



2020

SUSTAINABILITY & CORPORATE RESPONSIBILITY REPORT



A Letter for the Future



Stephen K. Melink
Stephen K. Melink
Melink Corporation Chairman & CEO

READ MORE
Steve walks the talk. In his latest book, Fusion Capitalism, Steve discusses how the threat of climate change is a chance for opportunity and leadership. Scan the QR code to learn more.



The clean energy movement is well underway. Nowadays, countless government, business, and education leaders are investing in solar and wind farms across the United States and around the world. Electric cars and batteries are slowly but surely going mainstream.

Yet how many of us complain about someone else not doing their part to lead on climate action, and then fail to do so ourselves? It is in this spirit that I make the Melink 2025 Pledge. Our company has long been a pioneer and leader in clean energy solutions and Zero-Energy Buildings, and now it is more incumbent than ever for us to walk the talk on our vision and mission.

- Every Melink Employee Owner shall select the clean power option from his/her utility. (The average monthly cost is the price of a cup of coffee).
- Every Melink Employee Owner shall drive an electric vehicle using clean energy. (Our benefit incentive, leasing program, and lower market prices should make this possible).
- Melink Corporation shall give everyone five years to transition to this commitment. If there are personal financial reasons preventing this, we will support the employee.



To further leverage this pledge, we invite our local, regional, and national partners to join us. It's a small premium to do the right thing, and it's getting smaller every day. Let's create more demand so that in five years it's cheaper than doing the wrong thing. We can only win if we all do our small part. Let's create a better world for our children and grandchildren — all of us, together.

Zero-Energy Buildings



Constructing HQ2

Melink’s second headquarters (HQ2) was completed in late 2019, doubling the company’s office and manufacturing space. HQ2 serves as a model Zero-Energy Building (ZEB) for architects, engineers, and contractors to learn best practices to mainstream ZEB construction.



NOVEMBER 2018
Twelve years after building HQ1, President Steve Melink breaks ground on HQ2, a prototype Zero-Energy Building (ZEB). The goal? To show the world that new (and existing) buildings can be made ZEB at a small cost premium of less than 15%.



DECEMBER 2018
The footprint of HQ2 is set, as excavating begins. The building plan is a similar size and layout with HQ2’s courtyard facing the original building.



MARCH 2019
HQ2 begins to take shape. The pre-cast concrete walls are erected. This concrete forms the base of the walls, which are constructed with built-in air gaps and foam to fully insulate the building.



APRIL 2019
The pre-cast concrete walls are completed, and the support beams for the second floor are installed.

MAY 2019
HQ2 is halfway complete! Steel for the second floor and roof is erected.



JUNE 2019
Concrete for the first floor is poured. The outside of the building is painted with primer and prepped for the next coats of paint.



JULY 2019
The mechanical and plumbing systems are installed. These systems make HQ2 a ZEB second to none. For instance, zone water-source heat pumps are installed in HQ2. These heat pumps transfer energy from the air to water, which heats and cools the building depending on the season.

AUGUST 2019
Next, HQ2’s interior is foam-insulated. Framework and electric installation begins. Window frames and glass are installed. The rain water cistern is added to the outside of the building. And a key part of HQ2’s Super Hybrid Geothermal HVAC System installation happens: the geothermal boreholes are drilled. The building’s geothermal set-up includes four wells and a Manifest™ pump system.

HQ2 approaches its 90% completion mark with many mechanical innovations being installed. Inside, the framing and drywall is nearly complete. Floors are epoxied, and the Super Hybrid Geothermal HVAC System is installed. The zone heating/cooling, plumbing, and electric is also nearly completed. Double-barrier doors and auto-shade controls for the windows are installed. Outside, the concrete sidewalks and asphalt parking lot are poured. The courtyard’s pavers are placed. The campus’ two ponds are combined into a larger one and lined with riprap to help prevent erosion.

