will coordinate industry workshops focused on embedding embodied carbon requirements into local zoning and policies. These workshops will bring together experts with experience in jurisdictions that have implemented embodied carbon policies, as well as people knowledgeable about Atlanta’s zoning policies.
- **ULI Chicago:** ULI Chicago will help fund the development of case studies of two multifamily decarbonization retrofit pilot projects being funded by the City of Chicago. The case studies will document the work done to help encourage and guide future retrofit projects.
- **ULI Germany (Berlin):** ULI Germany will build upon previous NZI technical assistance efforts to develop a business case for financing retrofits in the affordable housing project by applying lessons from Buckower Höfe, identify a taskforce of local stakeholders and ULI members to drive decarbonization efforts forward, and produce a case study outlining the business case, potential financing mechanisms, and implementation roadmap for neighborhood-scale retrofits.
- **ULI Hong Kong:** Continuing from previous NZI technical assistance efforts on landlord and tenant engagement, the NZI implementation grant will be used to spark new discussions in Hong Kong on sustainable fit-outs—a topic that is not covered much in the city.
- **ULI New York:** Work will commence with New York City to put together a technical assistance event to identify Local Law 97—compliance pathways that can enable large multifamily affordable and middle-income building owners to reach net zero by 2050 by considering how funding and financing programs can be designed to meet those owners’ unique needs, technical solutions to upgrade existing building conditions and implement zero-carbon building systems, and legal mechanisms so that these investments are compliant with New York housing laws and rules.
- **ULI Northwest (Portland):** The technical assistance efforts will explore and facilitate the adoption of grid-interactive efficient building solutions in the Northwest region of the United States by fostering collaboration between commercial real estate stakeholders and local utilities to enhance energy decarbonization, resilience, and overall grid stability.



- **ULI Philadelphia:** This project will collaborate with the City’s Division of Housing and Community Development (DHCD) and Philadelphia Housing Development Corporation (PHDC) to convene a series of workshops to bring together regional and national peer experts in the affordable housing sector, housing development corporations, and private sector development professionals. These professionals will discuss lessons learned in retrofitting existing affordable multifamily housing stock to preserve affordability and become carbon neutral.
- **ULI Sacramento:** This project will revitalize a struggling corridor through the development of a dynamic outdoor gathering space and a rehabilitated commercial building, designed to foster community engagement, education, and business incubation, and to lead by example through implementing net zero strategies.
- **ULI Spain (Madrid):** With the City of Madrid and local real estate, this project will develop a neighborhood-scale strategy for deep-energy retrofits while scaling solutions for other neighborhoods and cities.
- **ULI Washington (D.C.):** This project partners with the Washington Metropolitan Area Transit Authority (WMATA) to generate design guidelines, developer-facing incentives, and government-facing priorities for net zero buildings within WMATA’s Joint Development Program.

**PROGRAM PARTICIPANTS BY LOCATION**

**NORTH AMERICA**



**EUROPE**



## ASIA AND AUSTRALIA

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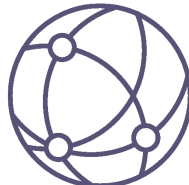
# From ULI's Mission to NZI Action

The NZI program is one way ULI has operationalized the ULI mission priorities. Building upon ULI's core activities, the program's key elements include sponsoring technical assistance and implementation efforts in a select number of global cities each year, ongoing exchange and community-building efforts, publications, and learning opportunities designed to share insights from the program, detailed here.



## ELEMENT 1

Leverage a two-day technical assistance event in each city to help the public and private sector develop a "pathway to decarbonization."



## ELEMENT 3

Build a global cohort that can receive ongoing technical assistance to refine on-the-ground campaigns and work together to share best practices and lessons learned.



## ELEMENT 2

Run long-term, on-the-ground implementation campaigns in global cities to accelerate decarbonization of the built environment, which includes alumni engagement.



## ELEMENT 4

Create global resources (research, toolkits, and other tools) to help all ULI members accelerate decarbonization in their real estate operations (and in their cities).



On behalf of the City of Melbourne team, I wish to extend our deepest gratitude for your immense, invaluable contribution and efforts over the last week. You each accepted this challenge to meet in Melbourne to consider our buildings and decarbonization challenges, meeting with other strategic expert advisors to seek input, and developed an innovative and leading approach for the City of Melbourne in terms of zero carbon precincts. We are awed by the efforts of both ULI Australia, ULI Net Zero Imperative, and especially each of you as individual panel members. . . . Our next steps will be to collate your expert advice and plan how we report to Council through pathways with your presence where possible, to seek Council endorsement to begin implementation of priority actions that'll materialize a bright, revitalized, prosperous, and sustainable city for Melbourne."



