



FORWARD DINING SOLUTIONS LLC  
PUSHING SUSTAINABLE KITCHEN DESIGN FORWARD



**Forward Dining Solutions LLC.**  
**Chef Christopher Galarza, Principal Owner**  
**133 Fox Chase Dr.**  
**Verona, PA 15147**



**FORWARD DINING SOLUTIONS LLC**  
PUSHING SUSTAINABLE KITCHEN DESIGN FORWARD

Dear Reader,

Thank you so much for reading this and for considering Forward Dining Solutions to assist you in your journey to an all-electric future. Forward Dining Solutions was realized in 2019, as a mission-driven, minority-owned business dedicated to creating a better culinary ecosystem by leveraging our passion for the culinary arts and our expertise in commercial kitchen electrification. Prior to our formation we began our journey by working with a multi-disciplinary team to develop the world's first fully self sustained university campus for Chatham University. Chatham University's Eden Hall campus also houses the nations first all-electric campus kitchen. We formed Forward Dining Solutions LLC. in response to Microsoft's request to help with the creation of their new all-electric home office in Redmond Washington.

In our relatively short time in operation we have consulted for some of the top firms in the nation and worked in development for several schools such as Castilleja all girls 6-12 school (Palo Alto, CA), and Pittsburgh Technical School (Oakdale, PA). We have also been instrumental in moving all-electric retrofit projects such as the Berkley Labs forward. We recently completed work on The Design Professional's Guide to Decarbonization of the Built Environment for the William J. Worthen Foundation. This guide will be a revolutionary document to help non-residential designers understand how to develop all-electric designs.

We are small but mighty and our intimate studio provides the attention and service to every project that only a smaller company can provide, while having the diverse experience and management capacity of a much larger firm.

At **Forward Dining Solutions** we believe in good design for all, and have world class culinary talent and expertise to provide forward thinking designs that promotes operational efficiency, employee safety, & guest satisfaction. We strive to be a socially-minded firm for community-centered projects and we pride ourselves in bringing our lived experiences to every project. We hear our clients - their stakeholders and their pain points, their needs, their budgets - working from day one to mitigate risk, get questions answered, and find creative solutions that satisfy the needs of everyone.

Good communication is the route to success for any project, and we preserve this by not only scheduling standing weekly client meetings for every project to make sure to be able to have that important time with the entire team, but we also use these as 'working meetings,' marking plans on Zoom together and creating documented sets with any alterations or new direction, followed with meeting notes. We do the same with extensive site notes during every construction meeting or site field visit, following up and getting items solved. We often **go above and beyond** to ensure our clients vision and goals are met and that the success of the projects are ensured.

Thank you,

*Christopher A. Galarza*

Chef Christopher Galarza, Principal Owner, Forward Dining Soutions LLC.

**COVER LETTER**





## VALUES

### Community

**Our projects build, impact, and empower the greater community. We seek to collaborate to develop sustainable initiatives, efficient landscape development, and legislative support for lasting community preservation.**

### Purpose

**Establish Synergy between sustainable efficiency and the reduction of gas reliance through education and understanding.**

### Innovation

**Within our network of expert collaborators, we work creatively to find solutions that meets the needs, budgets, and goals of our clients which results in high quality and high performance designs. Simply put we solve problems.**

### Perseverance

**Through hard work and diligence we work through all challenges with integrity and professionalism. We utilize our experiences, resources, and leadership to work smart and more importantly work as a team.**

### Commitment

**We are invested in as an open door of education, in addition to our project collaboration, community enrichment, and legacy contribution.**



## Forward Dining Solutions Brand Values and Mission

## Impactful Design

Helping Designers Sustainably Build Kitchens of the Future

### MISSION

Our mission is to build kitchens that promote safety, equity, and inclusion. We work with our clients to create state of the art kitchens to meet their individual needs while being mindful of operational, sustainability and budgetary goals.

### VISION

Most architects and engineers struggle with how to get Chefs on board with the idea of an All-Electric Kitchen, As one of the leading voices in commercial kitchen electrification we get projects moving forward with our ability to bridge the design world and culinary arts to get projects to the finish line.

Our vision is to affect lasting sustainable change, not just for the chefs inhabiting the space but for the guests who will dine in those establishments. Combustion fueled kitchens produce contaminants such as Carbon Monoxide, Carbon Dioxide, Sulfur Dioxide and particulates such as soot, smoke and other PM 2.5. and we know through electrification we can reduce these contaminants significantly.