SEPTEMBER 2019



With its landscaping completed, the greenest building in the world finally starts to look “green.” Fresh sod is laid down at the main entrance and courtyard, while the rest of the property is seeded and strawed. Inside, painting is wrapping up and flooring is installed. The geothermal loop is flushed, and the heat pumps are ready to function. Auto-dimming lighting and ceiling “clouds” (large tiles to absorb noise in the open-concept office space) are installed.

OCTOBER 2019



Construction begins on the parking lot’s bifacial solar PV canopy. This canopy generates electricity for the building, as well as nearly 40 electric vehicle charging stations. The first building tours are given to businesspeople, teachers, students, and green building advocates this month.

NOVEMBER 2019



HQ2 passes its final inspection. Furniture, including standing desks, is selected to match the building’s natural light, earth-tone colors, and open floorplan. The building features exposed ceilings throughout. A water feature is installed near the lobby for ambience and to help control the building’s humidity in the winter months. Repurposed materials are used for décor. For example, a conference room on the main floor has wood-paneled walls salvaged from a Thomas Edison phonograph cabinet factory located in Wisconsin. The wood is from a 200-year-old Hemlock, which now finds its home in one of the greenest buildings in the world.

DECEMBER 2019



HQ2’s first occupants, Melink Solar & Geo, move into the building.

JANUARY 2020

Landscaping was completed at HQ2 through the spring and early summer.

JUNE 2020



BOOK YOUR TOUR

All are invited to tour this Zero-Energy Building! Scan the QR code to book your tour.



A Vision: Zero-Energy Buildings & Melink’s HQ2

Why is ZEB construction so important? Commercial buildings and homes consume more than 60% of the energy in the U.S. and, therefore, represent much of our country’s carbon footprint. A growing segment of the building industry is calling for all new buildings to be Zero-Energy by the year 2030. Melink has proven that this can be easily achieved, 10 years ahead of schedule, with a relatively simple design strategy.

Because of global climate change, we need cost-effective building solutions, like HQ2, now. Renewable energy still only makes up about 20% of our country’s energy mix. Coal,

natural gas, oil, and nuclear make up the rest. We need to go from 20% to 80% renewables within the next 10-20 years. It’s time for the business sector to lead and create the clean energy economy of the 21st century.

To be clear, this is not just about protecting the environment. It’s about saving our planet and life as we know it. It’s about investing in our security, health, and economy. Who doesn’t want to be safe from more natural disasters in the future? Who doesn’t want to be secure from flooding coastlines and mass human migration? And who doesn’t want more jobs and long-term economic growth?



Architectural rendering of Melink’s HQ2 facility.

Therefore, HQ2 is not just another green project to say we “walk the talk” at Melink. Our building is helping revolutionize the building industry for the 21st century.



HQ1, Melink’s first building on its Milford, Ohio, campus.

ABOUT HQ1

HQ1 is the original building at Melink’s Cincinnati campus. Since the largest energy loads in most commercial buildings are typically lighting, HVAC and hot water, HQ1’s construction focused on how to minimize these energy drains. Many of HQ1’s technologies were not widely adopted (i.e. geothermal) or available (i.e. LED lighting) when the building was constructed in 2005. Now, these practices are more common in commercial building construction — thanks in part to revolutionary building designs like HQ1.

The building is classified as Zero-Energy, ENERGY STAR 99 Rated (only achieved by 1% of the population), and LEED Platinum-Certified. Its progressive integration of conservation, efficiency, and renewable technologies make it one of the greenest buildings in the world.

RENEWABLE ENERGY: CAPACITY & GOALS

The average cost of commercial office buildings in the U.S. is \$160-\$170 per square foot. Melink was able to build its Zero-Energy HQ2 at a cost of \$180 per square foot, which amounts to a premium of less than 10% over the average. Given this small investment and the long-term energy savings, the question is: *Why isn’t everyone doing this?* HQ2 has two unique renewable energy features that enabled it to achieve Zero-Energy status:

Super Hybrid Geothermal System This patent-pending system offers nearly the same energy savings as a conventional geothermal HVAC system without the high installation costs. The development of this new system was partly funded by the U.S. Department of Energy and utilizes heat sources and sinks that mimic a ground loop but are more cost effective.