**CITY OF  
MELBOURNE**

—OFFICERS

City of Melbourne, NZI sponsor, ULI Australia NZI TAP



ELEMENT 1

# Technical Assistance

Central to the NZI programming is supporting ULI district or national councils as they design and implement a technical assistance panel to address local net zero challenges and identify locally relevant solutions for the community. These panels convene local and international experts to bring in the best practices from different viewpoints. NZI participants then publish a ULI TAP report to disseminate findings broadly. These processes have resulted in positive impacts and mobilized many resources, totaling:

1,500+ hours volunteered by ULI members

15 TAPs completed

2 Advisory Services panels completed

375+ stakeholder interviews conducted

100+ expert panelists participated

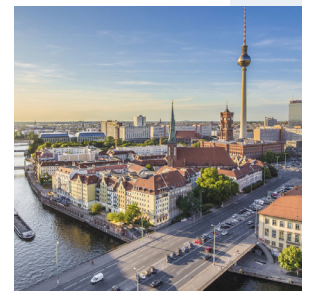
\$750K+ in grant funding distributed to local communities

\$300K+ in additional funding leveraged through local sponsor matches



The ULI Berlin Advisory [Services] panel presented our thoughts on the net zero carbon challenge as it related to two Berlin neighborhoods. I love working with my talented, passionate, and knowledgeable panelists to come up with ideas to meet the challenge. I was reminded that on-the-ground action is great—but when delivered within a wider framework of policy, partnership, and funding, impact is magnified. Change is possible.”

—EXPERT PANELIST  
ULI Germany NZI/C Change Advisory panel

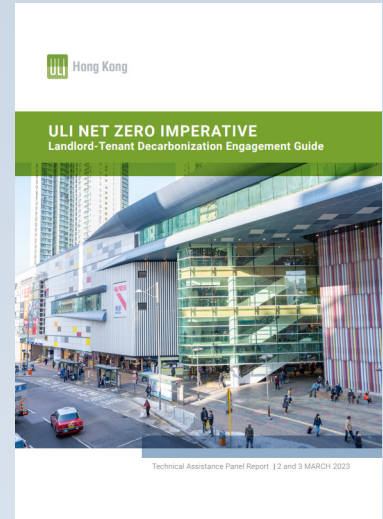


## Hong Kong Engages with Tenants to Decarbonize Leasable Space

ULI Hong Kong participated in Cohort 2 and is continuing their involvement through implementation efforts in Cohort 4. The council is continuing to implement recommendations focused on tenant engagement with partner and sponsor Link REIT, which primarily leases to small- and medium-sized retail tenants in community mall settings.

From ULI Hong Kong's perspective, the largest impact of their NZI efforts was to better understand small- and mid-sized tenants, who typically do not have resources, information, or capacity to integrate sustainability into business practices and are usually not the core audience of ESG conversations.

Since participating in NZI, Link REIT has integrated the NZI recommendations into their core business planning, and significantly broadening their impact as Link also engages with the public housing sector in Hong Kong. Several other notable developers have also followed suit and announced their own tenant engagement strategies, both amplifying and scaling the NZI efforts locally. These cascading efforts indicate changing market practices as they relate to decarbonization in Hong Kong.



**Charlotte, North Carolina**, developers communicated a need for tangible carrots to advance efforts to build more sustainable buildings. ULI Charlotte's NZI TAP connected the developers directly with the public sector. The panel presented recommendations to developers and to the City of Charlotte encouraging future sustainability collaboration. The City's chief sustainability officer has participated in conference panel presentations with the NZI team on their efforts and has prioritized two of the recommendations from the TAP for implementation, which are currently underway. One useful suggestion was to incentivize developers to create sustainable buildings by providing expedited permitting, reducing their overhead costs.



The ULI Net Zero Imperative plays a critical role in bringing the topic of building decarbonization to the Kansas City metro area. The TAP exercise provided a clear roadmap to local policy leaders, brought credibility to our current pursuit of private and public capital, and is a key catalyst in making the 'Energy Efficiency Investment Fund' a reality."

—DAN COLLISON  
Expert panelist, ULI Kansas City NZI TAP



1,900+ page views and downloads for Cohorts 1–3 technical assistance panel reports (13 total reports)

## ELEMENT 2

# Long-Term Engagement and Implementation Efforts

A strong focus of NZI is leveraging the momentum built during the program to produce actionable recommendations and avoid missed opportunities. Implementation support is provided for post-technical assistance activities that catalyze and advance priority recommendations. ULI also organizes regular follow-ups (through annual interviews, surveys, and peer connections) with past NZI participant sponsors and local ULI staff to encourage continued local engagement and action, and to capture changes and impacts.

5 implementation grants awarded

30+ local sponsoring organizations



## Chicago Brings Together Public and Private Sector to Streamline Decarbonization Retrofits

ULI Chicago began its participation in NZI in Cohort 2 and is continuing in Cohort 4 to expand and deepen their impact through implementation. In Cohort 2, they focused on deep retrofits to prepare the region for climate change through focused workshops with dozens of stakeholders throughout 2022 and 2023. These efforts culminated in a robust and [actionable TAP report](#) and an incredibly well-received launch event that was picked up by several media outlets in the region, including [ConnectCRE](#) and [The Real Deal](#). Based on annual progress check-ins and interviews between ULI HQ NZI staff and ULI Chicago, in just over two years, leadership and membership are now energized, passionate, and much better equipped to advance the region toward net zero goals.



