

SONOMA COUNTY » TURNING ART INTO NFTS

Digital opens whole new world for artists



JOHN BURGESS / THE PRESS DEMOCRAT

Lisa Ledson stands at the the Christopher Hill Gallery in St. Helena on April 11. Ledson, an abstract artist from Kenwood, has successfully sold seven NFTs. Many local artists are turning their work into NFTs as a lucrative way to earn more money for their craft.

Creators find non-fungible tokens lucrative way to sell, earn from works

By MYA CONSTANTINO
THE PRESS DEMOCRAT

Kenwood painter Lisa Ledson snaps an image of her black-and-white abstract painting hanging on a wall inside St. Helena's Christopher Hill Gallery.

She hits her iPhone's Photoshop application icon and changes the image's saturation and colors before using another app to shift its resolution.

The end result: An image that art lovers and investors are collecting much in the same way sports fans would collect baseball cards.

The artist is getting ready to turn her painting into an NFT, or non-fungible token, an irreplaceable digital file that's stored online and can be sold and traded for thousands of dollars in cryptocurrency. The "non-fungible" part means they're unique and not interchangeable.

NFTs have been around for eight years but didn't become prevalent in Sonoma County until last year.

NFTs date back to 2014 when Brooklyn artist Kevin McCoy designed the first-known NFT called "Quantum" — a pixelated image of an octagon that hypnotically pulsates in fluorescent hues. Today, it's worth over \$1.4 million.

Yes, \$1.4 million. But artists don't get all

that money. They receive royalties instead, a percentage of sales whenever their NFT is resold to a new owner. The average royalty is between 5% and 10%.

"The NFT space gives artists control. They aren't at the mercy of these galleries who sometimes take a percentage out of what they pay artists," said Paul Wedlake, a San Carlos crypto NFT consultant.

"These artists can earn royalties forever." Some say the release of NFTs could potentially compare to the magnitude of when dot-com domain names were first released in 1985 or when social media became popular in the early 2000s.

"It's an emerging market, so you're going to see a lot of craziness and a lot of speculative buying right now. Give it a few years, it'll start to settle down," said Steven Cuellar, an economics professor at Sonoma State University.

Before I move on, you should know this: NFTs are digital files stored in a blockchain, essentially a digital filing cabinet where receipts and transaction records are stored.

Leveling the playing field

Ledson's original painting displayed in St. Helena's Christopher Hill Gallery is now listed for over \$20,000 on OpenSea, the largest platform for buying, selling and trading NFTs. Ledson shares the listing

with her 5,000 art collectors and followers on Twitter, Instagram and Facebook hoping someone will decide to buy it.

The artist has sold seven NFTs so far, and in the future she's thinking of including an NFT with every purchase of one of her paintings.

Through this process artists are receiving more money for their work than they would if they simply sold them on their websites.

Mike Winkelmann, the digital artist better known as Beeple, sold his NFT, "Everydays: The First 5000 Days," at an auction for more than \$69 million in March 2021.

The piece is the third-most expensive NFT ever sold by a living artist.

In October 2021, Ledson released 15 NFTs in her first collection — abstract paintings from the past five years. On Oct. 8, Ledson sold her first NFT, "Golden Wave No. 1," a vibrant yellow and blue abstract painting for nearly \$1,900.

She sold the physical painting for \$1,000 to a longtime admirer of her work, Ledson said.

"We've never empowered artists like this," Ledson said. "Now, we can hold up artists in our society. We're leveling the playing field and allowing people to be involved no matter who they are. You don't

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"The NFT space gives artists control. They aren't at the mercy of these galleries who sometimes take a percentage out of what they pay artists."

PAUL WEDLAKE, Crypto NFT consultant

Making most of Earth's steam

Thermochem of Santa Rosa harnessing power of geothermal energy

Editor's Note: The Press Democrat is publishing a series of stories about Sonoma County innovators who are tackling global warming. We invite readers to propose stories of those involved locally in climate change. Share your ideas by contacting our editor, rich.green@pressdemocrat.com.

By MARY FRICKER
SPECIAL TO THE PRESS DEMOCRAT

The potential for geothermal energy to power the planet is enormous, and Thermochem of Santa Rosa is one of the key firms helping to develop that potential worldwide.

Geothermal prospects are a special focus in Sonoma County, which is home to the largest developed geothermal field in the world, an area known as The Geysers.

With new technologies, geothermal energy can potentially be produced 24/7 almost everywhere. But challenges like technical issues, cost and seismic concerns have stood in the way of fully developing this geothermal opportunity.