Kitchen electrification is very important to us so we utilize our expertise as the only firm with real world working knowledge of how electrified systems work day to day; and by doing so work to ensure the culinary and cultural traditions are preserved and respected.

Forward Dining Solutions was born through conversations with industry professionals who sought to accomplish what we did with Chatham University. We saw a lack of understanding and sought to fill that void through peer to peer discussions and demonstrations. We now work diligently to educate the masses as well as our clients on the benefits of the elimination of combustible fuel sources in an effort to create a healthier and more comfortable ecosystem.

Through our work we have identified many benefits of kitchen electrification from thermal comfortability, to positive change in air quality, and even speed and efficiency of cooking, but most importantly of all is the reduction of emissions a building can give off. We have found that the adoption of electrified kitchens reduces kitchen EUI by more than half with a near instant ROI.

We understand that building costs are going up every quarter which is why we promote an approach that utilizes technology designed to save costs over the lifetime of the build.

# Chef Christopher A. Galarza

Principal Owner/ Culinary Sustainability Consultant

**Credentials:**

- Bachelors of Science in Culinary Management International Culinary Schools at the Art Institute of Pittsburgh
- Co-Author: The Design Professionals Guide to Decarbonization of the Built Environment

**Membership & Awards:**

- The Confrérie de la Chaîne des Rôtisseurs since 2015
- The American Culinary Federation since 2012
  - Chef of the Year Nominee 2021
- Master Freemason Since 2022
- Building Decarbonization Coalition: Kitchen Electrification Group Member

**Boards and Non-Profits:**

- Advisory Board Member: The American Academy of Arts Pittsburgh Technical College, since 2013
- Board Member of American Culinary Federation Pittsburgh Chapter
- Treasurer of American Culinary Federation Pittsburgh Chapter

**Recent Projects:**

**Chatham University Eden Hall Campus**  
6035 Ridge Rd.  
Gibsonia, PA 15044  
Design and Operate all-electric state of the art kitchen utilizing latest in induction technology by working with multi-disciplinary team and state/local officials.

**Microsoft**  
One Microsoft Way.  
Redmond, WA 98052  
Instrumental in the decision to go all-electric and worked with their team to develop the design of their campus kitchens

**Castilleja School Grades 6-12**  
1310 Bryant St.  
Palo Alto, CA 94301  
Working with culinary and design team to develop all-electric kitchen and dining program

**Environmental Charter High School**  
Pittsburgh, PA 15232  
Developing first Passive House all-electric dining hall in Pittsburgh with pedagogy teaching kitchen space for active learning and development of students grades 9-12.

## PROJECT TEAM AND QUALIFICATIONS

# Chef Christopher A. Galarza

Principal Owner, Culinary Sustainability Consultant, Forward Dining Solutions LLC.

Entrepreneur, author, public speaker, podcaster, & Chef Chris Galarza is the Founder and Culinary Sustainability Consultant for Forward Dining Solutions LLC renowned for his work in kitchen electrification. As one of the country’s foremost expert in commercial electric-kitchens chef works with clients to sustainably create kitchens that promote healthy, efficient, and equitable working conditions. Chef has worked on notable projects such as Chatham University’s Eden Hall Campus (the world’s first fully self-sustained university campus), Microsoft Redmond, and Castilleja All-Girls School.

Chef worked for several prestigious establishments such as Carnegie Melon University, Monterey Bay of Pittsburgh, and The Greenbrier of WV where he apprenticed under several Certified Master Chefs and culinary Olympians. Chef leverages his experience as a culinarian, educator, and consultant to get projects moving forward and leaves operators educated and prepared to successfully, efficiently, and safely run their kitchen for years to come.





# Chef Gerard T. Kenny II

Partner/ Director of Strategic Operations

**Credentials:**

- Associates Degree of Science in Culinary Artistry - The Culinary Institute of America
- Graduate of The Greenbrier Culinary Apprenticeship (1 of 350)

**Membership & Awards:**

8-time National Medal Recipient, American Culinary Federation  
Building Decarbonization Coalition: Kitchen Electrification Group Member

**Relevant Projects:**

**Castilleja School Grades 6-12**  
1310 Bryant St.  
Palo Alto, CA 94301  
Working with culinary and design team to develop all-electric kitchen and dining program

Environmental Charter High School  
Pittsburgh, PA 15232  
Developing first Passive House all-electric dining hall in Pittsburgh with pedagogy teaching kitchen space for active learning and development of students grades 9-12.

**PROJECT TEAM AND QUALIFICATIONS**

# Chef Gerard T. Kenny II

Partner, Director of Strategic Operations, Forward Dining Solutions LLC.