Through NZI, I have gained an appreciation for the sheer complexity of thinking about how to build smart, how to adaptively reuse, how we make certain this is top of mind for people that are focused on other things in light of changes like remote work in the office space. The greatest value of the program is the opportunity to learn from other cities around the globe, and we've learned a great deal. I am truly excited to be focusing . . . on action; action is what we need at this critical juncture.”

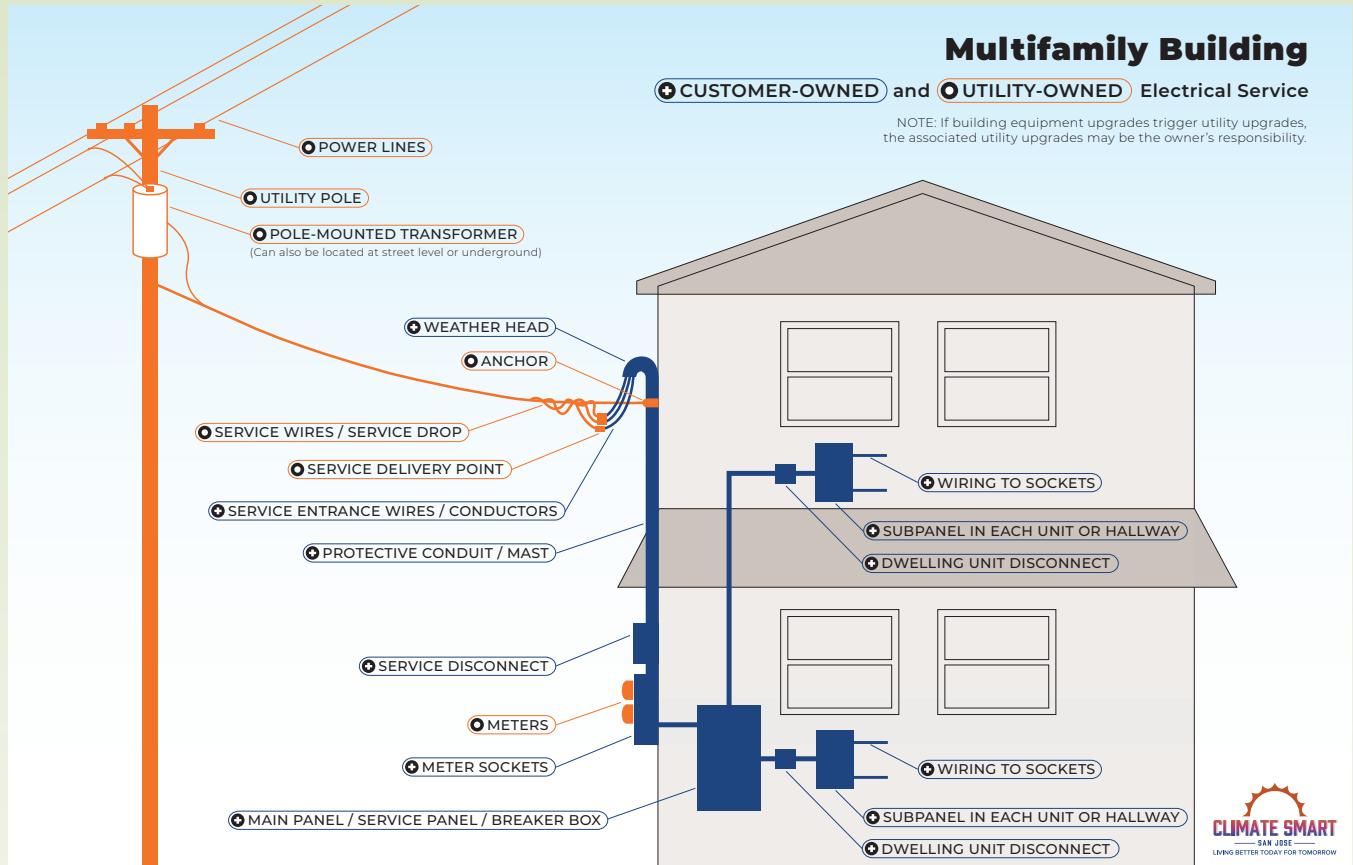
—MARY LUDGIN

NZI chair, ULI Chicago, NZI Cohorts 2 and 4



Various implementation efforts have helped initiate net zero actions. Actionable recommendations from the technical assistance efforts are critical to prioritize decarbonization. NZI provides implementation funding post-technical assistance to encourage action on these priorities and to continue the momentum. Examples of NZI implementation efforts include a

green leader video interview series, a district energy expansion plan with the public sector, webinars and convenings, and promotional or launch events. NZI participant testimonies express how being a member of the Net Zero Imperative has helped them to leverage additional support, research, and action beyond the original grant funding as well.



