



ll across the globe, an increasing number of organizations are integrating sustainable standards and policies into their business models.

We are already in a unique position because our lotteries exist to support good causes within our jurisdictions. At the heart of everything we do is the goal to fulfill our obligations to our beneficiaries, but so is our goal to enrich our communities.

A few months ago, these pages highlighted how lotteries support communities beyond providing revenue to beneficiaries. In this issue of Insights, we continue to explore Corporate Social Responsibility (CSR) from a larger perspective and turn the focus to what lotteries are doing in the area of environmental sustainability.

The scope of CSR, while encompassing responsible gaming as a core value, has become much broader over the years. From sustainability efforts to community involvement and job creation, we are looking at how to address issues that impact our economy, environment, employees, citizens and communities.

Understanding the role that we play helps us to understand the responsibility we bear to our jurisdictions' citizens of today and of tomorrow. We owe it to them to be responsible in the creation of our games, to be fiscally responsible with the business they've provided us, and to continue to generate critical funding for our beneficiary programs.

NASPL fully supports our efforts with a newly formed NASPL CSR working group. Comprised of lottery and vendor leaders across North America, the committee is working to identify our industry's shared goals and standards. It's also working to better provide helpful resources, actionable best practice standards, and quantifiable metrics.

We understand that a house cannot stand well-supported without strong infrastructure, or pillars, to hold its weight, which reinforces our commitment to CSR.

We have a responsibility to our employees, customers and stakeholders. As such, we are all focused on integrating responsible practices into the fabric of our day-to-day operations. We want to ensure that our social and environmental initiatives align with our

As we continue our proud tradition of generating revenue for our beneficiaries and supporting our communities, we look forward to steadily defining and expanding the scope of CSR.

We are grateful to NASPL and the members of our NASPL CSR working group for their ongoing dedication to CSR aimed to broaden and strengthen our commitment toward an even more comprehensive spectrum of responsibility.



Sending my best,

Gretchen Corbin President and CEO, Georgia Lottery Corporation NASPL President



Executive Director DAVID B. GALE

VP of Operations ANDREW WHITE

Director of Program Planning TAMIKA LIGON

> **Graphic Designer** JOHN KOENIG

Accounting NATALIE ROSS NORRIS

Editor PATRICIA MCQUEEN

Vendor Relations JAKE COY

I.T. / Software Development PAUL COREY

Communications Coordinator MACKENZIE WHITACRE

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CIRCULATION:

Insights ISSN 1528-123X, January/February 2022, Volume No. Twenty One, Issue One. Published bi-monthly by NASPL (North American Association of State and Provincial Lotteries)

> 7757 Auburn Road Unit #7 Concord, OH 44077

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NASPL Email: info@nasplhq.org

Websites: www.naspl.org / www.nasplmatrix.org p (440) 361-7962 f (440) 867-2327



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INSIGHTS







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Building Back in the **Bluegrass State**

After a violent storm system of unprecedented proportions tore through their home state, the Kentucky Lottery team sprang into action.

By Mackenzie Whitacre



Tornadoes aren't especially rare in the final month of the calendar year; on average, about two dozen tornadoes form in the lower 48 states each December. But none have been as destructive or as deadly as this system that carved a 250-mile path through



parts of the South and Midwest. At least 90 people were killed across five states, and more than 1,000 homes were destroyed.

Kentucky was hit the hardest. A continuous tornado path - confirmed by the National Weather Service as an EF4, with winds up to 190 mph - ripped through the western part of the state, spanning 163.5 miles. This twister shattered the record for longest tornado track in Kentucky's history. Areas near Mayfield, Bowling Green and Dawson Springs saw

catastrophic damage; at least 77 people were killed, and hundreds have been displaced.

Right away, on the morning of December 11, the Kentucky Lottery team started mobilizing. The first step was to set up a call tree, to make sure all team members were safe. "We have several people who live in those affected areas, so it was tense until we actually heard from everyone," explained Mary Harville, President and CEO of the Kentucky Lottery Corp.

By around noon, all 160 employees were accounted for. Luckily, the entire Lottery team was safe and their homes intact. "We had no one that experienced any injury or damage in their immediate families," she said. "We were blessed."

Beyond that, they were ready to lend a hand to their fellow Kentuckians who were less fortunate. "What was amazing is that, that very day, people started wanting to help. 'What can we do?' 'Where can we give?' 'How can we be of help?" said Harville of her team's response.

In just the first few days, the Kentucky Lottery raised over \$1,700 and brought in much needed supplies, including:

- 4,412 baby wipes
- 3,792 flushable wipes
- 2,053 diapers



Left to right – Jenna Cionko, Chad Frank, Heather Vasseur, Chris Green and Melissa Gable with donated items. Top photos: Amy Drooker in front of her van with supplies. Employees assemble hygiene kits.

- 75 hygiene kits (containing toothbrush, toothpaste, deodorant, shaving kits, etc.)
- 40 totes/laundry baskets
- 32 tarps
- 18 gallons of drinking water
- 18 gallons of distilled water
- 12 LED lanterns
- 10 large bags of pet food
- 4 totes full of toys
- · Various other hygiene products, baby formula, socks, batteries, etc.

All Kentucky Lottery employees are given a Volunteer Day each year, in addition to PTO. In the aftermath of these December storms, additional hours - dubbed Western Kentucky Disaster Relief Volunteer Days - were granted, to allow team members more time to provide assistance to their families and neighbors across

Amy Drooker, Vice President of Sales and Coordinator of the Lottery's KL Cares program, headed up the team's relief efforts, coordinating with community members on the ground to learn what items and services were needed. Volunteers went shopping and gathered supplies, loaded up two carloads, and went first to the hard-hit town of Dawson Springs. (See page 10 for the personal account of a KLC team member and Dawson Springs resident.) There, along with FEMA representatives and other volunteers, members of the Kentucky Lottery Western Region team spent the following days unloading trucks, sorting donations and offering assistance wherever they could. Meanwhile, KLC reps servicing the Central Region headed to Bowling Green to offer their support.

"It was a team effort, 100%," Drooker said.

The Lottery's disaster response has been met with overwhelmingly positive feedback. "What I heard over and over again is that many companies talk the talk," she added. "But our



Mary Harville

company not only says that we care about our employees; we show that we care about our employees. And we certainly showed that through this disaster."

KLC retailers felt that support too. "They're always talking about how wonderful our reps are, and how they're always available, and that they are true partners," said Drooker. That rang true in the weeks following the storms as well.

The storm's impact on lottery operations has been surprisingly minimal. A couple hundred of the state's lottery retailers were offline the following morning, but most came back on as power was restored. Incredibly, only three retailer locations - all in Bowling Green - were destroyed.

Support has poured in from across the industry as well, from peers offering prayers, encouragement and financial contributions. Notably, Kentucky Lottery vendor partner Scientific Games committed to donating \$25,000 to the Commonwealth's Team Western Kentucky Tornado Relief Fund.

"It was amazing how many colleagues reached out to us," marveled Harville. "We were bolstered by all of it, just really lifted up."

Today, the national news coverage may have waned, but recovery is going to be a long-term effort. "We're going to keep these folks top of mind," said Harville. "We're going to make extra efforts to remember them in the months to come, because we know that need is not going to go away anytime soon."

Moving forward, for the rest of the year, KLC plans to dedicate a department to oversee relief initiatives each month. The Lottery is also leveraging one of the state's most popular pastimes, raffling off basketball tickets across the state to raise additional funds for the relief efforts. "We're going to keep being there," Drooker emphasized.

"We are Kentuckians, and we exist for Kentuckians," said Harville. "We're all about the state of Kentucky. This is our family, it's our neighbors, our retailors, our friends. I think it's just all part and parcel of what this organization has been about."

Donations can be made at the **Team Western Kentucky Tornado** Relief Fund website. All donations are tax-deductible and donors will receive a receipt for tax purposes after donating. If you would like to make a contribution on the Lottery's behalf, please enter "Kentucky Lottery" in the Fundraising Event box.





Strength in Community

Kentucky Sales Rep and Dawson Springs resident Chris Fairchild shares his experience.

my own. My family and I

he night of December 10, 2021, changed many lives, including

were in the basement of a friend's house when the tornado passed through our town of Dawson Springs. The house shook as a large tree fell across their roof; it only lasted a minute as the tornado passed through.

I went outside and there was just darkness. There were power lines down and debris scattered everywhere. Our friend's truck had a 2x4 stuck through the windshield.

We left to check on our house and saw no damage. The power was out, but we thought it would be back on shortly. We went to my wife's uncle's house; they were alright too. We spent the next two hours sitting in our car, charging our phones and listening to the radio, waiting for another storm to come through. Eventually, we decided to go to bed. Throughout the night, sirens rang out as emergency vehicles sped by our house.

When we got up Saturday morning, we saw the houses and commercial buildings, no farther than 100 yards from our home, destroyed. We drove around, checking on our church family; they were all alive, but their homes were nothing but rubble. We left town because we had no cell service, power or water.

I was speaking on the phone with my father when I got a call from Amy [Drooker]. I called her back, and she was relieved to hear that my family and I were okay. (Thank you, Amy.) Then the texts started rolling in, and I saw the concern from my teammates. (Thank you, Western Region.)

After I took my family to my brother-in-law's house, I came back to town to help search for those who were missing. At that time there were over 100 people unaccounted for.

Sunday, our church had a prayer service, and we prayed and thanked God for our safety. The utilities were still out, but a generator was on the way. We decided to cook the food stored in the freezer, and as I set up the grill in front of the church and started to cook sausages and

biscuits, donations began to arrive. We loaded the church bus with the sausage biscuits, along with hamburgers from a restaurant in Madisonville, and started to distribute them to townsfolk.

Donations kept coming in. Monday, the church was able to distribute generators, donated by the owner of a Louisiana alligator farm. We built a wall of bottled water, tables of clothing, food, baby supplies, and personal hygiene items. People from across the state and across the country poured in to help put tarps on roofs, cut trees and clean up debris.

On Wednesday, the President came to Dawson Springs to survey the damage; 75% of the town had been destroyed. That day, my oldest daughter and I delivered 200 meals.

Thursday, the KLC Western Region team showed up to help at the church. Chris worked in the church's kitchen, making tea and spaghetti. Melissa, Michael, Glen, Chad, and Heather and her husband helped unload trucks and sort donations. Chad, Michael and I assembled generators, as Hutson Ag and Construction Co. provided many.

All week, Amy had been calling me, asking what the town needed. On Friday, Marty, Amy, Rick, Val and the Western Region team showed up to help, bringing these donated items from the Lottery. (Thank you, Lottery Team, for your donations.) They unloaded trucks, helped in the kitchen and sorted through donations. (Thank you, Western Region, and Marty, Amy, Rick, and Val, for your help.)

I saw such an outpouring of love and concern for the people of Dawson Springs. People from all over came to help our town, and our small community greatly appreciates the love shown to us.

Sincerely,

Chris Fairchild

Sales Representative, Kentucky Lottery, Western Region; Community Member of Dawson Springs, Ky.

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David Stevens

Chief of Security, Wyoming Lottery

here's nothing like working at a very small lottery to get the full immersive experience of the many unique aspects of the lottery industry. As Chief of Security at the 11-employee Wyoming Lottery, David Stevens has his hand in a number of different areas, including retailer selection and investigation, contract compliance, and draw team management - everything designed to maintain the integrity of the organization from top to bottom. He's looking forward to even greater challenges, with keno on the horizon along with a potentially epic expansion of lottery operations if the legislature decides to allow instant games in the state for the first time.

"Dave is a very honest, loyal and capable member of my team and I value his contribution and his friendship immensely."

- Jon Clontz

"Dave was one of my very first hires in 2014 when I started the Wyoming Lottery," said Chief Executive Officer Jon Clontz. "He spent 20 years as a Laramie County Sheriff's Deputy, specializing in investigations, K-9 handling and undercover operations. He eagerly accepted the job here and immediately began studying and assimilating everything he could about being a lottery security and enforcement officer. Dave has performed admirably, and he has earned both my trust and confidence and the trust and confidence of his peers. I believe he will make a wonderful lottery CEO or director at some point in



his future if he chooses that path, and I am certain he will continue to achieve, deliver what is expected, and go above and beyond without being asked. Dave is a very honest, loyal and capable member of my team and I value his contribution and his friendship immensely."