Solar Parking Lot Canopy A large, bifacial solar PV canopy covers the main parking lot. This canopy powers the entire building and 39 electric vehicle charging stations, generating approximately 85 kW of clean energy. If Melink exports more energy back to the grid than it uses, the local utility grants us a billing credit.



HQ2 features a Super Hybrid Geothermal System, developed through a U.S. Department of Energy grant.

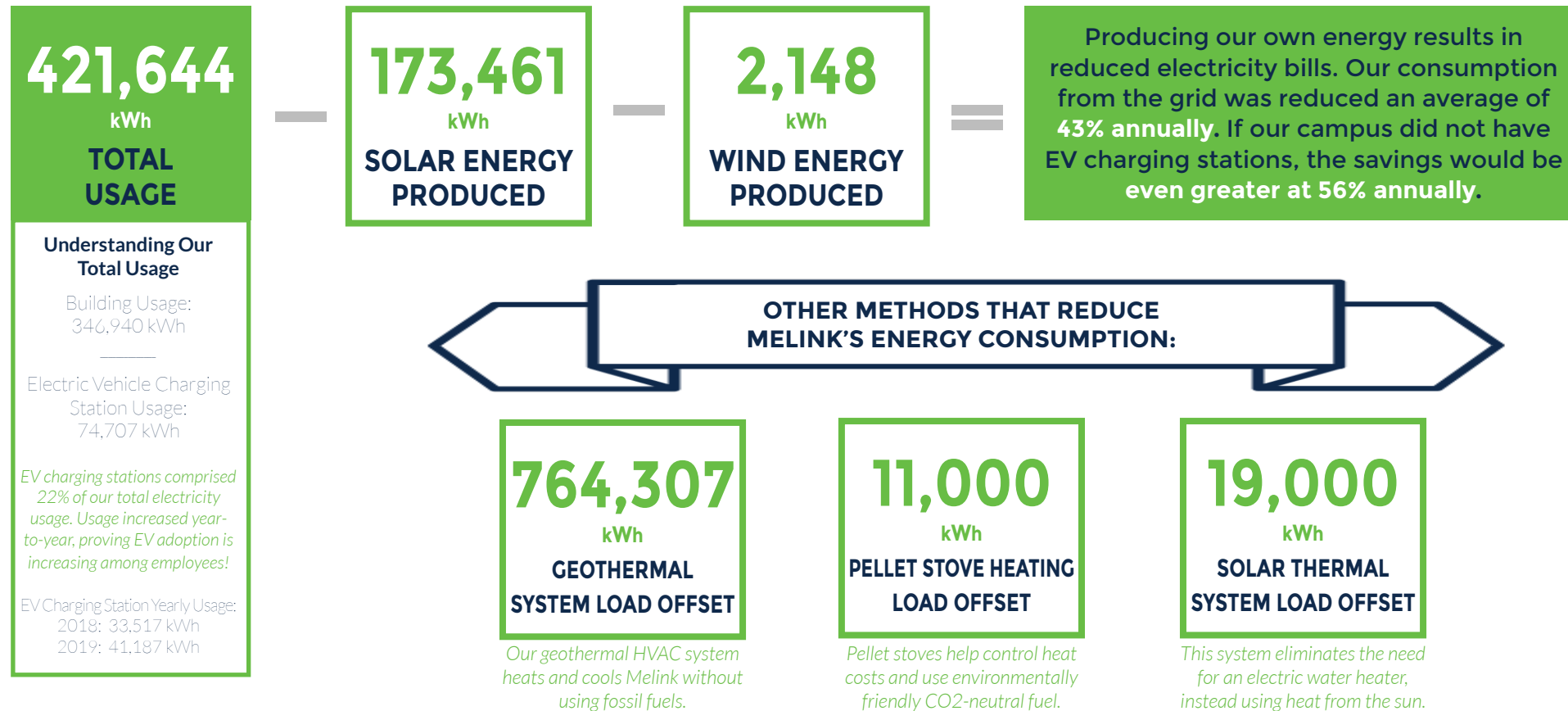
PACE FINANCING

To construct HQ2, Melink took advantage of a Property Assessed Clean Energy (PACE) loan, which finances energy efficiency and/or renewable energy improvements for commercial, industrial, and residential properties. PACE programs allow an owner to finance a property’s energy-related improvements and then pay the costs back over time through a voluntary assessment. In essence, the capital is provided upfront and paid back over 25-30 years through an assessment on the property taxes.

Our Campus By The Numbers

Achieving Zero-Energy is a balancing act that depends upon a number of variables. We've been able to achieve Zero-Energy for several years. In others, we've come close. During those times, we purchase power from the local utility to make up for the shortfall. Budgeting energy is similar to budgeting for your business. It's not an exact science with a certain formula.

From Jan. 1, 2018, to Dec. 31, 2019 (24-month review), Melink's usage and offset for its 31,237 sq. ft. HQ1 facility was:



SOLAR ENERGY PRODUCED AT MELINK'S CAMPUS

2018: 94,236 kWh

2019: 79,225 kWh*



WIND ENERGY PRODUCED AT MELINK'S CAMPUS

2018: 1,379 kWh

2019: 769 kWh**

OUR CARBON OFFSET WAS...



74 tons in 2018, equivalent to charging 31,391,986 smartphones.***



62.3 tons in 2019, equivalent to consuming 480 barrels of oil.***



WATER CONSUMPTION

Melink uses **79% less** water than the average office building.****

*In 2019, 25 kW of solar panels were removed from the campus during the construction of HQ2.