## City of San José Co-Creates Electrification Resources to Clarify Utility and Owner Responsibilities

A recommendation from [ULI San Francisco's NZI panel](#) focused on the need to educate the public about what electrical upgrades look like for building owners and utilities. A recurring challenge in communities is understanding ownership and responsibility of electrical upgrades (e.g., electric vehicle–charging infrastructure, building electrification, etc.). ULI San Francisco used implementation funding to create two graphics detailing the difference in utility versus customer ownership for electrical upgrades—one for multifamily buildings and one for single-family buildings. These tools helped to delineate the lines of responsibility, helping to facilitate building electrical upgrades. The City of San José shared these resources in public presentations and ULI San Francisco has amplified them through local newsletters, meetings, etc. An [Urban Land magazine article](#) was also published to help share the story and deliverables.

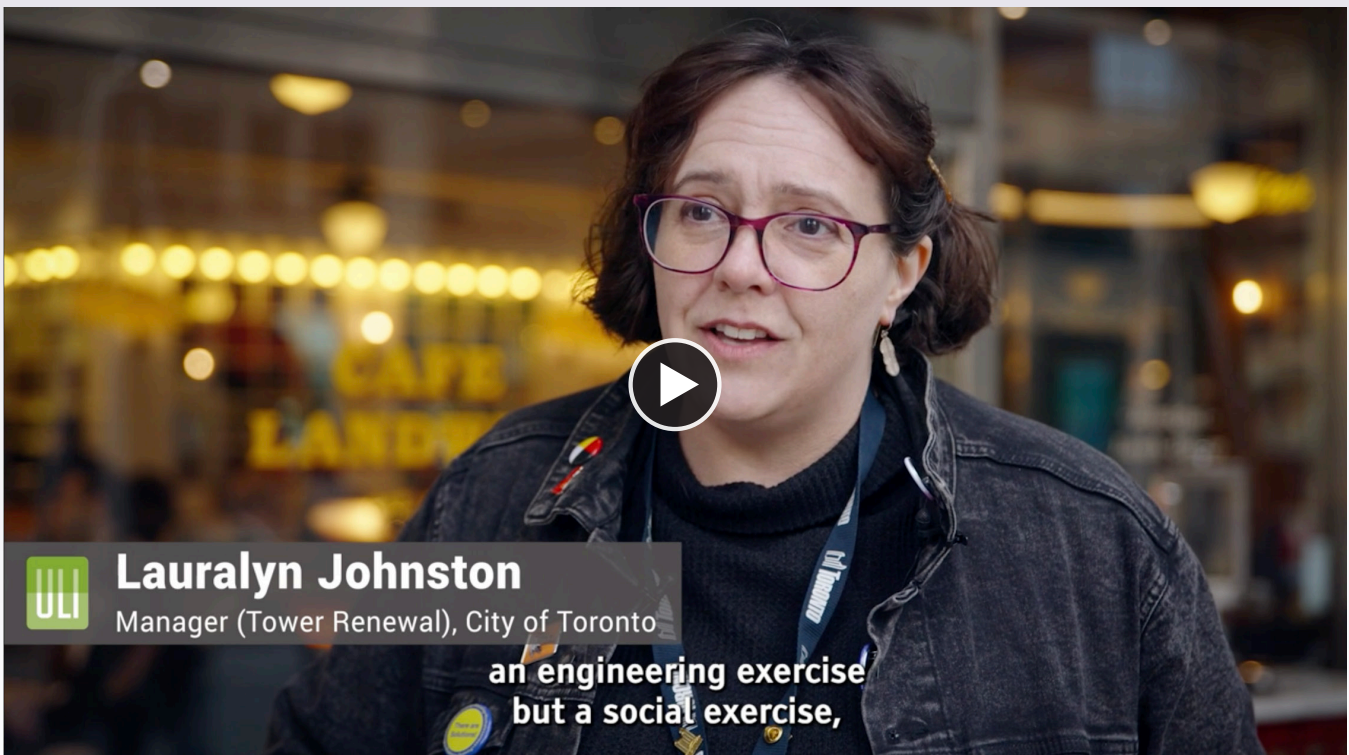
### ELEMENT 3

## Global Cohort

Net Zero Imperative participants join monthly global cohort virtual calls to swap ideas, tackle challenges collectively, and learn from global experts about emerging practices. This critical monthly collective, which has been described as incredibly valuable by program participants, is open to both current and previous NZI participants, meaning over time the conversations have become richer and more inclusive of cities at various steps along the journey to net zero. At ULI meetings, NZI participants can meet in person to increase their professional network with other decarbonization practitioners. Cities can elevate their local decarbonization work among a global community.

By holding monthly calls, cities can connect directly to discuss similar challenges and avoid reinventing the wheel. For example, thanks to the global cohort, ULI Mexico and ULI Kansas City were connected to discuss the success of green banks and similar financing opportunities. ULI Australia and ULI Germany also connected via the NZI network to discuss assets at risk of stranding and opportunities to decarbonize these buildings instead. To enhance conversations and make professional connections, ULI has also brought experts in federal funding, green financing, ground-source heat pumps, and sustainable retrofits to present to the global cohort.