Stevens learned very quickly that nothing could be taken for granted in the lottery industry, and that he always has to keep his eyes and ears open using 20 years of law enforcement experience to guide him. "The most important thing in the industry is keeping the integrity of lottery operations, and I always need to be on my toes."

New adventures are on the horizon that should keep him busy, with keno expected soon; that will bring in new types of retail locations and a new customer base. Stevens added that the state legislature may be introducing a bill to allow instant games; if that makes it through, it will significantly expand the Lottery's security and investigative

He pointed out that gaming in Wyoming has been expanding, with sports betting launching last fall (under the Wyoming Pari-Mutuel Commission), so more lottery products seem inevitable. "Any additional revenue we can bring in for the state helps."

When he's not keeping an eye on things at the Lottery, Stevens enjoys spending time with Pauline, his wife of 21 years, and their three children Braydon, Joshua and Karena. For many years he coached the kids' baseball teams, and now a favorite activity is golf - often with his adult son Braydon, who will be graduating from the University of Wyoming with a criminal justice degree. The middle son, Josh, is also attending UW, working toward an ag business degree; he's a team roper on the school's rodeo team. Karena, 13, is following in the tradition and







is also active in rodeo, including barrel racing, pole bending and her best event, goat tying - an activity reserved mostly for youth rodeo, typically for girls.

In what seems a lifestyle far removed from Stevens' New Jersey roots, the family has three Quarter Horses and enjoys spending time in the outdoors, including riding, fishing and hunting. They also have three dogs; after all, Stevens loved being a canine handler in his work with the Sheriff's department.

He continues to serve as an adjunct instructor at Laramie





At a charity softball tournament with football player Marcus Epps (left photo) and former NY Yankees pitcher Jeff Nelson (right photo).

County Community College, teaching criminology and law enforcement going on 14 years now. He has a Bachelor of Arts in criminal justice administration from Mansfield University of Pennsylvania, and a Master's degree from the University of Phoenix in administration of justice and security. He is a certified fraud examiner, and has completed training and certifications in other related areas such as money laundering.

During his law enforcement career, Stevens was twice awarded the Medal of Valor for conspicuous gallantry and integrity at the risk of life; was named VFW Peace Officer of the Year in Cheyenne; and was a recipient of the United States Police Canine Association National Detector Trial-Bill Robinson Memorial Canine Sportsmanship Award.

What brought you to WyoLotto at its startup?

I was close to retirement from the Sheriff's Department, so I really was just generally looking around to see if I could find something in Cheyenne. Cheyenne, and Wyoming in general, is limited as far as jobs, especially if you

are looking at specific fields. So when I saw a newspaper ad for the Lottery security position, I thought it would be a new and different challenge, yet still be in my general line of work. I like investigations in particular, so that part of it really piqued my interest. It was the best of both worlds - something new yet keeping me close to my law enforcement background.

What aspects of your previous career have had the most application to your role at the Lottery?

Probably the most similar activities are the compliance and retailer background investigations. Other types of investigations, such as fraud or ticket issues, are similar to law enforcement, but you are not looking behind your back every five minutes to make sure nobody's sneaking up on you. I've always really liked investigations and detective work, but I did a lot of drug work, and that is the tougher side of investigations with a lot of deaths. Now I can be involved in investigative work without that aspect - most of what I do in that regard is retailer related, things like

problem tickets and other issues that can turn into different investigations. And because I'm the only one here in security, I probably do have more responsibilities than people in similar roles at larger lotteries.

From your perspective, what have the biggest challenges been over the past 20 months?

For me personally, it was learning more about the information technology side of things. In general, security functions have become more IT-based and we have to learn things quickly, and that has been particularly true during the pandemic. One of the biggest challenges was keeping our draws going. While four of our draw products are MUSL games, we do have our in-state Cowboy Draw. I'm in charge of our draw coordinators. We have three people on our draw staff; one is full time and two are part time. They had to keep coming into work even when the pandemic kept many people at home. But we have such a small staff in general that it was also important just to keep people in the office. We had to make sure to avoid a COVID outbreak among our

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small staff, which we succeeded in doing.

At the same time, we learned that more things can be done remotely. We use RNG for Cowboy Draw, so we did end up establishing new disaster recovery procedures where the draws could be done remotely. We actually put that to the test last year when we had really bad weather. We had a storm dump three feet of snow, with drifts of six to eight feet all over the city. We were able to continue our drawings remotely without relying on anyone else.

We did have to delay a lot of our retailer compliance work, as it wasn't always easy to make site visits during some stages of the pandemic. But we've been trying to catch up on that, and of course we were always on top of any cases where we had complaints.

Is there anything you wish WyoLotto, or the lottery industry in general, could do differently?

It's kind of interesting. In law enforcement, I always felt there is a bias that comes with the job - that

law enforcement gets a bad rap. I think that applies to lotteries too. People look at lottery as a "tax" or something negative, even though the whole purpose of lotteries is to raise money for good causes. A lot of people don't know about that part of lottery. And they don't realize how much lotteries contribute to the economy - for example the people they employ, either directly or through vendors and outside contractors.

In Wyoming, the state treasury collects lottery revenues and then distributes it to the cities and towns based on the lottery revenues generated in each locality - but they are free to use those revenues however they need to use them. Not long ago someone in Cheyenne wanted to have lottery proceeds earmarked to specific projects in the city, like a recreation center. Something like that would really let people see where their money is actually going. Our marketing team does a really great job promoting the benefits of the Wyoming Lottery, but we don't have the ability to point to specific projects.

What keeps you at WyoLotto as one of only two original employees?

Although perhaps I miss a little bit of the adrenaline you get in law enforcement, I do like the freedom of being allowed to do my job in a more relaxed environment. The Lottery is a great place to work, and Jon is a really good boss to work for. The schedule is easier compared to my previous work, where there were very strict guidelines, so here it's much better for my family. And like I said earlier, it is tough in general in Wyoming to find jobs specific to a particular field, so when you find something that fits your job skills, your family life and also provides a good work environment, it's worth staying!

I would always tell people that in my former job, I used to make people miserable by sending them to jail. Now I get to help people who win big prizes. It's always nice to hear when people have something challenging going on in their personal lives - doesn't everyone? and how a big lottery prize makes a huge difference for them. There are some really great stories.





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The Value of Baseline Studies

Annual studies provide valuable insights into shifting trends over a long period of time.

Christian Teja, Director of Communications, Massachusetts State Lottery

he Massachusetts State Lottery, in conjunction with its instant ticket partners, utilizes both qualitative and quantitative research to assist in the development of our product and marketing strategies.

Since 2004, the Mass Lottery has conducted an annual baseline study in partnership with Scientific Games. One of the main objectives of the study is to track various attributes associated with the Mass Lottery, our brand and our products.

This survey began with telephonebased interviews of Massachusetts residents. In 2008, the survey switched to using an online-based sampling methodology. The study has grown to include approximately 1,500 participants.

Additional objectives include understanding game spending patterns, identifying segments within our customer base and measuring public awareness of our advertising. The study also seeks to identify how technology, media consumption and social media preferences may impact customer attitudes and behaviors.

While many of the questions have remained the same over the years, the study continues to evolve. Prior to going into the field each year, we meet with Scientific Games and its research partner to review the questions, adding material to reflect changes in the marketplace and

removing questions that are no longer

For example, as gaming has expanded in Massachusetts and surrounding states, including the introduction of casinos and the emergence of daily fantasy sports in Massachusetts, and the launch of online lottery and sports betting in bordering states, questions have been added to gauge attitudes toward these entertainment options.

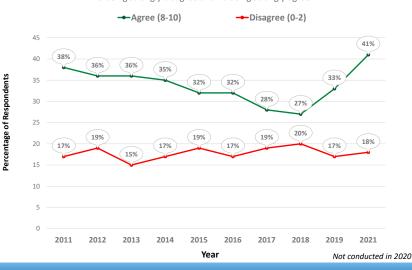
By benchmarking these perceptions, attitudes and behaviors, we are able to better understand the role that the Mass Lottery plays in overall entertainment spending and identify any trends and fluctuations that develop over time.

One Key Finding

One of the more significant trends that this study helped us identify was a steady decline in recognition of the Lottery's mission to provide local aid to all cities and towns in the state. Cities and towns utilize this

"The Lottery provides valuable funding for cities/towns"

Those surveyed were asked to rate whether they agree or disagree with this statement, 0 being strongly disagree and 10 being strongly agree.



Tes To Longer Element



...numerous consumer studies have shown that young adults who are part of Generation Z characterize themselves as altruistic and show a preference for supporting brands based on their missions and values. unrestricted funding for public safety staffing and equipment, snow removal, local road improvements, school services, programs for seniors, and parks and recreation projects, among other things. With nearly 20% of Lottery revenues directed to local aid, the Lottery in recent years has been returning approximately \$1 billion to the state for distribution to cities and

From 2011 to 2018, recognition decreased from an all-time high to an all-time low (since the beginning of the study in 2004). While our annual performance is reported by news outlets, the focus of our advertising in this span had shifted almost exclusively to product messaging. We had a great story to tell, but it was not being heard. This led to a change in marketing tactics to include more brand and beneficiary messaging.

The resulting campaigns, "Giving Is Our Thing" and "The State of Winning," have led to a marked reversal of this trend, with recognition exceeding the peak level recorded prior to the decline.

"Giving Is Our Thing" expressed the values that we share with the people of Massachusetts and highlighted the various ways that Lottery funding supports communities. "The State of Winning" illustrated the enormity of the Lottery's impact on communities through the construction of a map of the state of Massachusetts made up of the equivalent of a billion dollars of cash, the amount we had returned to communities in the most recent fiscal year. This was displayed in a high foot traffic area of Boston, and the reactions of passersby were included in a comprehensive advertising campaign that followed.

We amplified our beneficiary messaging through strategic sponsorships, developing community-oriented partnerships with sports teams throughout the state and a popular morning news show.

While it may be difficult to measure the value of beneficiary awareness, it is important to note that numerous consumer studies have shown that young adults who are part of Generation Z characterize themselves as altruistic and show a preference for supporting brands based on their missions and values.

Guiding Efficient Spending

The study has also influenced our media buying strategy and allowed us to spend our advertising dollars more efficiently. By tracking how people say they consume media, we have been able to better quantify the migration from traditional media outlets like broadcast and cable television and terrestrial radio to subscription video services and music platforms, both overall and within certain customer segments. Working with our advertising agency, we have adapted our spending to place greater emphasis on subscription and streaming options so that we can reach our consumers in their preferred forms of media.

The findings of earlier editions of the study accelerated our transition from traditional print media to digital and social platforms and have helped shape our social media strategy.

As we strive to become increasingly data-driven as an organization, with multiple forms of research, the annual baseline study remains a key component of our sales and marketing strategy.





LETTER FROM THE CEO

To our valued clients and partners,

As we begin the new year, I'm overcome with a sense of optimism and gratitude. After nearly two years of having our personal and professional worlds shaken, it appears we are turning a corner. I can't tell you how happy it's made me to see so many of you this year at G2E, SBC Latin America, IAGR, PGRI and LeFleur's. I look forward to seeing even more of you at ICE, the National Indian Gaming Association show, and our own Regulators Roundtable. Nothing is quite as powerful as collaborating face-to-face.

We've had the privilege of working with so many jurisdictions globally in their quest to start new forms of gaming and digitize their offerings, whether it was regulated skill-based gaming, sports betting, iGaming, iLottery or eSports. We've also seen a resurgence in traditional gaming equipment from suppliers submitting new products for testing. Personally, I feel fortunate that GLI has had a chance to help our clients lead that change.

In my last open letter, I told you about how we've been reshaping our leadership team and reinvigorating our compliance and testing road map to better accommodate your non-testing needs. Our GLI Assured Integrated Compliance service has been overwhelmingly welcomed as clients know that failure today is not an option. With time and execution critical to survival, you've invited us to become an even more integral partner, assisting you with trusted end-to-end solutions and thought leadership that goes beyond testing.

New opportunities also bring fresh challenges, with cybersecurity topping the list for many companies. Together with our integrated cybersecurity company, Bulletproof, we've ensured the safety and integrity of our clients' systems by combining our world-class testing with world-class cybersecurity services. It's crucial in today's climate to have a partner who knows both security and gaming; thanks to our combined background, not a single gaming client who used Bulletproof during the pandemic has reported a security breach—something we're immensely proud of.