Displaying a prominent presence early in his career, Chef Gerard found leadership and project management as a natural role. As Director of Strategic Operations for Forward Dining Solutions, Gerard aligns operational growth with management of sustainability, through organizational effectiveness and mentorship. These attributes have been instrumental with previous involvements with establishments internationally recognized by Forbes, Relais & Châteaux, and the Michelin guide.

Chef received formal training at the Culinary Institute of America in Hyde Park, NY. Receiving a High Impact Leadership Scholarship, Gerard was selected into the school’s advanced curriculum (A.C.E.) in tandem with his Associates degree in Culinary Arts. Following the CIA, acceptance in The Greenbrier’s Culinary Apprenticeship Program was the next endeavor. This three-year program, based on international culinary show competencies has produced numerous members of the ACF Culinary Olympic Team, Certified Master Chefs, and even Bocuse D’or participants. Since inception in 1957, this program has only 350 alumni, Chef Gerard being one of them.







**6035 Ridge Rd.  
Gibsonia, PA 15044**

Nestled on 388 acres of rolling woodlands and fields the “new farm” is an inspiring landscape supporting health and wellness while advancing an important idea – that suburban land can be developed as a net positive resource for urban areas. The campus generates more energy than it uses, is a water resource, produces food and recycles nutrients, and supports habitat and healthy soils while building eco-literacy.

**Chatham University Eden Hall**





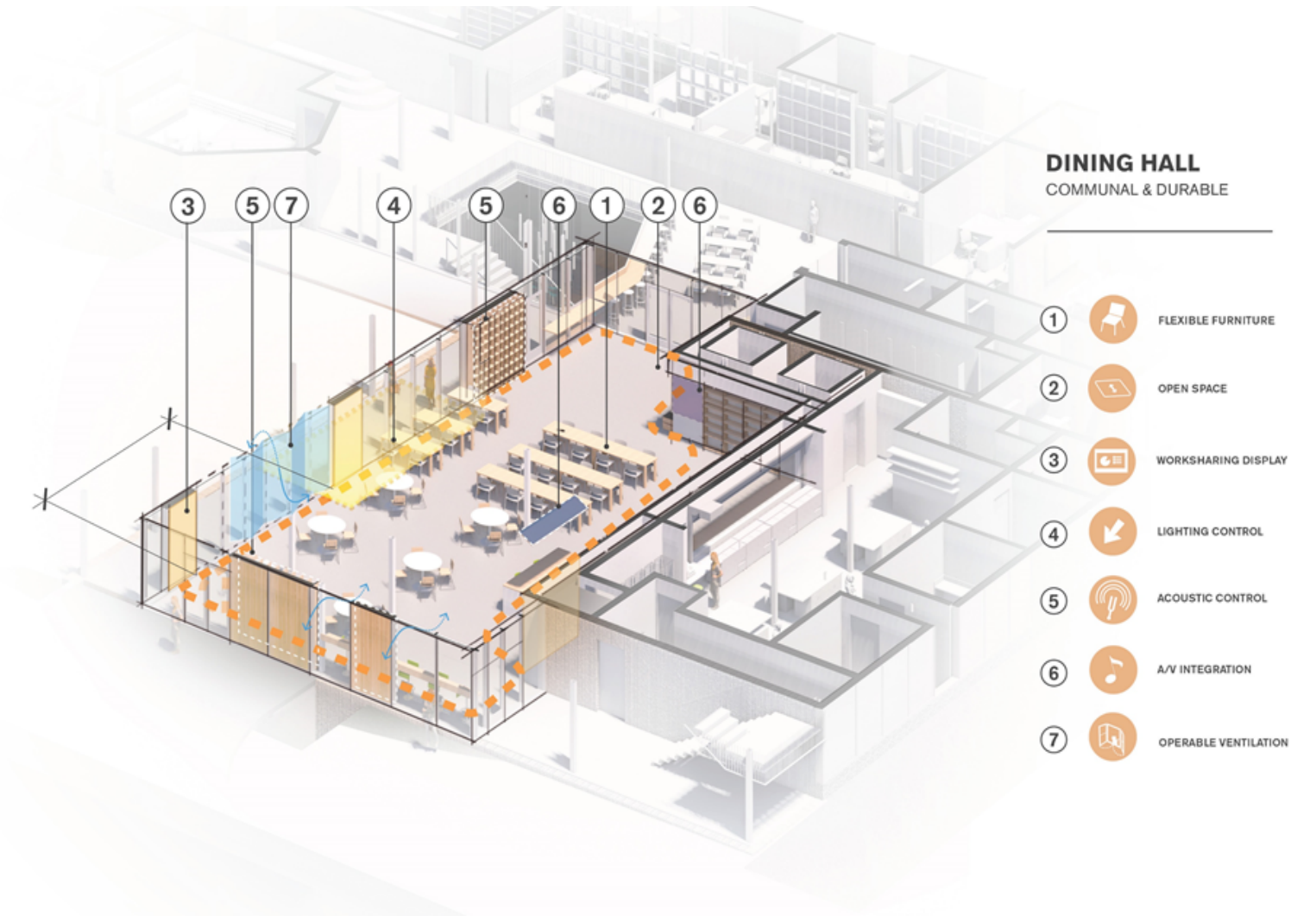
**One Microsoft Way.  
Redmond, WA 98052**