The NZI program overview video below describes the value NZI participants have received through their global cohort connections.





We joined NZI to get access to some of the best thinking globally through ULI. The Net Zero Imperative really was an amazing vehicle for us to get the best practices and, frankly, to share some of the best practices. Some of the things we're doing here in Toronto are great lessons for the rest of the world; it's been a valuable exchange. NZI brought our own city officials, individuals, and practitioners in the real estate space to really get a sense of what is happening, and it has given us a greater sense of urgency and resolve to get the job done. Because if we didn't do that, we would be operating in a vacuum, and that would not, I think, encourage us to do more than we can."



—RICHARD JOY  
Executive director, ULI Toronto



The ULI Net Zero Imperative is a gift to all. Thank you. One of the NZI's aspects that I enjoy most is that it is GLOBAL. At our last cohort Zoom there were excellent (and well-illustrated) presentations from friends in Germany. Inspiring, informational, and so wonderful to see all that good people are doing around the world. The alignment of public and private sector people, developers, policy-thinkers, and others were great. And ULI's great staff (thank you Celeste Smith and Chris Perkes) always follow-up with the presentation and useful notes. Another aspect of the NZI program is built into its name—IMPERATIVE. It is not a Net Zero Program, or Initiative, or a 'would be nice thing to do.' As an imperative it is well-named and makes a difference. We at ULI Minnesota were honored to be involved and trust that the work will be the groundwork for the near future in our neighborhood."



—NICK KOCH  
NZI panelist, ULI Minnesota

## ELEMENT 4

# NZI-Inspired Global Resources

The Net Zero Imperative also investigates common barriers to building decarbonization through resources, reports, and conference sessions. These resources are housed in the [Net Zero Compendium](#) and respond to the needs, barriers, and opportunities identified via the TAPs and cohort engagements.

While each Net Zero Imperative cohort member tackles a local net zero challenge, program staff and the global network surface common threads and work to create resources that address these overarching challenges. Below are examples of the resources funded through the Net Zero Imperative:

[\*Pumping Up Sustainability: Myth-Busting Heat Pumps in Commercial Real Estate\*](#)

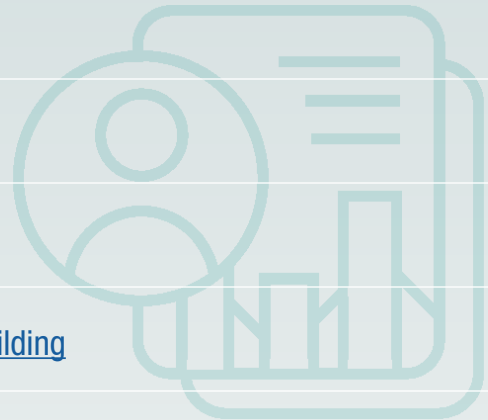
[Induction Cooktop Demonstration](#)

[\*Net Zero for All\*](#)

[Net Zero Deal Profile: HopeWorks Station North](#)

[Net Zero Deal Profile: Entegrity Energy Partners' Network Building](#)

["Nature Positive and Net Zero"](#)



Equity is a priority for NZI as demonstrated in the [Net Zero for All](#) report that highlights the intersection of sustainability and equity. This cornerstone report has been shared with the wider community through [conference sessions](#), webinars, and [online magazine articles](#). This report is in direct response to recommendations from multiple Net Zero Imperative TAPs and is just one example of many on how ULI is centering equity in our programs of work. The NZI application also centers equity through various equity-related questions and is prioritized throughout the review process. Several NZI efforts have also directly engaged the topic of equitable net zero practices, such as in ULI Minnesota and ULI British Columbia.



I am a ULI member in Indiana and am teaching a class this semester on sustainability, affordability, and justice for students at Indiana University. We watched the Net Zero for All webinar and . . . it was such a rich conversation. The learning from the ULI webinars is top notch!”

—ULI MEMBER



## Cultivating Energy Codes: Innovation and Collaboration for Achieving Zero Emission Buildings



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Frontier Energy



**Ada Shen**  
Frontier Energy

[gettingtozeroforum.org](https://gettingtozeroforum.org)

Other common recommendations from NZI TAPs included the need for more information on U.S. federal funding, educational content for heat pumps, and additional net zero case studies and deal profiles. As the global cohort continues to grow, net zero resources will be created to help support decarbonization.

The NZI program will also amplify the progress, impacts, and successes of district councils through external presentations, webinars, live events, and videos.

One example of successful live events has been holding [induction cooking demonstrations](#) at ULI Fall and Spring Meeting conferences. These events have given real estate the opportunity to try induction for themselves, while hearing from peers who have successfully incorporated induction into their typical design.