If 2021 was about diligence and strategic preparation, 2022 is about momentum and execution. We've hired nearly 150 new delivery personnel over the past 12 months to make sure we're ready to help you bring new products to market. Our people are the heart and soul of GLI. Their talent and dedication make everything we do possible and, as we look to the future, their health and safety will remain a top priority. We've also continued to innovate in test automation, offering quicker, more accurate tests for a wider range of scenarios. New opportunities, new forms of gaming and new jurisdictions are emerging every day, and we stand ready, as always, to help you reach your goals for 2022.

I look forward to seeing each of you somewhere on the globe.

Sincerely,

James Maida



Verifying Dedication to Responsible Gambling

To date, two dozen lotteries have gone through the innovative NASPL/NCPG Responsible Gambling Verification Program.





otteries have always taken the lead in the gaming industry when it comes to responsible gambling. So it's not surprising that in 2015, the North American Association of State and Provincial Lotteries (NASPL) and the National Council on Problem Gambling (NCPG) came together for a unique partnership, one that provides independent verification of lotteries' responsible gambling programs.

"I think that the lottery industry is doing a good job embracing some of the fundamental principals of responsible gambling," said Barry Pack, Director of the Oregon Lottery and Chair of the NASPL Responsible Gambling Committee. "The verification program has kind of institutionalized lottery support for best practices in gaming."

It has also deepened the relationship between NASPL and NCPG, as the application process is often a back-and-forth conversation designed to answer questions - and there are questions! - and put everyone at ease. "Lotteries really appreciate that this is not an adversarial process," said NCPG Executive Director Keith Whyte. "It's an approach that offers specific suggestions and recommendations, often from lotteries' peers, so that every lottery can do a better job with responsible gambling."

"We're pleased with the response of our membership since we launched the program," said Andrew White, NASPL's Vice President of Operations, who manages the program on the association's side. "This effort keeps building and we're adding new lotteries each year. The best part is all of the peer-to-peer sharing, mentoring and overall engagement. Without all of those elements, the industry wouldn't be where it is today in responsible gambling. The NASPL Responsible Gambling Committee members have worked hard and we've come along way. There is now a great foundation to keep moving forward."

"The verification program has kind of institutionalized lottery support for best practices in gaming."

- Barry Pack

The partnership has certainly been fruitful so far, with 24 lotteries verified over the years at one or more of the three available levels: planning, implementation and sustaining. Each application is reviewed by an independent panel of four assessors. Three are chosen by NCPG and one by NASPL. The eight areas of assessment include the overall responsible gambling plan, employee training, retailer training, public education and awareness, product oversight, research, advertising, and resources.

The planning level is suitable for most lotteries that are still working towards developing a comprehensive responsible gambling plan. They may have various programs in place, but without any coordination or overall guiding principles.

The implementation level may be the next step for a lottery that has first been verified at the planning level, or it may be the starting point for a lottery that already has a solid responsible gambling plan in place with demonstrable coordinated measures that address the specific areas of assessment.

Finally, the sustaining level is for those lotteries that have consistently operated at the implementation level for at least three years. They should be able to show, through internal assessments, what parts of their plan have worked well and what areas may need improvement.

Eight lotteries have been verified at the planning level; most of them have gone on to the implementation level. Some lotteries that started at the implementation level are now at the sustaining level. It all takes time - planning verification is good for two years, and lotteries have to be at the implementation level for three years before submitting an application for the sustaining level.

"It would be our goal to get every U.S. lottery to the sustaining level," said Whyte. "That would be such an enormous asset to the lottery industry, to their state governments and to their players. It's going to take a while, but we think it's possible, even for the smallest lotteries."

That last point is important. The way the verification program is structured, it can potentially work for all lotteries, even those



with small staffs or that have certain regulatory and legal restrictions. It's even provided as a free service to all NASPL members, so there is no direct cost involved.

NCPG Program Manager Semhar Abed is happy to see that the quality of the applications is improving and that lotteries are taking advantage of the resources provided. All successful applications are available for review on the NASPL Matrix, providing other lotteries with a wealth of information to help guide their own applications. Mentors are also provided to any lottery submitting an application, who can assist in any area necessary.

In 2019, the program added a parallel verification process for those lotteries who have already received certification in the World Lottery Association's Responsible Gaming Framework. Lotteries with WLA Level 3 certification may apply for the NASPL/NCPG implementation level verification; those with Level 4 may apply for the sustaining level.

The Hoosier Lottery was one of the early adopters of the WLA parallel opportunity, receiving the sustaining level verification in February 2020 as a WLA Level 4 certified lottery. Lottery officials - long proponents of responsible gambling - found the parallel verification process to be easy to execute and designed in such a way to be very time efficient. They also found that guidance from both NASPL and NCPG was very timely and helpful in preparing the application.

Although the WLA parallel verification was added to recognize that some American lotteries are very engaged with the WLA, Whyte believes the NASPL/NCPG verification is more "right-sized" for the American market. "We're pretty proud of it," he said. "We believe it is rigorous and it is a process that will work for every U.S. lottery. We're pleased that some lotteries have chosen to do both, because I do think having two assessments can help provide some insights."



"We discovered that there were people who were passionate about responsible gambling in other departments that we didn't realize, who hadn't spoken up before."

- John Hagerty

A Planning Start

The Virginia Lottery and Washington's Lottery are two that have gone first through the planning level and then the implementation level, and their different paths show that success doesn't require dedicated responsible gambling staff (as some lotteries have) or even a previous commitment to responsible gambling programs.

Virginia always had a commitment to responsible gambling, but had never formalized that commitment until it was one of the first to go through the NASPL/NCPG verification process in 2015. "We hadn't taken a

really comprehensive inventory of our responsible gaming assets up to that point," said Virginia Lottery Public Affairs Specialist John Hagerty, who has worked on the program since the beginning. "Frankly we were surprised at the assets we found across the organization. We discovered that there were people who were passionate about responsible gambling in other departments that we didn't realize, who hadn't spoken up before."

The planning level is about taking that inventory and building a roadmap. "It forces you to focus," and because of that, Hagerty thinks the planning application was much more challenging than the implementation application. "Certainly there's a lot of work that goes into both, and despite the work necessary for the implementation level, I still felt it was easier. We had a better idea of what we were working with and where we were going with it. Like a lot of things, the first step is the most difficult."

Now that the Virginia Lottery is tasked with overseeing sports betting and casinos - legalized last year - the verification is even more important. "The verification process is not just an exercise to check a box. It's about real people, real families and a real addiction, so we empower all our employees with the knowledge about what gambling addiction and problem gambling is, and what our responsible gambling message is. I think the stakeholders could see that."

Hagerty remembers going to NCPG conferences several years ago and not wanting other attendees to know he was from a lottery. Now, he's thrilled that the lottery industry has embraced problem gambling awareness. "I think it's fantastic to see NASPL and NCPG working together. It's really good for the lottery industry, because we are on the same side."

For Washington's Lottery, the end result is the same even if the beginning was different. A turnover of the

Lottery's senior executive team in late 2017 into 2018 opened the door for change under new Director Marcus Glasper. "We had this opportunity - even though we have incredible staff that has been here forever - to really decide what our vision was going to be for the future," explained Kristi Weeks, part of the Lottery's new management team as Director of Legal Services. "I came from a public health background, and we were really interested in responsible gambling." As the team, new to the lottery industry as well, went through strategic planning and discovered the NASPL/NCPG verification process, they knew it was the right thing to do.

Completing the planning application was a bit of a bumpy road, because the Lottery hadn't really done anything like it before. "We didn't know what we were doing and we didn't know what was expected of us," said Weeks candidly. It wasn't easy, but the final application was something of which they were all very

Once the plan was in place, everything became easier. "Now we have a cohesive plan, we have expectations, and everybody knows their job. We don't have the luxury of having one full-time responsible gambling person who oversees all this. I kind of act as the champion, but it's spread out among a good 10 employees across the Lottery."

The pandemic put a crimp in the ability to submit their implementation level application, especially when certain components - like retailer training - were impacted by things out of their control. So the Lottery had to be flexible, but the experience and relationship-building that comes with time still helped make the implementation application process go much smoother.

While the new commitment to responsible gambling comes from a heartfelt understanding of the need

for social responsibility, Weeks did note that the Lottery's efforts will help build credibility with the state's political leaders. "We have one of the most restrictive lottery laws in the United States, and if at some point we ask for modernization measures, we need to show that we have been good corporate citizens. I believe this will help us be successful in the future."

RG Culture - And Beyond

As noted earlier, not all lotteries have to start at the planning level. The Maryland Lottery began with verification at the implementation level in 2016, so it already had a good plan in place at the beginning. Later, upon joining the WLA and receiving Level 3 certification in the WLA's framework, Maryland received the WLA parallel verification at the implementation level in February 2020.

Current Director John Martin has participated in the NASPL Responsible Gambling committee for years, long before he was named to his current position at the Maryland Lottery. He remembers the challenge it was to instill the culture shift necessary to get everyone on board in Maryland. And that it can be a humbling experience when one lottery starting down the road looks at others who have lived and breathed responsible gambling for years. How does a lottery find the time?

"You make the time," emphasized Martin. "You do what's right, because at the end of the day, that's what good people do. And we're fortunate to have a lot of good people here."

It's even more important as lotteries take on more roles in their jurisdictions. "As we continue to grow our gaming footprint in the state, with that comes the responsibility of being a good corporate citizen. That includes the responsible gambling message."

Indeed, Martin sees responsible

gambling as becoming part of a bigger corporate social responsibility effort in the lottery industry, efforts that are becoming commonplace in other industries covering an entire range of initiatives. "We're a \$4 billion enterprise in Maryland - that's a pretty big business. We are a force to be reckoned with. Maybe we should be looking at an overall CSR program." One that includes things like environmental and green initiatives, for example. (Which just happens to be the subject of our roundup beginning on page 42.)

Pack would agree wholeheartedly with that idea. Oregon not only has a strong responsible gambling program - as a WLA Level 4 member, Oregon also holds sustaining verification in the NASPL/NCPG program - it has additional programs on sustainability and diversity/equity/inclusion/ belonging. "I'm not sure that a lot of lotteries have that broad a view," he said, adding that bigger-picture CSR initiatives are often successful because they are employee-driven. "We brought volunteers together who have a passion and they come up with the vision." They figure out what things to measure and track, and what things can be improved. "If you let employees set the vision for corporate social responsibility, you will find I think a lot of people who will step up to the plate and help put it together. It doesn't have to be entirely top driven. You can set the vision and let the employees fill out the details."

Pack has one key piece of advice for lotteries that haven't been through the NASPL/NCPG verification process yet. "Put a plan in place and do it! Really, all it takes is planning. Understand what is going to be required of you, and then allocate the resources when they are available. Every lottery has to fit this into their business plan. We all have product roadmaps, system upgrades, all those

"You do what's right, because at the end of the day, that's what good people do. And we're fortunate to have a lot of good people here."

- John Martin

things that draw on both human and financial resources. If you put this into your plan, you can make it happen."

Even better is the resulting understanding that lotteries are staying on top of emerging trends in the industry, trends that are in response to changing consumer behavior. "If you are demonstrating that you live up to your commitments and to your statements, you build trust and confidence with policymakers," said Pack.

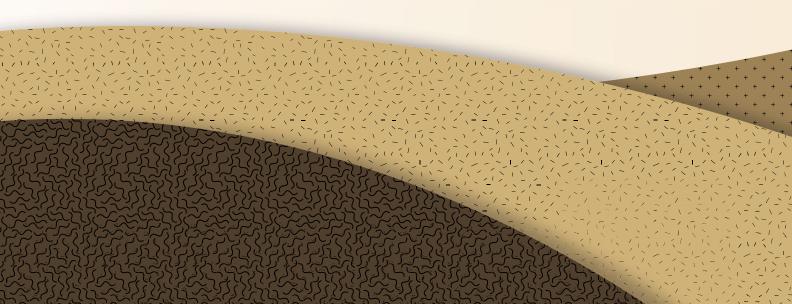




Expanding Horizons in Connecticut

The Connecticut Lottery received many new presents in advance of its 50th anniversary this year, and is working hard to provide those gifts to players.

By Patricia McQueen





ucked between two industry giants in the Northeast. the Connecticut Lottery has New York to its west and Massachusetts to its north. While the

New York Lottery was established in 1967, the Connecticut Lottery launched five years later, on February 15, 1972 - just a few weeks before the Massachusetts Lottery opened for business.

