

WYND 

CASE STUDY

WYND & United States Green Building Institute (USGBC) East Oakland Faith Baptist Church



Intersection of Indoor Environmental Quality and Energy Efficiency

Each year, the Greenbuild International Conference and Expo supports a Greenbuild Legacy Project, an effort to give back to the local community in gratitude for hosting some 10,000 attendees from across the country and around the world.

The Greenbuild Host Committee proudly awards the 2022 Greenbuild Legacy Project to California Interfaith Power & Light (CIPL) and WYND for a neighborhood resilience hub project at Faith Baptist Church in the city of Oakland.

Feature image: Pastor Curtis of Faith Baptist Church cutting the ribbon for the solar installation, along with RE-volve staff; Susan Stephenson, executive director of Interfaith Power & Light, Rev. Dr. Ambrose Carroll Sr., founder and CEO of Green the Church; and other Faith Baptist members and community members. Image credit: Faith Baptist Church.

California Interfaith Power & Light will receive funding for a neighborhood project.



Faith Baptist Church's focus on serving the community will particularly benefit vulnerable demographic segments, such as older citizens and children, who are more adversely affected by poor air quality and energy disruption events. Data from CalEnviroScreen, provided by IPL, shows that the Havenscourt/Millsmont community suffers disproportionately from **air pollution from surrounding industry, freeways and airports**. These public health concerns are further aggravated by **wildfire events**, making the facility even more important for the local, predominantly Black community.

“With worsening wildfire seasons and higher temperatures, people throughout California are increasingly exposed to dangerous, smoke-filled air and heat impacts,”

Rebekah Kokalis explained in CIPL's application.

“In low-income communities already dealing with poor air quality, like East Oakland, these dangers are exacerbated by the fact that many are unable to sufficiently insulate their home or invest in high-quality air filters or air conditioning.”





How do you know the air is safe?

The truth is, you don't...at least not yet. Your air (and everything in it) is invisible. That's where WYND comes in. We specialize in Indoor Air Quality (IAQ) optimization that enables healthy and comfortable environments through IAQ monitoring technology and advanced medical-grade air purification

WYND creates comprehensive and easily deployable air quality monitoring technology and software to continuously monitor your IAQ—keeping individuals healthy, happy, and safe.

Beyond simply displaying the pollutants it detects, the Halo provides in-depth reporting and recommendations. Our state-of-the-art Halo system also comes with a full suite of automation tools that operate in conjunction with your HVAC and air purifiers to maximize the health of your employees while minimizing the work on your end. With our comprehensive, data-rich IAQ software suite you can instantly track alerts, recommendations, building hotspots, reporting, and HVAC automation all from a single dashboard.

With WYND, you can stay on top of the quality of air each person inside is breathing.

The WYND Halo and the WYND Max work together harmoniously to monitor every inch of your space and ensure your staff's health, safety, comfort, and productivity.



The WYND Halo helps to optimize the IAQ of your building by continuously monitoring the air for over 19 metrics, including:

COVID-Related Metrics

- » Indoor air health index
- » Bio-aerosols
- » Ventilation

Health and Safety



PM 1



PM 2.5



PM 4



PM 10



VOC



Mold



Smoke



Smog

Comfort



CO2



Temp



Humidity



Light



Noise



Pollen



CIPL's project application stood out to the Greenbuild Host Committee-Legacy Project working group for its consistency in performance across all Legacy Project criteria, advancing all four of USGBC's core pillars through resilience, equity, health and wellness, and sustainability. In addition to serving the needs of the 700-person congregation, Faith Baptist Church aims to extend its support to the broader community by serving as a state-recognized resilience hub in the event of natural disasters.

CIPL and the church aim to share lessons learned with other projects in the country, a goal that resonated with the Greenbuild Legacy Project working group. Faith Baptist Church and CIPL will host workshops discussing the impacts of climate change on their neighborhood and how to adapt to these changes. Another partner, Green the Church, will use this project as a model to create a guide for other congregations on how to become resilience hubs. The guide will then be distributed among all three organizations. The resilience hub will also become a source of education and awareness for environmental sustainability, carbon reduction, and resilience for the community.

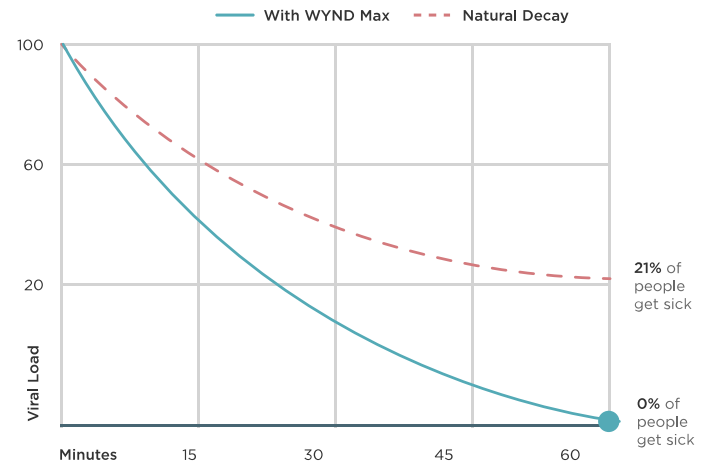
WYND Indoor Environmental Quality & Energy Information

Today's modern world needs to prioritize health and energy efficiency. Because COVID and other diseases spread mostly via the air, enabling a healthy air environment is critical. The HVAC system is often used these days to enhance air health via 100% ventilation, thicker filters like MERV 13, and higher air exchanges, but this practice can be quite energy intensive.