# Key Recommendations across Cohorts: Localized Solutions, Global Perspectives

The more than 20 NZI-supported implementation and technical assistance efforts completed or in progress as of the third NZI cohort offer opportunities to extract common learnings and insights. While each NZI effort has its own local nuance and context, the five recommendations below illuminate shared insights from across the panels.

## KEY RECOMMENDATION 1

### Integrate Renewable Energy and Building Electrification

*Efforts to decarbonize must link building electrification efforts with larger-scale renewable energy investments alongside capital budgets planning.*

At the core of building decarbonization is the technical exercise of removing fossil-fueled systems and infrastructure, which is primarily made possible through selecting clean, renewable energy and electrifying the building and community. This critical process tends to have common steps and best practices, such as forecasting capital expenditure budgets and having plans in place for end-of-useful-life of aging infrastructure systems. Importantly, relationships with utilities are also key to understanding the business case of electrification, their own decarbonization goals and plans, and which renewable energy systems are locally appropriate for effective and equitable integration.

ULI San Francisco held an Advisory Services panel on electrification and renewable energy for San José, California. As an implementation step, they created graphics that identified where ownership falls for electrical upgrades in a single-family home or a multifamily building during the process of electrification.

#### Related Resources:

- NZI Cohort 1 Feature – ULI Los Angeles Bunker Hill net zero TAP report: [Distributed District Energy](#)
- NZI Global Cohort Feature – [Industry expert speakers](#) from Taurus Holdings and HEET shared their expertise on electrification and thermal energy networks
- NZI Resource Feature – [Induction cooktop demonstration events and video](#)

ULI Los Angeles

#### DISTRIBUTED DISTRICT ENERGY: A POTENTIAL CATALYST FOR EQUITABLE URBAN DECARBONIZATION



TECHNICAL ASSISTANCE PANEL REPORT | OCTOBER 2022

## KEY RECOMMENDATION 2

# Increase Stakeholder Engagement and Collaboration

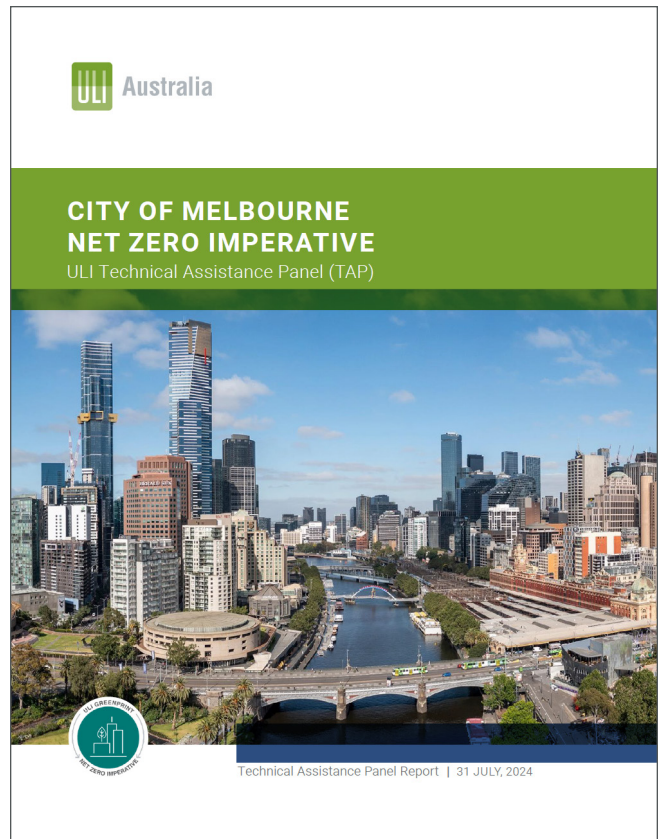
*Public- and private-sector partners must engage and collaborate with a broad cross-section of community stakeholders. Bringing the community along throughout the journey to net zero helps build champions, coalitions of action, and long-term buy in.*

Throughout each NZI effort, one of the core commonalities was the intention and focus on engaging all stakeholders and decision-makers related to their scope early and often. TAPs inherently build in stakeholder interviews, which ensures that the scope questions are answered and informed by each stakeholder group that would be impacted by the recommendations. The TAP panelists are balanced in the public and private sectors, as well as local and nonlocal, to ensure that diverse and representative perspectives are provided. Regardless of scope, having buy-in from the key partners and implementers ensures that the recommendations are more actionable and pragmatic.

ULI Australia convened a TAP to work with the City of Melbourne on the Zero Carbon Precincts pilot that is replicable across Melbourne and Australia more broadly. They worked closely with local real estate professionals to better understand carbon asset stranding risk, as well as available incentives and regulatory compliance needs.