**In 2019, mechanical maintenance was performed on the wind turbine, resulting in downtime and decreased annual production.

***Carbon offset calculated with EV charging stations' output taken into account.

****Melink consumed 96,880 gallons of water in 2018 and 94,480 gallons in 2019. Per the U.S. Energy Information Administration, the average office building uses 15 gallons per sq. ft. per year. A building similar in size to Melink's HQ1 (approx. 30,000 sq. ft.) would consume an estimated 450,000 gallons of water per year.



5
ELECTRIC VEHICLES



48
HYBRID VEHICLES

MEET OUR FLEET

57%

OF EMPLOYEES DRIVE AN ALTERNATIVE-FUEL VEHICLE IN 2019



Our People

Reduce, Reuse, Recycle. Sound familiar? This is a way of life for Melink Employee Owners in the office and at home. Take a look at a few examples of how we support green living.

Thinking Green

WASTE MANAGEMENT

Melink has a dedicated program to process traditional recycling, compost, trash, and specialties (such as Plastic 5). Employees are encouraged to divert their waste from the landfill and to bring in recyclable products from home.

WASTE AUDITS

Melink’s Sustainability Committee conducts waste audits. This monthly check-in helps to answer questions (“What goes where?!”) and is a way to make sure we’re not “cluttering up” the recycling or compost streams with incorrect products. Consider this: In 2019, Melink’s average recycling accuracy rate was 79%, and our composting accuracy rate was 98%.

EMPLOYEES AT HOME
Check out how Melink’s Employee Owners walk the talk at home ...

RESOURCE EFFICIENCY

11%
Manage lighting with sensors & timers

49%
Have double or triple paned windows

60%
Use programmable thermostats

54%
Use ENERGY STAR appliances

34%
Manage water use with low-flow fixtures

92%
Use LED lightbulbs

RENEWABLE ENERGY

8%
Have installed home solar panels

32%
Select the renewable energy option through their electricity provider

LIVING GREEN

40%
Compost at home

5%
Have geothermal heating/cooling

16%
Collect rainwater for watering

Becoming an ESOP: “Think Like an Owner”

An employee stock ownership plan (ESOP) is a benefit that gives workers ownership in the company. Melink became an ESOP in 2018 to create an additional retirement benefit for employees, to share success among all employees, and to reward employees for their efforts to grow and support the business’ success.