Microsoft's East Campus Modernization Project is a modernization of Microsoft's original campus replacing the original 14 office buildings with 3 million square feet of office and amenity space within 17 new buildings on a 72 acre site. The new office buildings are designed and clustered into four distinct areas blended together to create a unified campus. The campus will be designed for pedestrians and cyclists with no surface driving. All parking is contained below grade in a garage that connects and supports the areas above.

## Microsoft Campus Modernization Project







**1310 Bryant St.  
Palo Alto, CA 94301**

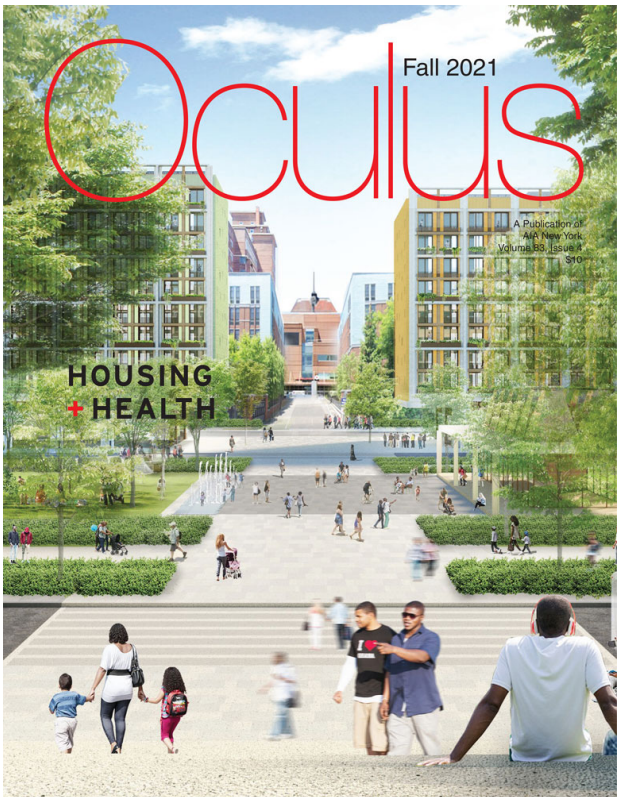
Originally founded in 1907, Castilleja School is the only independent, non-sectarian all girls middle and high school in the San Francisco Bay Area. Located in the middle of a Palo Alto residential neighborhood, the school worked with the community to develop a master plan to modernize the campus and create new dynamic learning spaces while minimizing noise and traffic impacts to the surrounding area. A new swimming pool built below grade, service delivery facilities relocated below grade and drop-offs/pick-ups from an underground garage are proposed to diminish Castilleja-related traffic and noise in the neighborhood.

**Castilleja School - All-Girl Grades 6-12 School**





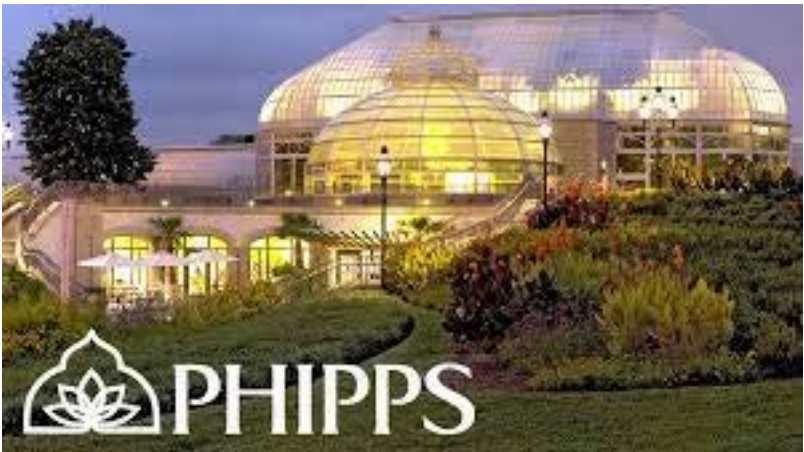
Recently Media Appearances:



*Click Photos to view*



Recently Speaking Engagement:





# Kitchen Design Services

- 1. Culinary Efficiency & Electrification Audit**
  - In person pre-project inspection designed to effectively identify the needs of the culinary program to ensure we create a kitchen conducive to culinary creativity, efficiency, and sustainability
- 2. Food Service equipment input guidance -**
  - Assessment and guidance to ensure proper equipment is chosen to benefit electrical efficiency and kitchen productivity needs as outlined in electrification audit.
- 3. General Food Service Input Guidance -**
  - While working with your architectural/design team(s) time will be spent on the layout, design, and specification that meet the needs of the food and beverage service.
- 4. Food Service Drawings review -**
  - Review of the Food Service Drawings by our electric kitchen subject matter expert to provide input on layouts and specification of the equipment and lessons learned from running an electric kitchen.
- 5. Post Construction inspection & Punch List Development**
  - In person inspection of facility, prior to building turnover, and subsequent development of punch list to ensure building is ready for department of health walk through.
- 6. Department of Health Walk through & Initial Approval**
  - Will coordinate with Department of Health to schedule Initial health inspection and walk-through kitchen with Owner/Client & Inspector to ensure any and all concerns are satisfied and Dining service company is approved for moving forward with opening.

And so much more...



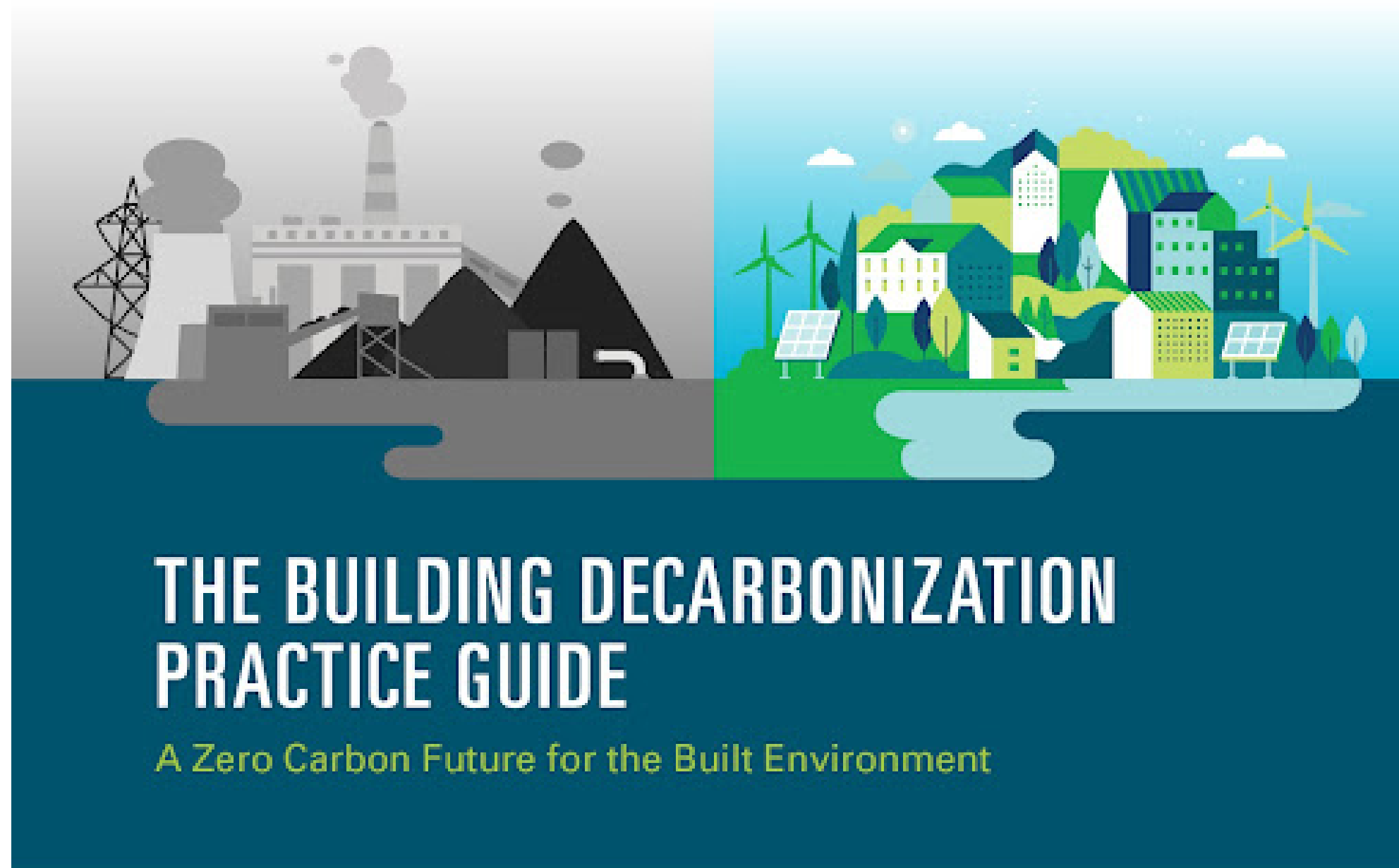
# Culinary Services

- 1. Menu & Recipe Efficiency Development**
  - Work closely with chefs to evaluate efficacy of their current menu on new electrification equipment.
- 2. Kitchen Organization & Efficiency Guidance**
  - Work with culinary leadership to develop strategies that promote and maximize kitchen utilization balance & equipment usage efficiency.
- 3. Culinary Talent Development**
  - Virtual Kitchen electrification webinar designed to instruct leadership on what to expect with an all-electric with follow up consultation with culinary leadership.
- 4. Culinary Electrification Staff Training**
  - Tier 1: Culinary training session designed to educate and demonstrate to staff how to properly use, utilize, and maintain an all-electric kitchen
  - Tier 2: Tier 1 package with an additional next day session for in person follow-up and production input to ensure previous lessons and materials are retained.
- 5. Culinary "Tech" Support**
  - 1 year open line of communication between our electric kitchen expert and culinary team designed to offer peace of mind and a safety net for any questions or additional trainings for incoming or existing chefs and anything that may come post project.

And so much more.