Connecticut is the fourth North American lottery to reach a golden anniversary, following New Hampshire, which started in 1964, New York, and New Jersey and Loto-Québec (both in 1970). Three more lotteries will pass that threshold this year - Pennsylvania and Massachusetts in March. Michigan in November.

Those who led the early lotteries would never believe their eyes at the complexity of a modern lottery, and there are few that are now more accomplished - and diversified - as Connecticut. That is due in large part to legislation passed in May 2021 that authorized sports betting, online gaming and iLottery. The state's two tribal casinos, Foxwoods and Mohegan Sun (both among the world's largest gaming properties), have now added online casino games to their vast gaming operations, and offer both onsite and online sports betting. The Lottery launched online and retail sports betting in October, and hopes to have iLottery (only draw games are authorized) ready sometime later this year. Fantasy sports was also included in the

legislation, and that's another item in development on the Lottery's very full plate.

It's clearly a major change for the 50-year-old lottery, but a welcome one. "Today is a great day for the state of Connecticut," said Rob Simmelkjaer, Chairman of the Board of the Connecticut Lottery Corp., after the legislation was signed last spring. "We are very pleased that the state legislature has approved this modernization of Connecticut's gaming landscape. I congratulate and thank Governor Lamont and his team for their leadership and vision to reach this historic agreement and see it pass the Connecticut General Assembly. I also thank the leadership in both the Connecticut House and Senate for this milestone achievement."

Of course, that means that the Lottery team, under the direction of President and Chief Executive Officer Greg Smith, has barely had time to catch their breath over the past few months. Lotteries always ask for more opportunities - iLottery, sports betting, other new products - but don't often get them. "We got our gift list filled so we're figuring out how to open all these presents and start playing with them," said Smith.

It made sense to start with sports betting, which has the biggest revenue potential but is also the hardest to develop. Smith is very proud of the fact that "hard" didn't mean "slow," and his team met an incredibly challenging timeline. "Within four months from legal authorization, we had full online sports betting and nine retail locations in operation."

Even before the new legislation, the Lottery was on target this year to surpass \$11 billion raised for the state's General Fund since its inception. The \$10 billion milestone was reached in 2019, and each additional billion is coming faster and faster. In fiscal 2021, the Lottery delivered \$418 million to the state from sales of nearly \$1.5 billion; both numbers set new records.

Through it all, the Connecticut Lottery has been a leader in the area of responsible gambling. In 2016, it licensed British Columbia Lottery Corp.'s award-winning GameSense program, customizing it for the needs of the local market. The Lottery has been honored with responsible gambling awards from the National Council on Problem Gambling, the Connecticut Council on Problem Gambling and the North American Association of State and Provincial Lotteries. It also achieved implementation level status in the NASPL/NCPG responsible gambling verification program.

The Lottery also conducts an annual "Give a Child a Toy, Not a Ticket" holiday campaign, geared towards driving awareness of youth gambling. Recently completing its eighth year, the toy drive component delivered more than 15,000 toy donations benefiting Connecticut Children's Medical Center.

With that heritage, it's not surprising that the Lottery's new online sports betting platform, PlaySugarHouse, integrates some of the industry's most robust responsible gambling tools. The organization works closely with its sports betting partner, Rush Street Interactive, and the Connecticut Council on Problem Gambling, to ensure the platform meets - and exceeds - standard responsible gaming best practices.

All In With Sports

Of course, Rush Street and the Connecticut Lottery work closely on all aspects of sports betting. The company provides the betting lines and much of the heavy lifting behind the scenes, and developed the PlaySugarHouse app and online sports betting website. The company also provides necessary equipment to the retail locations. There are currently nine retail sports books open, all members of state's off-track betting network operated by Sportech. The law allows for up to 15 retail sports betting locations.

For the retail launch, the Lottery has been supplying "sports betting ambassadors," who help customers understand how to operate the betting kiosks, and has also handled much of the associated marketing.

While the Lottery's sports betting competition in the state is big - Foxwoods partners with DraftKings and Mohegan Sun with FanDuel - the Lottery's retail operations are more convenient to most of the state's population. Smith is also very optimistic about online



service differentiations that will bode well for the Lottery, and the attraction of having a consistent offer that is available both online and at locations around the state.

"We have a very qualified and experienced team in Rush Street Interactive. We love our partnership. Going up against that competition means that we need to just continue to chip away at their market share. I think we will - our consumer experience will be really positive. We've got a really good opportunity with sports betting."

The Lottery's online sports betting had a soft launch last October 12, and the retail product made its debut on October 25. From those beginnings through the end of December, sports betting offered by the Lottery through both channels brought in net gaming revenue of more than \$2.7 million (handle minus payouts, and after adjustments including promotional credits).

That number is dwarfed by online play at the two casinos, which brought in a combined \$20.2 million in net gaming revenue during the same time period. "Are we in the shadows of the other two?" asked Smith. "Yes, absolutely. But I expect those shadows to get smaller.'

Game Progress

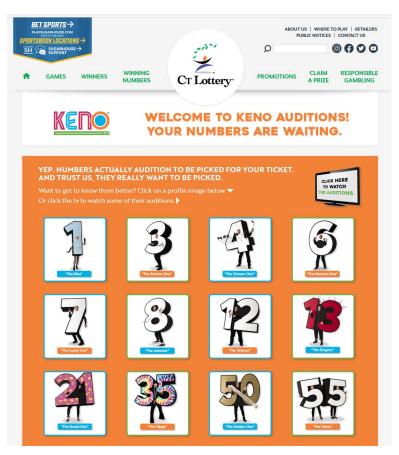
While sports betting is the biggest new game in town, the Connecticut Lottery had a lot of tools already in its toolbox, and there's a heritage of trying new things. It may have started with a 50 cent game called simply "The Lottery," with drawings held weekly, but the portfolio currently contains a rich variety of products. Instant games, first introduced in 1975, now range from \$1 to \$30. Draw games started with three- and four-digit daily numbers games, Lotto was introduced in 1983, and a cash lotto game followed in 1992.

Powerball came to Connecticut in 1995, and it didn't take long before for the state's southern New York borders were jammed with cars as residents of the country's most populous city wanted a chance when the jackpot reached a whopping \$100 or \$200 million. The addition of Mega Millions in 2010 after cross-selling began put an end to cross-border madness, much to the relief of local officials.

Other draw games came in and out over the years, but one stuck - Lucky for Life. It was a homegrown product developed by the Connecticut Lottery team, first launching as the Connecticut-only game Lucky-4-Life in 2009. The concept was so popular that other jurisdictions took notice. Lucky for Life became a regional New England game in 2012, and then spread to other jurisdictions beginning in 2015.

New product lines also came in, Keno in 2016 and Fast Play in 2020. "We have a little bit of a different approach than a lot of states for Fast Play," noted Senior Director of Sales and Marketing Pete Donahue.







Connecticut Lottery at a Glance

	Instant Sales	Draw Game Sales	Total Sales	Total Prizes	Net to General Fund
FY 2021	\$837,705,000	\$606,296,300	\$1,444,001,300	\$929,753,000	\$418,000,000
FY 2020	756,968,000	548,317,000	1,305,285,000	822,243,000	347,700,000
FY 2019	736,443,000	597,468,000	1,333,911,000	822,863,000	370,000,000
FY 2018	730,692,000	536,899,000	1,267,591,000	792,590,000	345,000,000
FY 2017	720,623,000	495,639,000	1,216,262,000	756,289,000	330,000,000

Current games:

Scratch tickets: Approximately 50 new games launched annually; \$1, \$2, \$3, \$5, \$10, \$20 and \$30 Terminal games: Powerball, Mega Millions, Lotto, Cash 5, Play 3, Play 4, Lucky for Life, Fast Play, Keno

Vital statistics:

Number of employees: 140

Number of licensed retailers: 2,900 Self-service equipment: 200 units

The product launched with a series of three games at \$1, \$2 and \$5, all funding a common progressive jackpot. A second series was added later, offered at \$2, \$5 and \$10. Recently Connecticut had its biggest Fast Play winner to date, almost \$200,000 on a \$10 progressive ticket.

"This state likes its gaming," noted Smith, pointing to the 50-year-old lottery and the two large casinos that stand as dominant players in the

landscape. "This Lottery recognizes that, and we need to bring forward relevant products so that we can provide games that appeal to the people here in Connecticut." He noted, for example, that the "for life" concept is quite popular locally, something that caught him a little by surprise when he first took the helm in July 2018 and saw the number of instant games with that kind of prize. "I've grown to recognize that these are highly

relevant games for people here and that there is space in our portfolio for them - another ticket isn't going to fill that gap."

There have been some adjustments to the instant game portfolio over the past couple of years as the team explores the relationships between top prizes and price points. There has also been more of a focus on shorter print runs that allow for more frequent introduction of new



games - once a month is the current schedule. "Consumers always like the new games," said Smith. "We have a talented group of people working on our instant games, and I like where we are headed."

Relevance is also why he focuses on the games the Lottery can control, instead of the two big national games that they can't. He recognizes the brand power of Powerball and Mega Millions, but their impact on the Connecticut Lottery's overall portfolio isn't very significant in comparison. Everyone is concerned about how long it takes the jackpot to grow, Smith noted, and there are always discussions about what it will take to keep those games relevant. He just hopes the game groups don't make rash decisions that are unrecoverable.

One thing he'd like to see the industry do is take a more active role in providing financial counseling to big winners before they receive their prize. That is especially important given that jackpot prizes these days are rarely divided among multiple ticket-holders. "I think there's some positive benefits to setting up formal funding for players to receive that financial guidance, instead of just turning winners loose and saying 'good luck.""

Retail Presence

With so much going on at the Lottery, some initiatives take precedence over others. For now, Connecticut is waiting for a new gaming system to be installed in 2023 before beginning in-lane sales projects, and there is always the ultimate goal of reaching more retail locations.

But it's also important to enhance the lottery presence in existing retailers (Connecticut has about 2,900 at the present time), and a new pilot project testing digital menu boards is

doing just that. "They give us a great opportunity to showcase our games, and they are absolutely beautiful," said Donahue. The pilot includes 50 locations; after beginning rollout in December, all 50 should be installed by the end of March.

The menu boards, provided by Carmanah Signs, can be configured in numerous ways depending on the individual locations. "Ideally we want a location that's big enough to have two 55-inch monitors side by side," explained Donahue, who emphasized that if a great location doesn't have that kind of room, they would simply choose smaller versions. Draw games are highlighted across the bottom of the panels, but the rest of the content can be programmed in response to changing needs. Big jackpot takeovers can provide an extra splash, new instant games can take center stage, side panels can advertise keno whatever is needed.

The Lottery's area managers have been busy scouting possible locations for the pilot, based on store size and foot traffic; so far retailers have been very receptive. Some of the initial stores chosen were smaller momand-pop stores. "We think there are better opportunities at some of these stores, but we're constantly assessing what might be the next best locations," Donahue said.

Marketing Fun

While menu boards could really provide an in-store impact, the Lottery's overall marketing efforts are important drivers of awareness and growth. In recent years, the Lottery had a global advertising campaign that focused on everyday wins instead of big jackpot wins. With the tagline, "It doesn't take much to live big," ad spots would run with a game-specific tag at the end. That way the campaign had continuity but could bring attention to specific games the Lottery wanted to promote.

There are also awareness ads that trigger when the Powerball and Mega Millions jackpots really start climbing, and of course a campaign when Lucky for Life went to daily drawings last summer. Aside from those ads, though, the Lottery hasn't run a full product-specific campaign for several years.

That changed in 2021, with the continuation of a strategic plan for Keno advertising. At launch in 2016, the Lottery focused on awareness. Next came a campaign reminding players that Keno was available in several different types of locations. In 2021, it was time to really have some fun with it - and keep the growth going.

"We brainstormed for a long time," explained Donahue. "We don't want to do the same old thing – we wanted it to be funny and memorable." The agency came up with the initial concept - Keno from the perspective of the numbers, not the players - and it was refined by both parties from there. "We just thought that it was a really interesting perspective, thinking of numbers as wanting to be picked." There were subtle educational aspects, such as choosing the number four to be one of the stars (Keno is drawn every four minutes), along with the bonus multiplier, which brings in incremental spend.