### Related Resources:

- NZI Cohort 2 Feature – ULI Hong Kong TAP report: [Landlord-Tenant Decarbonization Engagement Guide](#)
- NZI Cohort 3 Feature – ULI East China (Shanghai) TAP report on embodied carbon: [Net Zero Imperative](#)
- NZI Resource Feature – [Net Zero for All: A Just Transition for Real Estate](#)



### KEY RECOMMENDATION 3

## Identify Financial Incentives and Support

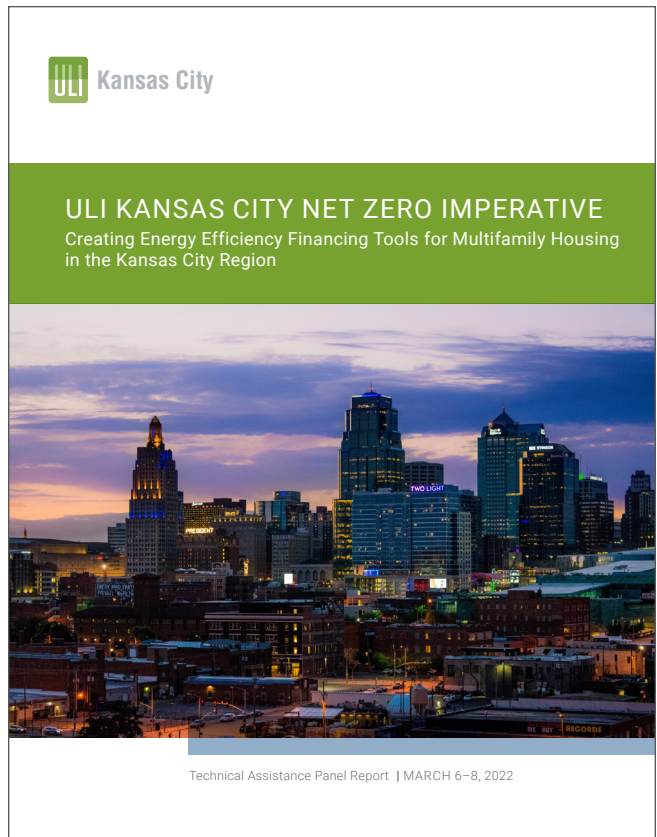
*Financial mechanisms such as rebates, financing, and incentives are essential tools to accelerate adoption, reduce potential “early-adopter” anxieties and cost premiums, and help stand up new markets for net zero technologies, services, and solutions.*

Decarbonizing the built environment requires deep partnerships and cost-sharing to implement sustainable solutions. While the real estate industry has expertise in crafting business cases to secure financing, public-sector support is also essential to accelerate (and not hinder) this journey to net zero through offering rebates or other incentives that encourage more sustainable buildings. For example, green financing and lending through programs such as commercial property assessed clean energy (C-PACE) also offer competitive, below-market interest rates for building decarbonization investments. As the scale of the climate challenges crosses community jurisdictions and is often larger than many local budgets can absorb, a spotlight on larger governmental body funding sources, such as federal incentives, grants, and tax credits through the United States’ Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA) has increasingly come into focus for NZI cohorts.

Several of the Americas-based ULI district councils conveyed deep interest in leveraging federal funding through BIL and IRA to decarbonize their communities. ULI’s Randall Lewis Center for Sustainability in Real Estate and the NZI program have created a [federal funding resource page](#) to socialize and disseminate information on how to use these generational investments for sustainable development. Through articles, guest speakers in global cohort meetings, in-person events, and panel sessions at ULI’s primary conferences, the program has assisted in the uptake and impact of these sustainable funding programs.

#### Related Resources:

- NZI Cohort 1 Feature – ULI Kansas City TAP report: [Creating Energy Efficiency Financing Tools for Multifamily Housing in the Kansas City Region](#)
- NZI Cohort 2 Feature – ULI Charlotte TAP report: [A Roadmap to Net Zero for New Commercial Buildings](#)
- NZI Resource Feature – [Green Finance Unlocked](#)



#### KEY RECOMMENDATION 4

## Conduct Educational and Awareness Programs and Campaigns

*Raising awareness and providing education on net zero benefits and practices are crucial to inform communities and raise adoption of sustainable practices.*

Related to but distinct from stakeholder engagement, socializing the community’s decarbonization efforts through local programming is an effective way to broaden participation and amplify the successes and challenges of early movers. ULI’s unique position as a neutral convener helps to create an open forum for sharing and educating the relevant communities on the importance of building decarbonization. Successful local NZI programming has included supporting parallel tracks while planning for the TAP with a regular cadence of webinars, events, or panel presentations to share updates. Other methods leverage social media channels such as LinkedIn or Instagram to share recorded video interviews of trusted voices in the community and their engagement with net zero.

ULI British Columbia (Vancouver, Canada) chose to create a parallel community programming workstream to enhance the technical assistance efforts focused on decarbonizing affordable housing in the city. This bimonthly series of community programming began with an introductory level “101” on embodied carbon and culminated in an [incredibly well received and sold-out event](#) that charted the path forward to decarbonize their community and achieve net zero.