- Increases of 30-40% more energy usage of HVAC typically represents an increase of 12-16% more energy usage for the entire building.
- Also, doesn't necessarily represent better health outcomes.
- Lastly, central HVAC is flooding everywhere with improved air but people are more concentrated in specific areas where issues like disease spread are most worrisome.

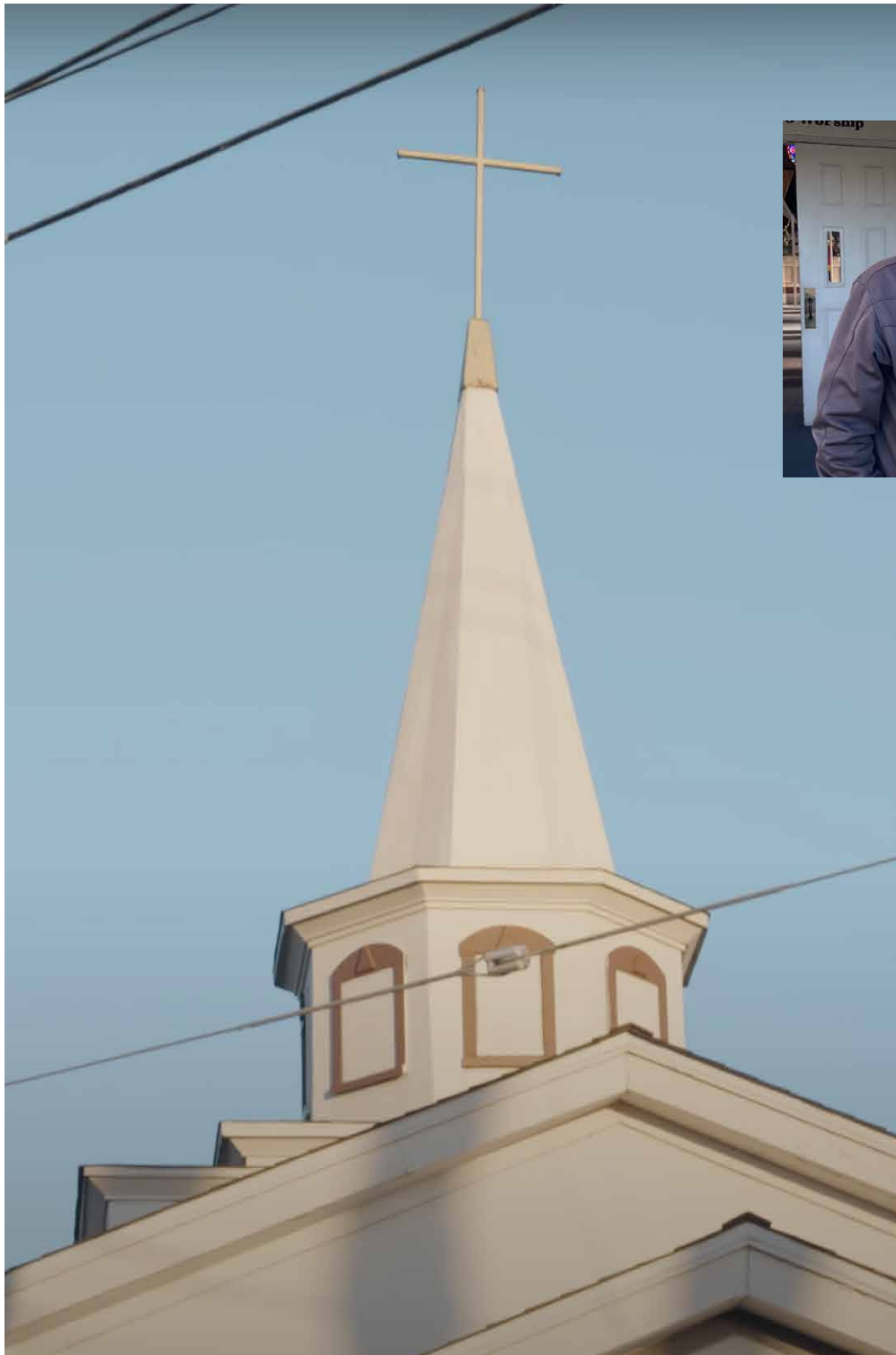
WYND Max

Reduce 99.9% of the viral load of the airborne H1N1 virus in 1 hour



Results: Third-party testing showed that in a 1,000 cubic foot space (10 x 10 ft), WYND Max reduced the H1N1 infection rate to 0% (versus 21% in the control cases).

The WYND Max Purifier combined with the WYND Sensor has shown a 5x decrease in disease spread and 30% estimated decrease in HVAC energy usage while enabling 5 effective air exchanges per hour.



Susan Stephenson, executive director of Interfaith Power and Light, says the team is feeling exceptionally blessed and grateful for the support. **“Our mission is to mobilize people of faith and conscience to take bold and just action on climate change,** and it is a privilege to take action with Faith Baptist Church to advance climate justice. As a community that has been historically marginalized socially and economically, the creation of a local resiliency hub will greatly advance the community’s climate resiliency, support the community during wildfires and other disasters, and provide resources to safeguard the health and well-being of the most vulnerable within the community,” she says.



[Additional Information at wynd.ai](https://wynd.ai)
[and wynd.ai/sustainability](https://wynd.ai/sustainability)