The campaign featuring multiple television spots won a NASPL Batchy Award in 2021, honored for the best television coordinated campaign for Keno games. The Lottery is also using stills in some of its point of sale pieces to create a true 360 campaign. "We've gotten tons and tons of great feedback, and people have said this is the best campaign we've done in a long time," said Donahue. "We're very, very pleased with it."

There has also been a lot of fun with social media influencers, starting



One of the Lottery's more popular social media influencers.

with the 2020 holiday campaign and expanding into Keno as well. "It is quite a departure from what we have traditionally done," said Donahue.

Tara Chozet, Director of Public Relations and Social Media, works with the Lottery's agency to get the most from the influencers, which have ranged in age from young adults to older generations, with interests and followers in a wide range of areas. "Social media influencers have been a really exciting way for us to engage with different groups," she said. There's been great success using influencers who are not always the most polished, but who are really just being themselves – their personality shines through. For the 2021 holiday season, one was noted lifestyle blogger and actress Eva Amurri.

Throughout its historical 50th anniversary year, the Lottery has a robust plan in place to celebrate, including special edition games, dedicated advertising, social media promotions, pop-up events and more. There's an anniversary logo, designed completely in-house. "We incorporated our original Money Tree logo into our 50th anniversary logo as a callback to our history," said Chozet. "It's a simple, sleek-looking logo that also incorporates the font that we use in our current marks, melding our past with our present."

Full Speed Ahead

Like most American lotteries, Connecticut had an exceptional fiscal 2021 – the surge in business due to the pandemic temporarily halting many other entertainment options continued. "To some degree, I think people who weren't playing lottery before tried it, liked it, and recognized that money actually does go to winners," said Smith. And he goes back to relevance again - finding out what customers want. "We look at what's selling well and actually go into our retail locations and talk to customers. We ask what they are buying and what makes things interesting." From those conversations came Wild Ball as an add-on to the daily numbers games in 2020,

and brought the launch of Fast Play as well. Smith, who has occasionally gone on these on-the-fly focus groups himself, encourages his sales and marketing management team, including Donahue and Games Director Carlos Rodriguez, to participate.

The challenge after big years is always what happens next, and new gaming categories give Connecticut an advantage going forward. Sports betting should continue to ramp up, and iLottery should be up and running later this year. To get ahead of any potential retailer pushback, the Lottery has been educating retailers about iLottery, pointing out how states with online sales also have some of the fastest-growing retail sales in the country. Smith is looking forward to bringing that kind of success to Connecticut, with plans to do cross-channel promotions to build both retail and online business. And of course, fantasy sports is on deck to follow iLottery.

In the more traditional business line, continued attention to what players want will be enhanced by the new gaming system in 2023. That could open doors to other opportunities, including self-service expansion - taking better advantage of one key aspect of consumer life that took off during the pandemic.

The year 2022 is one of accomplishment, and celebration, for the Connecticut Lottery. New tools to modernize operations are always hoped for, but rarely authorized. "It's a great thing to have all of this excitement at the same time!" exclaimed Smith.







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Progress Report:

In-Lane Sales

Led by Texas and Arizona, American lotteries continue their retail in-lane rollouts and pilots, while v3.0 of the NASPL API is nearing completion.

By Patricia McQueen



here's a lot of work going on in the lottery industry under the banner of "in-lane sales," although the conversation has really morphed beyond one of the key initial goals – reaching new types of retailers for the first time. Now, it's not only about reaching those new retailers but also about creating additional points of sale that don't require a dedicated lottery terminal, wherever they may be located. Instead of just one lottery terminal in a store, for example, a single store might have a dozen or more non-lottery terminals selling lottery tickets. That's many, many thousands more points of sale than previously possible, especially in a state like Texas, one of the pioneers in this area.

Just look at H-E-B. The big Texas grocery chain has been an enthusiastic supporter of Receipt Ticket, an innovation that prints Powerball and Mega Millions tickets on plain paper through its cash registers.

The rollout began in the summer of 2020, first at service centers and now through regular checkout lanes at more than 300 stores - in total, more than 5,000 new points of sale for the Texas Lottery.

Then there's Dollar General, plus stores in the Kroger and Albertsons families, choosing the QUICKTICKET or QUICKCARD route (depending on jursidiction), also giving consumers the ability to play Powerball and Mega Millions as they proceed through the checkout lane.

The advantages of these new developments for lotteries? "We don't have to deploy additional equipment, so we're saving money, we're reaching new customers and getting incremental sales," said Ryan Mindell, Director of Lottery Operations at the Texas Lottery. Combine that with the enthusiasm shown by these retailers, and it "really is a win-win situation."

Sure, it has taken a lot of hard work to get to this point, and there's a lot more to be done,

especially with the Holy Grail of lottery waiting in the wings - finding a great in-lane solution for selling instant tickets. But the progress so far in a few states is setting the stage for a bigger and brighter lottery future for everyone concerned.

The NASPL API is the underlying engine facilitating these recent initiatives, and a new 3.0 version is expected to be released by the end of February. The NASPL API working group, chaired by Mindell and including representatives from the major vendors involved in the process, has been finalizing additions to the specification.

Key new features include formal support for QUICKTICKET/QUICKCARD products; validation of other lottery products that allows for redemption of instant tickets and other draw games besides just Powerball and Mega Millions; and other items learned from actual experiences in the market so far. Most significant among those is something as simple as printing the security number twice on each ticket to help in cases where a ticket fades or is otherwise damaged.

Redemption is important. Mindell noted that H-E-B stores in Texas now do almost all of their redemptions - for draw and instant games - through their own registers, not through a dedicated lottery terminal. It is faster and more efficient for the retailer, and while redemption is currently done primarily at the service centers, it saves valuable time to use the cash register up front instead of the lottery terminal at the back. The only tickets (within the retail cashing range) that can't be validated through the register are those which offer a free ticket as a prize.

Still Expanding in Texas

H-E-B and Dollar General are only two of Texas' success stories. The Texas Lottery gets a side benefit to the work with Dollar General - that retailer's incredibly fast expansion. At launch there



Albertsons and Safeway are the newest chains to sell QUICKCARD in Arizona.

in late 2019, Dollar General had about 1,520 stores in Texas. That number is now up to 1,700 stores. "Generally they are growing four to six new stores a month here," noted Mindell. "It's very unusual for a chain of any size to grow that many stores each year. The growth adds up to something significant."

Texas' rollout of QUICKTICKET to more than 210 Kroger stores last October is one of the exciting new developments. It utilizes the Texas Lottery's integration with Blackhawk Network. Although the product availability came in time to capture increased jackpots in both national games, jackpot signs weren't included in the initial rollout. A pilot with the signs started in January, and the Lottery expects to add jackpot signs everywhere during the coming weeks. "No matter what in-lane products you are talking about, having customer awareness is a big part of the problem to solve," said Mindell.

This spring, Texas expects to launch QUICKTICKET in about 200 Albertsons Companies stores, primarily Albertsons

"No matter what in-lane products you are talking about, having customer awareness is a big part of the problem to solve."

- Ryan Mindell

"Lottery is like some products in some areas, and other products in other areas, so it's just a matter of making sure that we have it all lined up with the retail partner."

- Ryan Mindell

and Safeway, using the InComm Payments integration that was originally done for the Dollar General rollout.

These initial projects have uncovered issues that do need to be addressed by any lottery interested in moving forward. For example, some lotteries will require the retailer to accept split tender when lottery tickets can't be purchased with debit and/or credit cards. That's not always a challenge, though. "Most retail environments do have processes for these, because you have things that require split tender today," explained Mindell, like EBT and flexible spending cards. There also has to be an age gate, but again, most retailers are familiar with that given alcohol and tobacco products. "Lottery is like some products in some areas, and other products in other areas, so it's just a matter of making sure that we have it all lined up with the retail partner."

He has one other big piece of advice - make sure all the parties involved are talking the same language. Some of the terms used in discussion mean different things to different entities. "Sometimes we've gone down discussion paths only to realize, 'Oh wait, we're not talking about the same things."

Expanding Outlets in Arizona

The Arizona Lottery is another that has made a lot of progress in these areas, first introducing QUICKCARD (similar to QUICKTICKET) in September 2020 at Dollar General stores. CVS and Fry's (a Kroger brand) followed suit by the end of 2020, and Circle K stores started selling QUICKCARD in April 2021. The newest additions to the list of Arizona retailers selling the product are stores under the Albertsons Companies brand, Albertsons and Safeway, which began selling in January.

In total, more than 1,025 retail locations are now selling QUICKCARD in Arizona.

The Lottery is also testing Scientific Games' SCiQ InLane instant ticket

solution, with a pilot program launched in 17 Fry's stores last August. It was a good time to introduce the product, as it included the all-important holiday season. Sales increased each week leading up to Christmas - sales that week were double the previous week, and the highest since the pilot began. Since then, sales have declined - as is typical for instant games in the post-holiday season across retail stores.

Four instant games are offered, and the selection is rotated about every 10 weeks. While the lower price points (\$1 and \$2) are appealing as impulse purchases, the higher price points (\$5 and \$10) are the better-selling games. Approximately 1.45 tickets are sold per transaction, and customers appear to be comfortable adding the games to their basket at checkout.

Learning in Oklahoma

For lotteries more recently starting the process, the pandemic has had an impact beyond some underlying shifts in retail - ongoing staffing shortages affecting many businesses. The Oklahoma Lottery introduced QUICKTICKET at some 480 Dollar General stores early last summer, and has learned a great deal since then.

The fast-growing retail chain has its own way of doing things, and the QUICKTICKET implementation through an InComm integration has also meant that lotteries have to adapt. "There's definitely an opportunity for growth by presenting lottery in a non-traditional retail format, but lotteries have to be open to changing the mindset," said Mary Martha Ford, the Oklahoma Lottery's Director of Sales.

With Dollar General in particular, that means understanding the retailer's use of third-party installers to set up the stores and understanding the need for new types of retailer agreements that rely more on others than on the Lottery's own team. For example, some of the challenges that have arisen

in Oklahoma have to do with setting up QUICKTICKET displays. It may be that the Lottery needs to communicate on a more regular basis at both the corporate level and with the in-store management to achieve more consistency from store to store, but staffing shortages have certainly had an impact in getting to that point.

Regardless, it has been a great learning experience. "The addition of Dollar General has increased our total retail footprint by about 25%, and that provides a great opportunity for us to break out of traditional channels," said Ford. "In these and other potential locations, we just need to continually adapt our approach to present our products in a way that meets our brand standards. There's more than one way to sell lottery tickets!"

Eye on the Prize

The big nut yet to crack is selling instant games in-lane, and there are numerous pilot programs out there trying to come up with a good solution. While Mindell thinks the solutions currently being tested have their drawbacks, these pilots are providing valuable data about customer acceptance and sales potential, workflow and ticket flow.

For example, a Texas pilot involving H-E-B has a cashier "check out" a selection of scratch tickets in each shift, much like they take cash for their register drawer. Placed in a small in-lane dispenser, they are visible to customers and can be purchased simply by scanning their bar code. They are live, activated tickets, and remain that way until the end of the shift, when that cashier returns any unsold tickets for reconciliation, just like their cash drawer.

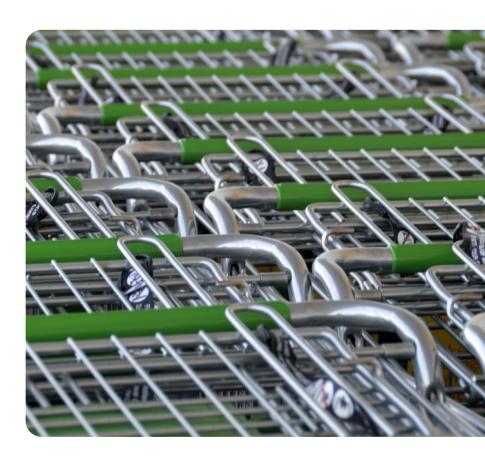
"Although it's been on a small basis, it is showing us the sales potential for scratch tickets in-lane," said Mindell. "It has been very robust." H-E-B has been enthusiastic about this pilot, which included 41 stores by late January; Alberstons is also interested and was up to 10 stores by the end of January.