Related Resources:

- NZI Cohort 3 Implementation Feature – ULI Greater Bay Area (Shenzhen, China): [creation of the Green Future Innovation Alliance and Green Leaders Interview Series](#)
- NZI Implementation Feature – ULI San Francisco: [San José electrification graphics](#)
- NZI Resource Feature – [Pumping Up Sustainability: Myth-Busting Heat Pumps in Commercial Real Estate](#)



## KEY RECOMMENDATION 5

# Adopt Supportive Policy and Regulatory Frameworks

*Streamlining regulations and implementing supportive policies are necessary to facilitate easier transitions to net zero solutions and lower barriers to entry.*

In some ways, the most dominant force in achieving net zero—policies and regulations—define what is possible in a community. Every NZI effort touched on the topic in some shape or form, from recommending streamlined development processes to implementing embodied carbon accounting local zoning and building codes, and everything in between. What was apparent, however, was the salient underlying message that policies can either be supportive of building decarbonization efforts, or hinder them, and that this distinction wasn't always clear cut (i.e., one policy which made sense for one community may not be effective in another). Moreover, the increasingly concerning reality of brown discounts, transition risks, and stranded assets highlights the need for speediness to avoid losses to building owners, neighborhoods, and communities.

Each community must fine-tune its own policies to meet its own local needs to be effective. However, best practices can be gleaned to create a menu of options to be considered, which accelerates these community conversations and provides a clearer path ahead to net zero.

ULI Chicago's NZI efforts performed a deep dive into existing city regulations that would enable or hinder decarbonization retrofits in the city. Their NZI TAP report, [Climate Ready Chicago: Strategies for Accelerating Building Decarbonization](#), also helpfully scales the recommendations to both the building level and the neighborhood/city level. A key recommendation focused on strengthening the policy ecosystem surrounding decarbonization and aligning public funding and goals to those efforts.

### Related Resources:

- NZI Cohort 2 and 3 Feature – ULI Germany's two-phase technical assistance efforts partnered with [ULI Europe's C Change Program](#) to study stranded assets
- NZI Global Cohort Feature – ULI Germany (Berlin) and ULI Australia (Melbourne) were connected to share learnings from precinct and neighborhood-scale decarbonization



I have facilitated community and cross-sector leadership convenings for the Root District for more than three years. The ULI NZI cohort and TAP [were] seminally important to the work so far, in that the eclectic, diverse, and interdisciplinary leaders and their research built on what was accomplished to this point and brought forward very clear frameworks and salient points of reference for which all future development in the district can be measured.”

—DAN COLLISON  
Panelist, ULI Minnesota, NZI Cohort 1



# In the Rearview and on the Horizon

The NZI program launched in 2021 to accelerate the decarbonization of the real estate industry and our communities. The purpose of the initiative is to benefit, support, and advance the sustainability mission of ULI through activities designed to help owners, cities, and other relevant constituents reduce or eliminate carbon emissions associated with buildings.

The fundamental goal of the effort is to provide concrete ideas and strategies to stakeholders of the TAPs and the general public to accelerate the decarbonization of our buildings and cities and to make meaningful progress toward net zero. As 2030 and 2050 net zero deadlines approach, it's important to take stock of our successes, learn from our common challenges, and forecast where further exploration and collaboration are needed.

NZI was originally funded for five years. With the additional individual donations received after the Thomas family's original gift, the program currently has funding available for a sixth cohort in 2026. These remaining cohorts will continue to tackle local real estate decarbonization challenges across the globe through existing efforts and channels. While NZI has engaged with nearly 30 global cities to date, there is still great potential to partner with additional communities on the journey to net zero.

Surveys and annual interviews of cohort participants show a strong desire to continue to meet and collaborate in person, such as through an NZI workshop, forum, or symposium focused on implementing the NZI TAP recommendations. This would have a large cobenefit of also being able to spotlight and elevate ULI member champions who have engaged with NZI, who are core to

the long-term success and impact of the program. Over the years, the program has become well-connected with external experts, guest speakers, and partnerships with similarly situated organizations that can also help amplify impact.

Other emerging topics for future NZI-inspired resources and technical assistance include embodied carbon, refrigerants, leveraging artificial intelligence for decarbonization at scale, and deeper dives into implementing green financing and federal funding. Lastly, as the NZI team ties common threads together between the cohorts, additional toolkits, resources, dashboards, sample language for requests for proposals, and other actionable resources can be created by topical area, sector, or industry.

While NZI has passed the midpoint of its originally envisioned program length, ULI sees tremendous potential in expanding upon net zero technical assistance and implementation activities to be able to scale, amplify, and shepherd the impact NZI has seeded to date. ULI celebrates our successes and incremental impacts on the extended timelines of decarbonization, but there is work yet to be done. Join us in amplifying the scale of change we can cocreate today.

Act today and donate to ULI's Net Zero Imperative:

[www.uli.org/donate/nzi](http://www.uli.org/donate/nzi).

- [NZI video feature](#)
- [Learn more about NZI](#)

# Report Team

The ambitions of NZI would be impossible to achieve without the dedication and support of our members, volunteers, donors, and continued staff support from our network of district and national councils and ULI Headquarters.

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