That put the industry where oil and gas were in the 19th century, when reserves were known, but the technology didn't exist to produce them economically, the U.S. Department of Energy observed in 2019.

Enter Thermochem, which every day tackles those challenges from its international Geothermal Energy Research Center near the Sonoma County airport and its Southeast Asia center near Jakarta, Indonesia.

"We are a key partner in developing geothermal projects that displace gas and coal," said Paul von Hirtz, Thermochem founder and president, during a recent interview at the 20,000-square-foot research center on Regional Parkway.

"Our new technology, innovation and efficiency make geothermal economically feasible."

So what exactly does Thermochem do, and why is its work so important to the development of geothermal as a counter to global warming?

Thermochem, named after thermodynamics and chemistry, doesn't drill geothermal wells. But it does do many of the tasks that tell drillers where to drill, how to drill, how to design the plant that processes the geothermal energy efficiently and how to gauge, maintain and increase well production.

For example, its people hack through jungles with machetes looking for hot springs, and its labs analyze liquids and steams to understand underground conditions and plant operations. It also designs and sells equipment to test well conditions and flows, it helps design power plants and it tracks plant performance.

"We are unique in this industry," von Hirtz said. "We help find, design, build and operate geothermal production."

Louis Capuano, founder of Capuano Engineering Company in Santa Rosa, does drill geothermal wells. A petroleum engineer who has been in the geothermal business since 1974, he said he has worked with Thermochem for years.

"I drill wells all over the world, and I use Paul as much as we can," Capuano said.

Thermochem's core operations are its labs in Santa Rosa and near Jakarta, where samples of geothermal steam and liquids arrive daily from

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around the world for sophisticated analysis.

"The geothermal industry needs someone to do very good accurate testing of the resource, and Paul's group has excelled," Capuano said. "He's probably the only one in the world that does a good test of geothermal fluids."

In the era of global warming, this work has taken on a new and vital importance. That's because geothermal is one of the few non-fossil-fuel sources of power that can run 24 hours a day, along with biomass and hydropower.

Sources of clean energy, solar and wind get most of the attention. But they don't produce power all

the time unless they partner with batteries.

Geothermal can produce power all the time and feed into a grid already in place to deliver green energy to every home and business.

"We hear about solar and wind. Geothermal is not highly publicized. But it can help reduce greenhouse gas emissions dramatically," von Hirtz said.

In 2020, geothermal made up only 2% of U.S. renewable energy consumption, according to the U.S. Energy Information Administration.

But innovators like Thermochem are helping to discover new geothermal resources and drive a revolution called Enhanced Geothermal Systems that could make geothermal power available not only in areas

where underground water or steam exist in natural reservoirs, like at The Geysers, but also in areas where underground heat in dry rocks can be mined by injecting water.

In other words, almost anywhere.

Because this energy would be produced locally, it would be reliable and safe, mostly impervious to geopolitical winds like those blowing in Ukraine today.

In the 1980s, Von Hirtz was in college and working as a lab technician while development was booming at The Geysers, the site in 1960 of the first commercial geothermal electric power production in the U.S.

"The Geysers was looking for labs to do specialized analytical chemistry work. I headed

THERMOCHEM AT A GLANCE

Founded: 1984

Officers: Paul von Hirtz, president; Matthew Broadus, secretary

Headquarters: Santa Rosa; parent company headquartered in Fukuoka, Japan

Employees: 25 in Santa Rosa, 45 in Indonesia

Product: Geothermal services and equipment

Website: thermochem.com

that program for a lab in Santa Rosa, and I became fascinated by geothermal energy and excited by the environmental aspects," von Hirtz said.

So, in 1984, he went out on his own with financing from his accrued vacation pay and with his first

employee, Russell Kunzman. In 1997, he opened a Thermochem subsidiary in Indonesia headed by Matt Broaddus. Both men are now vice presidents.

Today, Thermochem employs 25 chemists, engineers, geoscientists and technicians in Santa Rosa and another 45 in Indonesia. While it's still active at The Geysers and throughout the U.S., about half of its business is abroad in more than 30 countries, including Chile, Kenya, Iceland, New Zealand, Turkey and the Philippines.

Since inception, Thermochem has completed thousands of projects of all sizes, von Hirtz said, from a \$10 million job in Indonesia, to a \$2,000 assignment to help ranchers in Colorado develop their own power from their hot springs, to helping a Third

World village get its own electricity.

In 2020, with annual revenue of \$10 million including its Indonesian subsidiary, von Hirtz sold his company for an undisclosed price to the Kyuden Group, Japan's largest geothermal developer and fourth largest electric utility.

To date, Thermochem operations have remained essentially unchanged, von Hirtz said.