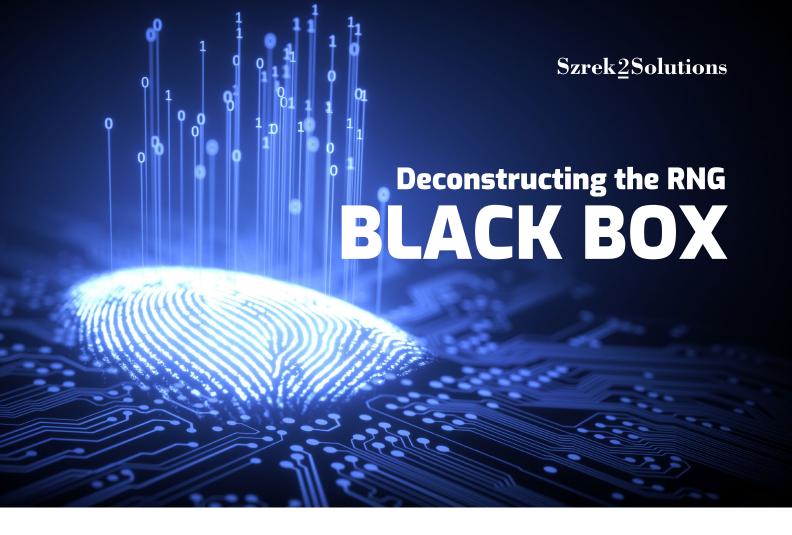
Other lotteries are testing different ways of displaying and dispensing tickets

in checkout lanes; some, like Arizona, are putting SCiQ Inlane through its paces. "My great hope is that with some of the information we are getting from these scratch ticket pilots, we can go back to the API and figure out what data needs to be addressed at the national level," explained Mindell. Once another version of the API incorporates useful information, then it's up to lotteries to handle the additional needs of their own jurisdictions - storing tickets, managing the ticket life cycle, and creating customer awareness.

One great aspect of all of these projects is that they have fundamentally changed the way these retailers view lottery. For some, they have shifted the conversation from lottery being a difficult product category to being a positive opportunity, one that can provide meaningful revenue growth. "That has definitely been true with Dollar General and H-E-B," said Mindell, and he hopes that Kroger, Albertsons and others will have the same experiences as they get further along.







ecurity in the lottery industry is essential and a priority for all stakeholders. Players must trust

that lotteries provide secure games and solutions, trusting RNGs and all other aspects of the lottery process. Some players may distrust RNGs because they perceive them as a "black box," lacking transparency into the draw process. Actually, many currently existing draw solutions can be considered "gray boxes," in that they provide security measures and procedures allowing some visibility into the draw process. However, the gray box is not 100% safe, it may not protect against hardware problems or deterioration of hardware, and most likely will not protect against fraud by an insider attack. Past incidents, including repeated draw numbers and insider fraud, have underscored the need for a "white box" RNG, a solution that provides

draw transparency and ensures that any draw problem will be detected by an independent audit.

Preventive security measures and procedures used for draws typically protect only against known or foreseen types of problems. Some currently-used preventive measures are sometimes referred to as a security theater, as they may seem good but do not add security value. For example, one of the lotteries that was using our systems in a secure enclosure installed alarms that would notify an external security company when the enclosure door was opened. In reality, if there were an attack, it would most likely come from a trusted insider who would know how to manipulate the system, and not from someone illegally trying to break through the secured cabinet to access the computer. After using our Trusted Audit system, which validates the integrity of the draw results, the lottery decided that the

Wikipedia definition:

Black Box

In science, computing, and engineering, a black box is a system which can be viewed in terms of its inputs and outputs, without any knowledge of its internal workings. Its implementation is "opaque" (black). To analyze an open system with a typical "black box approach," only the behavior of the stimulus/ response will be accounted for, to infer the (unknown) box.

The opposite of a black box is a system where the inner components or logic are available for inspection, which is most commonly referred to as a white box.

Source









verification service was offering them more security than the alarm and stopped using the alarm service.

The lottery industry has experienced various incidents that reflect a need to move beyond traditional preventive security measures. MUSL drawing machines were operated in several states for several years, and none of their protections helped against insider fraud. Security measures were in place, the computer was in a locked glass-walled room accessible only by two people at a time and then only on camera, and it wasn't connected to the internet or any other networks. And yet, without complete transparency, the RNG was unable to detect that it had been compromised. In another situation,

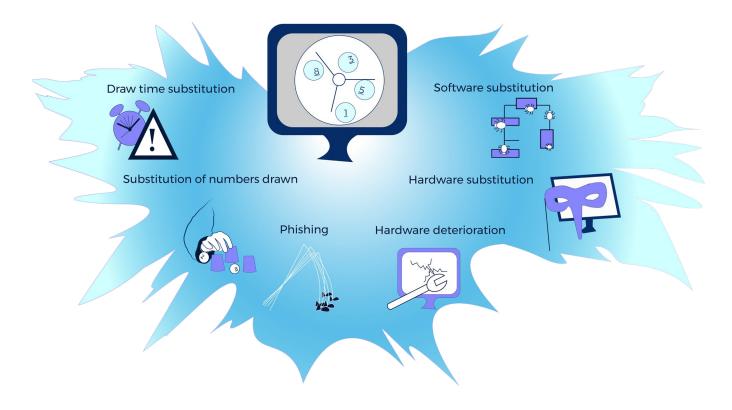
when lotteries experienced repeating random numbers over subsequent draws, it was due to failed RNG hardware. In yet another example, raffle draws were held from incomplete ranges. All the preventive measures and procedures used did not detect these problems, hence our analogy of the grey box - a system that lacks complete transparency and is unable to detect all problems.

Let's illustrate the problem, using an analogy from banking. Imagine someone deposited counterfeit money and the bank was unable to identify that the bills were forged. After the money is accepted by the cashier, it begins circulating in the bank's system - it joins an existing electronic trail and works without

further problems. The money could be transferred, it will accrue interest, and can be withdrawn. No audit would show any problems. In this way, when the fake money was accepted into the system, the security of the banking system failed.

The same problem exists with random numbers. If the source of randomness is bad, due to RNG hardware failure or deterioration, or if there is draw manipulation that is not recognized, the random outcomes will be affected and corrupted.

In the case of a lottery draw, a white box RNG would be able to detect any hardware or software failures, insider fraud, or changes made at any time to the draw results, and any other problem that could



occur. In addition, a white box solution can prove the validity of draw numbers. When unusual draw numbers, like numbers in sequence, are selected as winning numbers, as seen in December 2020 in South Africa's draw of 5, 6, 7, 8, 9, 10, a white box RNG is able to validate the random numbers as being true and correct.

The existing white box RNG solution is connected to the revolution in computing and cryptographic technology brought by Public Key Infrastructure (PKI). The PKI technology enables secure communication over the internet, blockchains and bitcoins, and enables transparency in random numbers generation. PKI enables verification of data without knowing how it was created. If the RNG seed is created using PKI, e.g., using digital signatures as RNG seeds, we can verify that the seed is correct without knowing all information needed to generate it! To make the RNG system transparent, it is enough to generate the RNG seed with PKI technology and to transfer it to an independent verification system. Now, one can verify the correctness of the RNG seed and, using the same RNG algorithm (PRNG), recreate the random numbers.

The main elements in the process are the algorithm and the RNG seed.

- **1. The Algorithm:** The PRNG algorithm transforms the seed data to the actual random numbers. It always generates the same set of numbers from the same input (seed). The PRNG algorithm needs to be cryptographically strong.
- 2. RNG Seed: The seed provides the actual randomness and is unknown and unpredictable. The same seed will always create the same string of random numbers.

There are several benefits to using PKI technology for

- Hardware faults are detected and ensure that hardware is not deteriorated during number generation.
- Some hardware devices keep independent verifiable time and a generation counter that allows accounting for each random number generated and verifies the time the draw took place.
- The verification process enables proving the integrity of the random results and the information of associated data such as the game matrix.
- If we provide the hash of bets participating in the draw, we also have proof of the content of the bets before the draw.
- If we provide player information for an instant win transaction, we can prove the outcome (win or loss) belongs to the specific player.



- In a connected environment, the verification system can be integrated with ICS.
 - The verification process can be automated, with draw numbers automatically verified by ICS in real time.
 - When the gaming system includes the hash of all bets with the draw request, the RNG system digitally signs the hash as a part of the RNG seed. The digitally signed hash of the bets can be verified by ICS in real time.
 - Verification can be done for 5-minute Keno and other frequent draws.
 - The hash of the file with second chance draw data can be verified by ICS.

In conclusion, we highlight the importance of RNG transparency. While errors, hardware or software malfunctions, human mistakes, and cases of fraud are bound to happen, problems persist because the random number generation process has not been transparent. Problems are hidden inside the black box or not fully visible in a grey box, and because they are not evident externally, they can exist without being detected. The cost of a single problem is very high and hurts the whole industry. The lack of transparency in any part of the draw opens the industry to vulnerabilities that could be avoided by using the white box solution.

Szrek2Solutions



TRANSPARENCY IN RANDOM NUMBERS

integrity verification and audit of lottery draws

Szrek2Solutions





Lotteries are known for raising funds for good causes, but many are also stepping up to help minimize their impact on the environment and saving money at the same time.



nvironmental concerns are on a lot of peoples' minds these days, as we recognize more and more that we have to take care of the planet upon which we live. Some of the most obvious manifestations of this

need are the extreme weather events becoming more commonplace with each passing year. Just look at how the Kentucky Lottery assisted with unprecedented tornadic devastation late last year (see page 8).

When we set out on this journey to see what steps the lottery industry is taking to promote environmental sustainability, little did we know how enthusiastic many of the responses would be. Clearly many lotteries - and the governing powers in their jurisdictions - have given the subject a great deal of attention. A few even have dedicated "environmental impact" pages on their websites. And best of all, many of these measures actually save money, allowing lotteries to give back even more to their beneficiaries.

An interesting side discussion that came up in this review is the transition to a remote workforce. Triggered by necessity due to the pandemic, some lotteries have determined that a remote workforce is a long-term solution that promotes productivity, saves energy and reduces costs, while improving the work-life balance and making happier, healthier employees.

You'll read about some very detailed efforts on the following pages, but also realize that most lotteries are doing everyday things such as encouraging office recycling, using recyclable paper, and providing drinking water sources for employees to limit the use of plastic bottles. And of course, many of their suppliers - not just the big lottery industry vendors – have environmental sustainability programs in place, so lotteries reap the benefits of their green measures as well.



Arizona Lottery Wayne Gillum

The Arizona Lottery continually works to improve all aspects of operations to help fulfill our mission, which includes supporting programs that protect and preserve our state's iconic wildlife and habitats. "The Arizona Lottery's mission is to support vital state programs and services that would otherwise rely on tax dollars for their funding," said Arizona Lottery Executive Director Gregg Edgar. "As the Arizona Lottery is entirely self-funded, every dollar in expenses saved is a dollar that can go back into state coffers and into our community. Being located in the desert, where the triple digit summer highs really put a strain on the electricity grid, it is important for us to protect our environment by conserving energy. What better way is there to do that than by making our own headquarters as green as it can be? They say charity begins at home and the Arizona Lottery is proud to continue to improve its home and make it as economical and environmentally friendly as possible."

Energy conservation. Our Physical Plant Manager Wayne Gillum has been a driving force behind implementing green improvements since his arrival in 2016. He has worked tirelessly to make the Arizona Lottery a greener workplace, significantly improving the agency's sustainability and reducing its carbon footprint. These improvements include:

LED lighting and electronic ballasts to replace all the fluorescent lighting
in the headquarters building. These are safer to use, use less energy to
illuminate workspaces and lower our utility bills in the summer, as they
emit less heat and reduce the need for air conditioning. We installed 600
LED lamps and 300 ballasts, which initially cost the agency approximately
\$9,000 but was partially offset by a \$5,000 rebate from Salt River Project,
the local power provider.

- An Energy Management System (EMS) to increase the efficiency of our HVAC system. When we are in the height of summer, the EMS detects that we are at capacity and pulling peak power. It then reduces the load from other units in the building, based on how important those areas are to lottery operations, in order to increase overall energy use efficiency.
- Motion detecting thermostats and light switches in all office spaces throughout the building. These save money and reduce our environmental impact, lighting or cooling these spaces only when in use.
- Solid-state Variable Frequency Drives (VFD) that control the central plant's motor speed. These motors drive the HVAC and the VFDs act as throttles, controlling the speed of the fans and cooling pumps, conserving energy and saving money for Arizona's taxpayers.