The ESOP also allows the company to maintain independence as a green-energy focused business. It is viewed as a long-term, wealth-building plan that provides each Employee Owner with an equity stake in the company. Employee ownership very much complements our company culture and our core values of integrity, innovation, and service excellence. We have always had an “owner” mindset. Owners make decisions that are in the best interest of their customers, their fellow employees, and the overall business.

Various studies and surveys have linked ESOPs to higher returns, greater productivity, higher sales growth, and greater likelihood to survive as compared to conventionally owned companies.

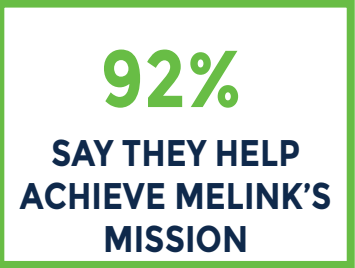


Melink’s core values.



Each year, one of our top objectives is to ensure Melink is considered a Great Place to Work®. How do we sustain and keep that momentum? We have to be transparent about our goals and actions; intentional about meeting the needs of our employees; and committed to providing a satisfying work life.

“The family atmosphere and the ability to make a difference, regardless of your level, are why Melink is a Great Place to Work.”



Surveys conducted by a third-party consultant, Great Place to Work® Institute. Results are from the combined averages of 2018 and 2019 surveys. Approximately 100 employees surveyed.

GIVING BACK

Melink Employee Owners give back to the local and regional communities. Many serve on advisory boards, committees, and interest groups to promote clean energy, green living, and wellness. We served the following organizations in 2018-2019:

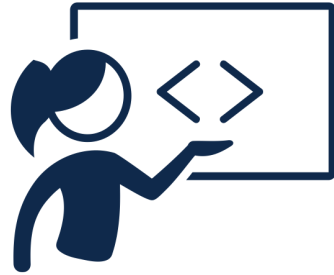
ASHRAE
Beyond 34
Cincinnati 2030 District
Cincinnati Office of Environment & Sustainability
Clermont County Senior Services

EV Cincy
Goering Center, University of Cincinnati
GoZero Composting
Greater Cincinnati Green Building Council
Green Energy Ohio
Green Umbrella
Green Workplaces Cincinnati
Keep Cincinnati Beautiful
Sonlight Power
Working in Neighborhoods

Employee Culture

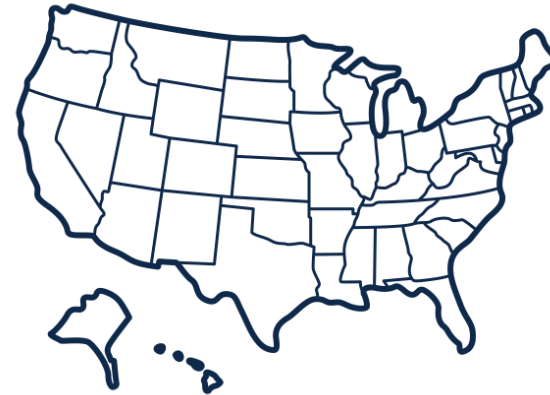


Meet Melinkers



**WOMEN COMPRISE
1/3 OF OUR
LEADERSHIP TEAM**

**VETERANS WORK
AT EVERY LEVEL
OF OUR BUSINESS**



**A NATIONAL NETWORK OF FIELD
SERVICE PROFESSIONALS**

MELINK HAS SEVERAL INITIATIVES IN PLACE TO DEVELOP TALENT:



A virtual resource library for self-guided learning materials



An ambassador program to welcome new hires



A co-op program employing multiple students per year



A young professional group for peer mentorship and networking

Our Business



The Melink Umbrella

What falls under the “Melink Umbrella”? What do we do as a business? Learn how Melink supports its mission of changing the world one building at a time.