"They want to develop more projects around the world, and I was ready for someone else to take over," said von Hirtz, 63, who had worked with the Kyuden Group in a major Indonesian project.

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need an MFA, you don't need to go through galleries — you can be anyone."

"What does the world look like when we are empowering creatives?" Ledson added. "What does our culture look like when creatives are empowered financially?"

NFT fomo (fear of missing out)

When a close friend, an art curator from Los Angeles, reached out to local artist Ricky Watts in March 2021 about an NFT opportunity, he couldn't resist. His friend asked him to provide an art piece to go with San Francisco music producer Mike Rehm's 15-second music beat.

The NFT, a 12-second video, features Watts' abstract art piece — an animated psychedelic styled sunset called "Flat Earth Sunset." The sunset moves as a music beat plays in the background.

It sold for nearly \$2,500 in March 2021. Now, that 12-second video is worth over \$5,000.

Watts, who has 32,000 followers on Instagram, has since released 19 NFTs of original abstract art

featuring vibrant fluid shapes and psychedelic color patterns.

He said his NFTs have surprisingly not received the traction and feedback he expected.

"I have somewhat of a following in the mural and painting world, but when I enter the NFT space — I'm nobody," he told The Press Democrat. "There are so many artists trying to sell their work as NFTs right now so it's as if I'm starting from the bottom again."

"I feel like I'm missing out or being left behind if I don't try and evolve and adapt to what is happening culturally and how things are shifting more towards digital platforms," Watts added.

A new found hobby

In March 2021, Sondra Bernstein, former Girl & the Fig restaurateur, announced she was taking a step back from the restaurant's daily operations.

After 24 years as a restaurateur, Bernstein has begun creating NFTs and metaverses in her free time.

"I asked myself, who am I without the restaurant? What do I love?" Bernstein said. "The NFT space has given me something to focus on in my transition. The space really captured me."

She created a virtual version

of the Girl & the Fig in November 2021. As an experiment, she plans to sell the restaurant's famed Sea Salt Chocolate Chunk cookies in the restaurant metaverse next year.

"These are tests," Bernstein said. "It's another way of marketing. You have the naysayers and then you have the people saying this space changed their lives. But it is also the wild, Wild West."

Four months ago, she joined SearchLight, a team and organization that helps artists enter the world of NFTs.

"The metaverse is what life could be on a digital plane," Bernstein said. "People can include things in their metaverse they think they lack in the real world. You get to create the world you want to see."

Artists ready to ride NFT wave

In November 2021, The Press Democrat spoke with local mural artists MJ Lindo-Lawyer and Joshua Lawyer. The founders of The Mural Project, a Roseland-based nonprofit, said they're brainstorming ways to implement NFTs into all their businesses.

That includes their annual Mural Festival, in which a group of artists create multiple murals

at the same time in one location.

The couple's idea is to create and sell an NFT of each mural.

"You get an NFT to sell, trade and collect but you also get to fund this mural project that gets to pay artists that create artwork for communities in the real world," Joshua Lawyer explained. "We've been slowly educating ourselves on what this all means. It's a hard concept to wrap your head around."

Wedlake, San Carlos crypto NFT consultant, also advised Ledson on how to turn her paintings into NFTs.

"People who are entering into the NFT space now are considered a pioneer," Wedlake said.

Joshua Lawyer said artists often feel they aren't being paid enough for what their art and time is worth. However, he noted that the NFT space brings agency to an artist.

"Artists of all forms have gotten the harshest end of the stick," Joshua Lawyer said. "Musicians make the music but the label gets the money, sorta deal. This space allows artists to own their art and have control over it which is always hard to do the moment you start gaining success."

The Lawyers are each planning to release a collection of NFTs in the next few years but are

searching for the right team to help them do so, MJ Lindo-Lawyer said.

Local brewery's non-fungible tokens

In a 31-second video, a close-up recording captures a person pouring "Dope-alicious," a beer from Santa Rosa's Shady Oak Brewery, into a rotating glass and a description of the beer.

Though short, this video is one of five NFTs that Shady Oak released and sent out for free in November 2021 for the taproom's third anniversary.

At the event, they put up a sign-up sheet and friends and regulars in attendance were sent the file for their virtual wallet.

Steve Doty, the taproom's owner explained that including an NFT with every beer sold is a way to engage customers.

"I have zero idea what's going to happen with the NFT space in the future," Doty said. "We just hope it remains an extra thing that can be a part of what we do. It's a way to engage with people and for people to be a part of the company."

You can reach Staff Writer Mya Constantino at mya.constantino@pressdemocrat.com. @searchingformya on Twitter.

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