· Consolidation of our server room, removing a large room full of IBM equipment that now takes just two server cabinets. This reduced our annual HVAC load by 40 tons, which is enough energy to cool eight homes.

Since work on these upgrades began in 2016, the Arizona Lottery's energy expenses have fallen significantly. From 2019 through 2021, our annual energy expenses fell more than \$12,000, down nearly 34%.

Office recycling programs. Our office recycling efforts are all employee led. Gathering and transferring aluminum cans in the office is returning \$50 a year to our Employee Activities Committee, funding social events enjoyed by agency employees. Our custodial and shredding contractor, Valley Life, works to shred documents and palletize waste cardboard for International Paper, which picks up the recyclables, returning about \$20 to \$30 per month to the state's general fund and further relieving the burden on Arizona taxpayers. Valley Life is an organization that provides "individuals with disabilities of all ages the opportunity to live a life with choices, independence and dignity."

Paperless office initiatives. As part of our continuing transition away from in-office work and toward working from home, because of the COVID-19 pandemic, we are transitioning to digital documents and away from paper forms, moving much of our work to Google Docs and cloud storage. In fact, all of our billing is now scanned and

Supporting green vendors. While the Arizona Lottery does not have a focused initiative to support our green vendors, many of our vendors have increased their own sustainability efforts. Our green vendors include Republic Services, which handles our plastic recycling and trash disposal; International Paper, which serves our paper and cardboard recycling needs; and Western Water, which treats the water used in our HVAC and cooling towers. We also renovated all the landscaping at our headquarters, converting it to xeriscaping with desert plants that require little water and very little irrigation.

Work from home options. We are offering more work from home hours and options for employees as part of a statewide initiative, due to COVID-19 changes in the workplace; there was nothing significant prior to the pandemic. We think there will be some level of remote working going forward, as the state is implementing hotelling and office consolidation projects due to lower demand for office workspace, reducing traffic and pollution and saving the state money in the bargain.

Encouraging sustainable transportation for commuting. We encourage use of the Maricopa County Rideshare program. This is a countywide effort to connect residents with their coworkers to facilitate carpool planning and execution.



British Columbia Lottery Corp.

BCLC is committed to aligning its business operations with the provincial government's CleanBC climate plan for reducing greenhouse gas emissions and transitioning to a low-carbon economy. We have developed a plan to reach a net zero emissions goal by 2030.

Prior to the pandemic, we were in the process of piloting a remote work program to explore environmental and employee work-life balance benefits. In mid-March 2020, to help stop the spread of COVID-19, the majority of BCLC employees switched to working remotely, with the exception





BCLC's Vancouver office

of roughly 10% of employees whose duties necessitated working with equipment located at one of our two offices. This has positive impacts on our carbon footprint, reducing employee mobile combustion emissions related to commuting to work by 73% and greenhouse gas emissions from office supplies by 57%. Given these results, BCLC formalized the remote work policy to provide employees with permanent remote options.

BCLC works with Green4Good to help address IT asset disposition needs. Through this program, we redirect aged technology away from landfills and maintain data security while supporting charities through cash and technology. In 2020, we recycled and repurposed 736 pieces of technology through Green4Good. This included data center related items and other types of legacy equipment such as desktops, monitors, printers and phones.

In addition to finding a second life for used technology, we made investments to replace legacy equipment, including servers and switches, with alternatives that are more efficient and have higher data storage capacities. In the long term this will reduce the need to replace physical devices, thereby reducing electronic waste. Where possible, BCLC is also using cloud-based applications, that do not require in-house server equipment, resulting in a dramatic decrease in our data center power consumption.

We encourage our employees to adopt sustainable

practices in the office and at home, wherever possible. Currently, the City of Kamloops, where our head office is located, suspended its curbside recycling program for soft plastics. Recognizing the need, BCLC provided collection bins for employees to bring in their soft plastics from home to recycle at the office.

BCLC also has an employee-led Green Committee. Together, they worked to build a new, larger bike cage at our Kamloops office to encourage more employees to ride their bikes to work. Recently, we also expanded our technology purchase program, which provides loans to employees for the purchasing of new technology that fosters creativity and innovation, including e-bikes.

Additionally, we collaborated with the City of Kamloops to provide "Lunch and Learn" opportunities for employees to learn about saving energy at home, specifically relating to heat loss. To support employees in making their homes more energy efficient, BCLC purchased two thermal imaging units and rolled out an employee-borrowing program so that employees can identify the necessary energy upgrades in their homes.

Looking to the future, BCLC has a plan to reach its net zero emissions goal by 2030. We will continue to look for ways to look for ways to improve the heating and cooling system at our Kamloops and Vancouver offices and reduce the carbon footprint of our vehicle fleet.



The ZNE Chatsworth office

California Lottery

We are excited about this review of environmentfriendly initiatives to promote sustainability and carbon-neutral goals. The California Lottery has accomplished a lot in this space, and that's something we are quite proud of. We are committed to being environment-friendly, spearheading a number of initiatives that promote sustainability and help toward the goal of carbon neutrality.

The California Lottery headquarters building in Sacramento, Calif., was the first of our sustainable green buildings to achieve the prestigious Leadership in Energy and Environmental Design (LEED) Certification in 2012 and 2015. The approach to the headquarters building design was to construct an environmentally sustainable building while being fiscally responsible at the same time. At the beginning of the process, our design professionals met to identify green features for consideration and analyzed those against the cost of design and construction, return on investment (ROI), energy and water savings, and ongoing maintenance costs.

The headquarters building design implemented green elements with a 15-year ROI, including a radiant



California Lottery headquarters

heat flooring system and something called "daylight harvesting" that allows us to utilize daylight to light spaces as much as possible. Efficient air filtration systems and water-saving plumbing was installed, specifically lowflow toilets and faucets, and ice storage to support the advanced heating, ventilation and air conditioning system. The original goal set by the state of California was for a 20% water reduction by 2020. We have reduced water usage by 37%, exceeding the state's goal by an additional 17%!

It's not just our headquarters building that we've focused on, however. California has a statewide goal to divert 75% of waste from landfills. Accordingly, the Lottery maintains a recycling program aimed at reducing the amount of waste sent to the landfill. Our Solid Waste Management Program addresses the collection, sorting, diversion and disposal of ongoing consumables, mercury-containing lamps, durable goods, and construction and demolition waste at Lottery facilities statewide.

Further, throughout all Lottery offices, each workstation has an individual recycling container, larger than the waste bin, which encourages employees to recycle first before putting waste in the landfill. We recognize the importance of purchasing sustainable products and strive to reduce the environmental impact of products used in business operations and building maintenance.

In April 2012, then-Governor Jerry Brown issued a Green Building Action plan, ordering all new state buildings beginning design after 2025 to be constructed as Zero Net Energy (ZNE), with an interim target for 50% of new facilities beginning design after 2020 to be ZNE. It was further ordered that all new, renovated or built-to-suit leases larger than 10,000 square feet obtain LEED Silver Certification. Shortly thereafter, in July 2012, we performed a lease-or-buy analysis of one of our distribution centers and nine of our leased district offices throughout California. The analysis found a clear financial advantage to owning versus leasing, as the existing buildings were not meeting operational needs. The findings of the lease-or-buy analysis and the Governor's Order presented the Lottery with an opportunity to accept the challenge to reduce entity-wide greenhouse gas emissions by way of sustainable design, construction, maintenance and operations of our buildings. A Facilities Master Plan was drafted to outline the infrastructure roadmap.

Along with our architectural and design firm, we designed and built eight ZNE buildings. This was achieved through the installation of solar power technology on the roof (photovoltaic panels) to optimize energy performance and offset 100% of each building's energy usage. The buildings were designed with extra insulation in the walls and roof, as well as high efficiency window

glazing to help minimize costs associated with heating and cooling.

Our team also minimized costs by installing occupancy sensors, low-energy LED bulbs and daylighting (placing windows, skylights, openings and reflective surfaces to maximize the opportunity for daylight harvesting).

In October 2016 the Lottery's first ZNE building, our Santa Fe Springs district office, opened for business. Our other ZNE buildings are in Fresno, Milpitas, Chatsworth, Costa Mesa and San Diego, plus two in Rancho Cucamonga. Our Southern Distribution Center in Rancho Cucamonga, as well as our district offices in Fresno, Milpitas and San Diego, have all achieved LEED Gold status. The Rancho Cucamonga district office achieved LEED Silver status, and Silver certification is currently pending for the Costa Mesa and Chatsworth district offices.

Moving forward in 2022, we will be registering our headquarters building for LEED Certification under the much more stringent LEED version 4, followed by a recertification of the Southern Distribution Center.



Loto-Québec

To guide our next Corporate Social Responsibility Plan, we updated the environmental performance review of our commercial and administrative activities. This enabled us to identify the sectors where action to reduce environmental impacts should be prioritized. We adopted a greenhouse gas reduction target (-25% by the end of the 2022-2023 fiscal year) to contribute to the Québec government's 2030 Plan for a Green Economy. This will lead to consistent and relevant action aimed at reducing our environmental footprint.

Scratch ticket developments. In January 2021, we introduced Évasion, the world's first-ever scratch ticket printed on entirely recycled materials. The game was launched after passing all environmental and security



tests. Printing on 100% recycled cardboard is a challenge, as it's less stable than virgin cardboard, so more than two years passed between the start of laboratory tests and the distribution of the first Évasion tickets across Québec. That game was followed by Code Secret, and they are the scratch tickets with the smallest environmental footprint in the industry.

In creating scratch tickets on a greener medium, Loto-Québec wanted to further reduce its environmental footprint by promoting the local economy. To do so, we called on two partners based in Québec. The games are produced with environmentally friendly, water-based inks at Scientific Games' highly secure Montréal instant game manufacturing facility. As for the recycled material, it is produced by Rolland, an eco-friendly printing paper supplier located in Saint-Jérôme.

The majority of Loto-Québec scratch tickets are FSC-certified. Forest Stewardship Council labels deliver a guarantee to consumers that the products they buy support responsible forest management, and that the products are handled correctly at every stage of production - from forest to shelf.

Furthermore, all our lottery tickets are recyclable. And we work with a printer who finds solutions so that production waste is also recycled.

Technology and work from home. The rapid rollout of new collaborative tools by our information technology (IT) teams enabled the majority of employees to work from home, which became necessary due to the pandemic. At the same time, we continued to successfully upgrade our technological infrastructure and increase the capacity of our IT networks while ensuring the availability of our critical services and systems. At the present time, employees must still work from home due to the pandemic. When the situation gets better, employees will work from home for up to three days a week. It will diminish our environmental footprint as well as enhance the quality of life and work-life balance for our employees.

Casino environmental certifications. The Casino de Charlevoix and the Casino de Montréal were awarded new BOMA BEST certifications in December 2020. BOMA BEST is Canada's largest environmental assessment and certification program for existing buildings. The casinos' continuous improvement processes enabled them to achieve Gold certification, surpassing their previous performance levels in both cases. All of our target gaming locations are now BOMA BEST Gold certified.

The Casino de Montréal was awarded Performance + certification for the ICI on recycle + program. This certification recognizes proactive organizations that are committed to improving their waste management performance. It also highlights the contribution of our employees, who reduce, reuse, recover and recycle waste from our activities on a daily basis.

North Carolina Education Lottery

The N.C. Education Lottery is taking steps to support environmentally friendly initiatives and promote sustainability in our workplace and operations. Here are some of the steps taken so far:

Energy conservation. We have replaced all incandescent and florescent lighting in our headquarters building and each of our six regional offices and claim centers with LED lighting. The switch produces an annual savings of almost \$20,000 and earns the Lottery an energy rebate from the electric utility company.

Office recycling programs. All waste from our office buildings are separated in trash and recycling. Recycling bins are conveniently and prominently placed throughout office buildings to allow employees to easily recycle plastic and paper waste. We have ongoing contracts with a recycling company, Green for Life (GFL) to ensure plastics, paper and cardboard materials are recycled appropriately.

Reducing waste through reusing. Due to the Lottery's popular Lucke-Rewards program and use of second-chance drawings, lottery players are less likely to litter with scratchoff tickets since they earn valuable points and entries into drawings by scanning in their tickets. Scratch-offs are more likely to end up in trash bins than on streets and sidewalks.