To understand Melink’s portfolio of energy efficiency and renewable energy offerings, pretend you own a hotel or restaurant...



While not all customers have the potential to benefit from the full suite of our offerings, these complementary business units make us a strong partner.

We’re helping you invest in business growth in a responsible, sustainable manner.

Prior to leaving for work, you check Melink’s **PositiV**® app to see if your building is healthy for employees and customers. The app tells you the latest building health markers of CO2, temperature, humidity, and building pressure. You notice that your building pressure has been trending in the negative for the past week.

BUILDING HEALTH MONITOR

You notify your **Test & Balance** account manager that you’d like an investigative visit. You meet your Melink field technician, who identifies the outside air damper on your rooftop unit (RTU) has been locked shut, creating insufficient fresh outside air supply.

HVAC TEST & BALANCE

This situation could have been substantially worse; however, you have a self-learning adaptive control system that adjusts kitchen exhaust fan speeds in accordance with cooking loads. **Intelli-Hood**® automatically turns itself on in case the prep crew starts cooking without the fans and will warn your team if there’s an issue with the exhaust fan.

KITCHEN VENTILATION

Knowing your building is back to optimal conditions, you review your utility bill. You’re sure there’s a billing error; then you remember Melink installed your new rooftop-mounted **solar system**, resulting in a 40% cost savings on your electric bill.

SOLAR

As for your gas bill, your building’s **geothermal HVAC system** utilizes the ground underneath your parking lot as a natural heat sink, rather than using gas to boil water for your HVAC units. Plus, you have a waste water reclamation system to extract the heat in the water being dumped in the sewer to preheat your hot water tank.

GEOTHERMAL



GET STARTED

How can we help you? Scan the QR code to speak with our energy experts.



Melink Intelli-Hood® Demand Kitchen Ventilation Controls

SIMPLE. SAFE. SUPPORTED.

Melink’s patented Intelli-Hood® kitchen hood controls dually monitor the level of cooking activity and automatically adjust the kitchen’s exhaust fan and supply fans to operate only as needed. Intelli-Hood allows commercial kitchens to reduce their energy usage, saving significantly on operation costs.



GET STARTED

Get your energy-saving estimate today for your commercial kitchen.



Melink advanced the DCKV industry with two developments: Auto-Temp Span and Smart Start.

More than 30,000 installation globally

Australia
Japan
South Korea
China

Auto-Temp Span: A self-calibrating, learning technology that adapts to cookline operations for optimal performance and energy savings

Smart Start: An intelligent startup assistant that will detect connected hardware and automatically program the Intelli-Hood controls system



Intelli-Hood expanded into **8 new countries** in 2018-2019, bringing its reach to more than **30 countries** around the globe.

NATIONAL. INDEPENDENT. CERTIFIED.

Melink Test & Balance is a provider of commercial HVAC testing, adjusting, balancing, and building commissioning services. Our national, NEBB-certified network of technicians independently verify that your commercial building’s systems are installed and working as designed to ensure comfortable, healthy, and efficient spaces.



WHAT IS T&B?

Watch a video and learn more about Test & Balance, plus Melink’s other HVAC services.

Melink HVAC Test & Balance

On a T&B report, “deficiencies” are discrepancies between design values and actual data collected.

DEFICIENCY STATS:



Melink techs discovered thousands of deficiencies while performing their scopes of work.

Average of 11 deficiencies (or punchlist items) found per job site

50% of issues were fixed by Melink on site. Other deficiencies needed to be fixed by outside contractors (plumbing, electrical, etc).



TOP DEFICIENCIES DISCOVERED

- DAMPER MISSING OR INCORRECT
- OUTSIDE AIR ISSUES
- DIFFUSER MISSING OR INCORRECT
- DESIGN DISCREPANCY
- UNOPERATIONAL EQUIPMENT

Melink Solar

PROVEN. PRACTICAL. PROFITABLE.