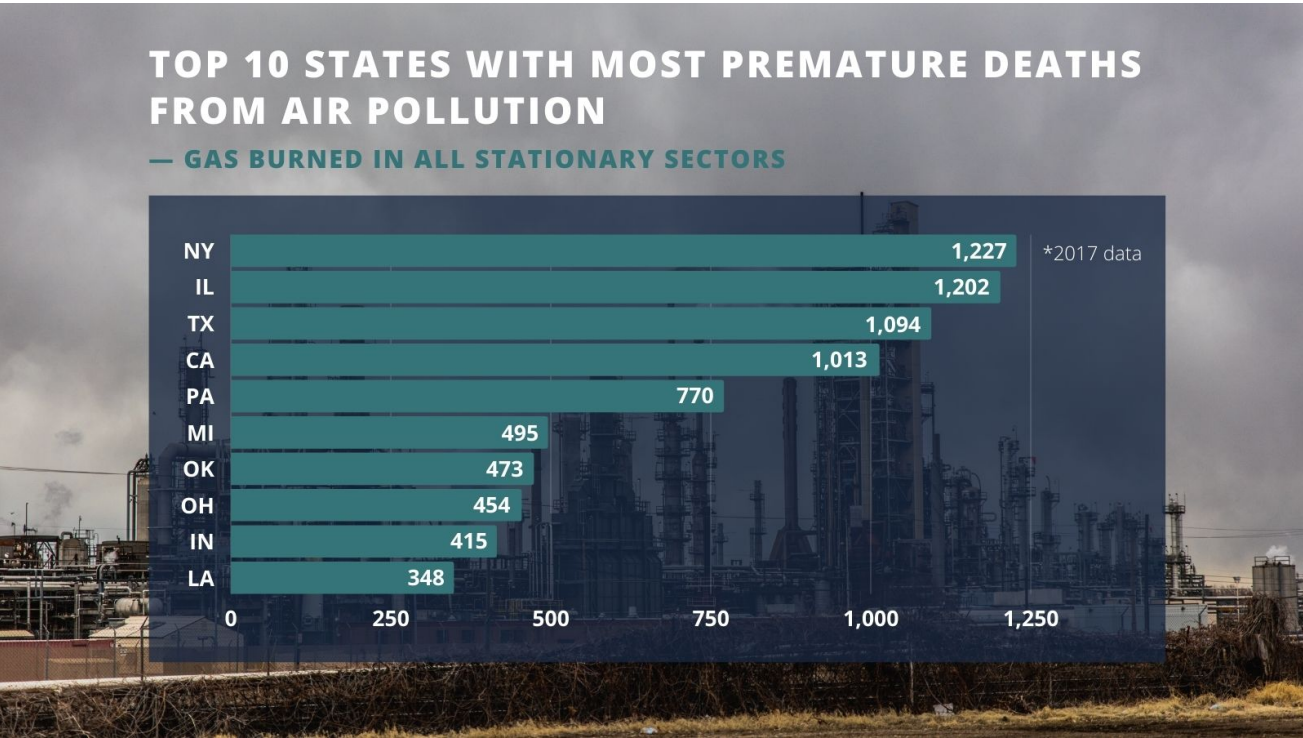


# The Design Professional's Guide to Decarbonization of the Built Environment



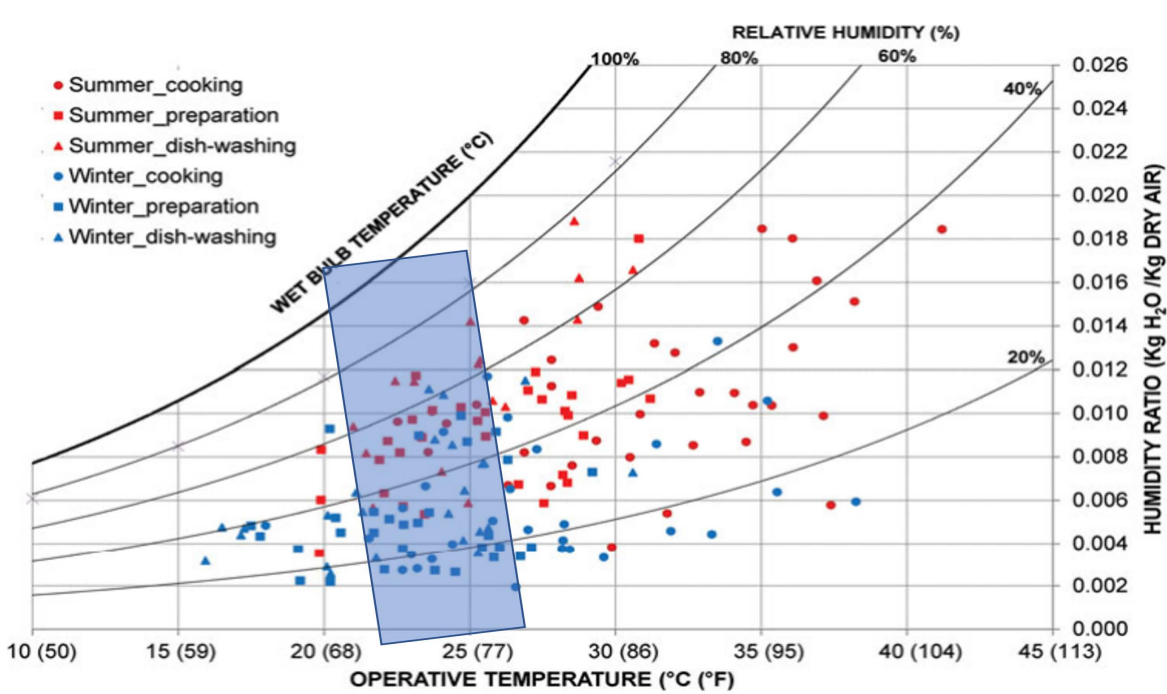
*Click Photo to view*





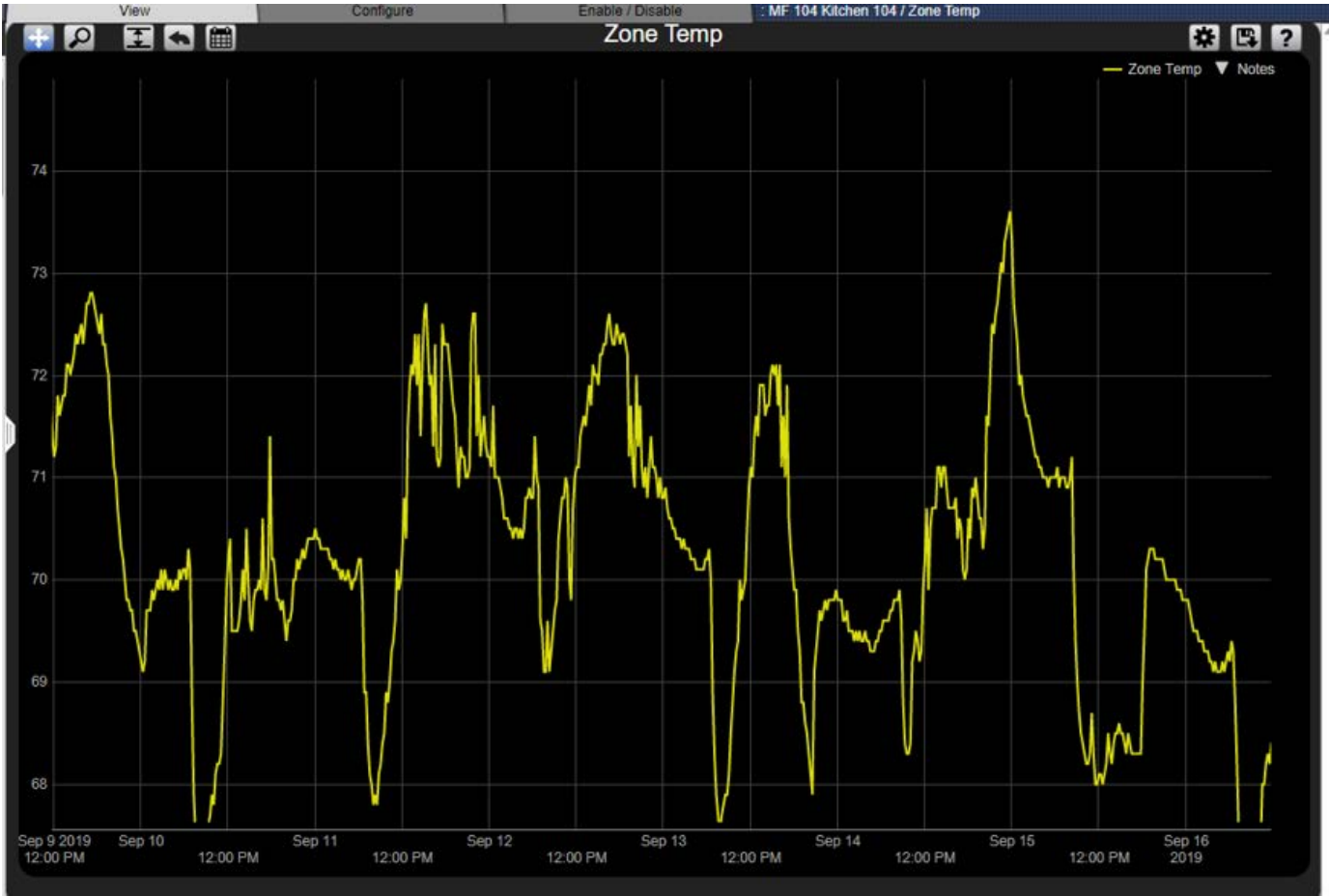
Uncovering the Deadly Toll of Air Pollution from Buildings

Burning gas, wood, and biomass in buildings now has more negative health effects than burning coal in many states, says a new study from Harvard T.H. Chan School of Public Health. The peer-reviewed study, published in Environmental Research Letters, is the first to examine the effects of burning different fuels and quantify those impacts in terms of both early deaths and monetary cost in the United States.



ASHRAE RP-1469 Thermal Comfort in Commercial Kitchens

The indoor climate in commercial kitchens is often unsatisfactory, and working conditions can have a significant effect on employees’ comfort and productivity. The type of establishment (fast food, casual, etc.) and climatic zone can influence thermal conditions in the kitchens.



Actual Data From Chatham University Eden Hall. Taken during Sept 10-16 2019, the Data shows that the kitchen never reached 72F despite outdoor temperature exceeding 85F.

Therefore the data concludes that it was cooler in the kitchen during production than it was outside.



# Podcast & Current Events

Sustainable Overload is here to offer up a perspective on the news and trends of today from gas bans to sustainability in and out of the kitchen along side a look into the life of your favorite chefs and industry leading designers. From engineers to architects and everyone in between.



OPERATIONS > WORKFORCE

## Biden proposes first safety standards to protect workers exposed to extreme heat

Restaurant kitchens are likely to be among the high-risk workplaces impacted by potential standards for extreme heat.

Hotter summers means more dangerous conditions for farm, delivery and kitchen workers

## Energy Star won't recommend any gas appliances on its next 'most efficient' list

Only electric versions of water heaters, furnaces, and dryers will get the ultimate efficiency award.



Click Photos to view