As a commercial solar engineering, procurement and construction (EPC) firm, we are full service and can deliver a turnkey project. We will design your solar system, procure all labor and supplies, construct the solar array, monitor performance throughout the array’s lifetime, and provide remote and field troubleshooting.



VIEW PROJECTS

Scan the QR code to check out photos of our latest solar projects.



15,509,760

LARGEST PROJECT (kW)



81.23

SMALLEST PROJECT (kW)



TOTAL PROJECTS:
37.23 kW

- COMMERCIAL
- INDUSTRIAL
- HIGHER EDUCATION
- K-12
- CORPORATE OFFICES



Projects spanned 8 states

SIMPLE. DIRECT. CONVENIENT.

PositiV® is a standalone system that remotely tracks building health. Alerts are sent when the system detects anything is out of set parameters. Moreover, PositiV monitors temperature, relative humidity, building pressure, and CO2 to provide a full picture of the health of your facility.



LEARN MORE

See how PositiV can protect your facility, your bottom line, employees, and customers.



Melink PositiV® Building Health Monitor

71%

OF SITES IN POOR CONDITION

PositiV identifies “poor” sites as those with more than 30% of all readings outside of set parameters.

4

INDUSTRIES SERVED

PositiV is installed at dining, retail, lodging, and health facilities.

1

PATENT PENDING

PositiV is officially trademarked and patent-pending.



ISSUES POSITIV DISCOVERED

- PERSISTENT NEGATIVE PRESSURE
- INEFFICIENT HVAC EQUIPMENT
- HVAC SCHEDULES OUT OF DESIGN
- INCORRECT OCCUPANCY MODES
- INCORRECT FAN SETTINGS
- HIGH CO2 CONCENTRATIONS
- HIGH RELATIVE HUMIDITY
- FILTER DEGRADATION

INNOVATIVE. EFFICIENT. PROVEN.

Melink Geo’s main focus is driving geothermal innovation, serving as a consulting engineer for architects, engineers, ESCOs, and building owners. We also offer a geothermal mechanical room on a skid called Manifest™ that makes for easy selection and installation.



READY?

Ready to talk geothermal for your facility? Scan the QR code to learn more.



2

PROTOTYPES
CREATED

2

PHASES OF
DOE FUNDING

4

PROJECTS
COMPLETED

Third phase of DOE funding approved in July 2020.

Melink Geo was awarded a Small Business Innovation Research Grant through the U.S. Department of Energy to build a prototype geothermal ground loop model. The model demonstrates that the installation cost of a geothermal HVAC system can be reduced, helping to mainstream geothermal technology in the U.S.



Geothermal HVAC is typically **25-50%** more efficient than a traditional HVAC system.

Source: U.S. Department of Energy



Melink Corporation

Energy solutions for a brighter tomorrow.™

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Follow us on social media!



We are a global provider of energy efficiency and renewable energy solutions for commercial buildings with five offerings: Intelli-Hood® Kitchen Ventilation Controls, HVAC Test & Balance, Solar PV , Geothermal HVAC, and PositiV® Building Health Monitor. For more than 30 years, we’ve been helping companies save energy, increase profits, and make the world a more sustainable place. We are 100% employee owned, our corporate headquarters is LEED Platinum and Net-Zero Energy, and our vehicle fleet consists of all hybrid and electric cars.

Steve Melink founded Melink Corp in 1987 with our first business unit, HVAC Test & Balance. He built a base of clients through national restaurant chains.

- VISION

We envision clean energy transforming the world by improving our global economy, security, and environment — for ourselves, our children, and future generations.
- MISSION

Our mission is to change the world one building at a time by helping decision-makers implement energy efficiency and renewable energy solutions into their commercial facilities.
- VALUES

Integrity. Innovation. Service Excellence.

Melink
BUSINESS
ETHICS

In 1990, the company expanded with his invention of Intelli-Hood®. Next came more clean energy products and the construction of our LEED Platinum and Net-Zero Energy headquarters in Cincinnati.

This is just the beginning. We can’t wait to see what the future holds.