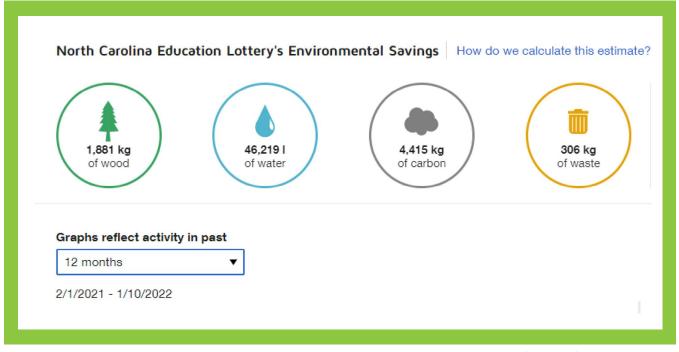
Paperless office initiatives. The remote work environment resulting from the COVID-19 pandemic has accelerated the Lottery's move into a paperless environment. We have adopted paperless processes using programs such as FileSolve, OnBase and DocuSign. The programs allow for employees to



work more efficiently and reduce the amount of paper generated for copies and signatures.

Supporting green vendors. As noted above, the lottery contracts with a green vendor, Green for Life, for the proper disposal of paper, cardboard and plastics from our offices. Two of our gaming vendors, IGT and Scientific Games, have robust sustainability programs, and provide annual reports documenting their initiatives.

Work from home options. Since the COVID-19 pandemic hit North Carolina in March 2020, many employees have worked remotely, a development that has produced significant reductions in the environmental impacts of commuting. Before the pandemic, the Lottery's benefits included the offer of Alternative Work Schedules that permitted work weeks of four or four-and-a-half days for some employees. The alternative schedules also played a role in alleviating the environmental impacts of commuting. Currently, customer-facing employees and sales reps are working either at the office or in the field. Since last July, working in the office for the rest of us has been on a volunteer basis.



ROI... that's a sure winner!



Our LED Modular Scratch-Off Lottery Dispensing System is taking convenience, functionality, <u>and your sales</u> to the next level.

- West Virginia Lottery Launched in 2021
- > Fits ALL ticket lengths up to 12" and widths up to 8"
- Ocmpletely modular design, can adjust at any time
- Customize configurations vertically or horizontally
- Illumination enhances customer experience
- Increase visibility of Lottery presence





For additional information and to set up a test evaluation in your region, call Randy Zaller at **908.591.8685** or email **salessupport@hspop.com**.





Together, we do good things.

Oregon Lottery

As part of our commitment to the people of Oregon and our mission statement to "Operate a lottery with the highest standards of security and integrity to earn maximum profits for the people of Oregon commensurate with the public good..." the Oregon Lottery is committed to sustainable business practices in all of its activities, working to limit any negative environmental impacts and encouraging our employees and business partners to join our efforts.

To help achieve its goals, the Lottery has a Sustainability Committee, with employees participating on a volunteer basis. They support the Lottery's work related to sustainability strategy and initiatives, building on efforts currently in place as well as developing new initiatives designed to limit our environmental footprint and contribute to the state's efforts to reduce energy use. The Committee publishes an annual Sustainability Report, and since the pandemic began there are ongoing discussions about what issues and initiatives are the most important to track going forward.

These reports have focused on energy conservation and greenhouse gas emissions, recycling and materials, and water resources. They summarize the Lottery's goals and achievements in these areas, highlighting the most recent accomplishments each year along with ongoing measures. For the most recent report, these include:

Conservation and greenhouse gas emissions. Warehouse and office light fixtures fully converted to LED bulbs; installing additional motion sensing light switches; installing new and more efficient gas boilers and warehouse fans (with financial support from Energy Trust of Oregon); initiated the acquisition of renewable power from Green Mountain Energy/PGE through their Green Source renewable energy program; replacing some gasoline engine automobiles with electric vehicles, operating some gasoline/electric hybrid fleet vehicles, and replacing a number of full-size cargo vans with more fuel-efficient models; adjust field support vehicle routes to reduce fuel consumption; and increased use of online meeting technology, available throughout the Lottery facilities, encouraging teleworking and reduced travel to attend meetings.

Recycling and materials. We operate over 11,000 video lottery terminals (VLTs) and other electronic equipment at over 3,900 retailer establishments, and recyclable materials from decommissioned VLTs, electronics and other items are separated and recycled to the extent possible. Thousands of old Lottery retailer signs were upgraded to new signs using LED lamps; we've distributed new, visually appealing instructions and guidelines for office recycling; our distribution staff and field representatives ensure recycling of unwanted/surplus materials, including point-ofpurchase materials; and we are continuously finding new recycling streams for items not currently recycled.

Water resources. Reducing water consumption by controlling outdoor irrigation and gradually installing low-flow water fixtures in restrooms as projects are budgeted. Bio-swales continue to be used to filter and cleanse the runoff from the Lottery headquarters building and parking lot to prevent any possible contaminants from entering nearby Mill Creek.

We have also given considerable attention to what a modern work environment should look like. Before the pandemic, the conventional wisdom had been that offices were critical to productivity, culture and winning the war for talent. One thing that has not changed is that the Oregon Lottery relies upon the



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\$100,000,000 in Winnings

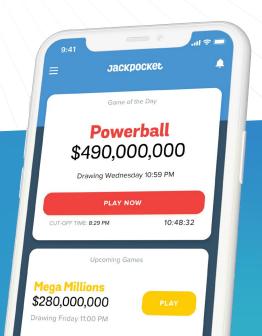
Best for last? Our Jackpocket players have hit the \$100 million mark in prize payouts!

Jackpocket

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dedicated and talented staff at the Lottery, whether at an office, working in the field or working remotely. The COVID-19 pandemic has demonstrated we can work and collaborate successfully even when we aren't in the same physical location. Now is the time to consider this success, as well as our lessons learned, and turn it into a more stable and viable way of doing business going forward. Continuing remote work will look different for individuals, teams and departments. It may include shifting to full time home offices or splitting time between home and office on a regular basis. It may mean sharing office space. It may mean more flexible work schedules. It may be some combination of these or something else entirely! This only works if we recognize it looks slightly different for everyone - we know it won't work for every employee or every position.

Why are we having these discussions? Less time spent driving to the office = better work-life balance. It also means reducing traffic congestion and our carbon footprint. There are cost savings as well. If the changes that started with the pandemic continue going forward, we'll need less physical office space, and the greater use of technology for meetings, training sessions, etc., means less travel costs over time.

A modern work environment has other benefits beside those strictly related to environmental issues. It would give us a greater ability to attract and retain new talent - we're actively recruiting people for our designated remote positions from all over the U.S. Modernizing our work environment opens up new opportunities for creativity and innovation, thinking differently and leveraging technology in ways we haven't before.

Colorado Lottery

The Colorado Lottery's environmental initiatives include:

Energy conservation through working from home. The pandemic triggered a work-from-home situation, but the plan is to make that arrangement permanent with 70% of staff working from home.

Shared space. We moved to a shared office space with other Department of Revenue divisions, not only reducing the Colorado Lottery's square footage by nearly 60%, but decreasing annual rent by about 70%.

Recycling. We have recycling programs in every office, and we also recycle all of our scratch tickets when we destroy them.

Reducing waste through going digital. We have been converting various processes to digital, including drawing processes and fiscal processes, and most recently we have implemented a virtual claims process. These are all efforts to eliminate paper through Google office.

Annual Report modifications. We condensed our Annual Report and transitioned it to digital; we print only small runs on recycled paper as needed to avoid waste.

Reducing plastic waste. Our Pueblo office uses water coolers to reduce plastic waste, and this will be implemented in all our offices.

Vehicle transitions. Of the Lottery's 53 vehicles in its fleet total, we've transitioned 18 to hybrids. Of those, five are PHEVs - plug-in hybrids that get charged nightly. The governor has mandated that starting in FY23, all new vehicles ordered will be electric.

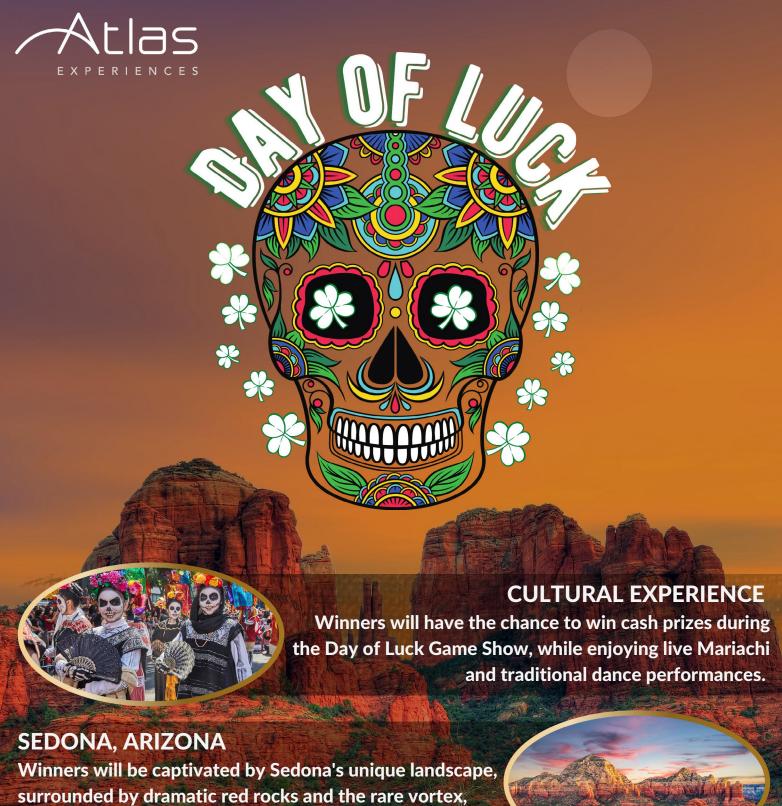
In the environment. The Lottery sponsored and helped plant 500 trees along the Yampa River in Steamboat Springs, Colo., this past October. The Runyon to the Rez annual conservation project removes waste from a valuable water resource, the Arkansas River, and helps foster healthy wildlife, supports recreation, and gives Lottery staff an opportunity to contribute directly to conservation in Colorado.



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The Lottery sponsored and helped plant 500 trees along the Yampa **River in Steamboat** Springs, Colo., this past October.



creating a strong connection to nature.

BALLOON FESTIVAL

Winners will be part of an exclusive balloon festival, which includes balloon rides, custom artisanal gifts, local food trucks, craft beers and wines.

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Connecticut Lottery

For years we've been doing our part to be environmentally proactive and save money. As early as 2002, we started an effort to clean used scratch ticket dispensers instead of purchasing new ones. Not only was this the environmentally responsible thing to do, but it has also saved considerable expenditures.



We have also taken advantage of a pallet recycling program that recycles worn wood pallets into a finished pallet through a repair process. Pallets are then remanufactured into standard or customized sizes and supplied back into the distribution chain. Again, this is an environmental measure that has saved the state considerable money.

In an effort to protect water quality, we added a rain garden at our headquarters in 2008, designed to capture and soak up stormwater runoff from roofs, driveways, walkways, etc. Because stormwater is considered one of the main sources of water pollution nationwide, a rain garden allows the runoff generated on the property to infiltrate into the ground and reduce potential water quality problems.

Our most recent environmental initiative included converting all parking lot lights to LED bulbs, and the estimated annual savings in usage is expected to be 49,884 kilowatt-hours.

In 2014, the CT Lottery was awarded with a "Green Circle Program Certificate" by the Connecticut Department of Energy and Environmental Protection (DEEP) for promoting pollution prevention, waste reduction, natural resources conservation and/or environmental awareness.

Hoosier Lottery

Paper and energy consumption are the largest environmental impacts of the Hoosier Lottery. We strategically partner with vendors who operate in an environmentally sustainable manner as a measure to



reduce our environmental impacts. As a result, the most substantial volume of our advertising and promotional materials is printed on recycled material using green energy.

As a step toward achieving game sustainability, the Hoosier Lottery supported first-of-its-kind research into the environmental impacts of Scratch-off tickets. The research is available on **Harvard University's Digital Access to** Scholarship system.

To reduce reliance on paper playslips, the Hoosier Lottery launched myPlayslip, a digital playslip, myPlayslip enables players to create a playslip on their smartphone, and it allows players to save their numbers for their favorite games for future use at retail.

Since early 2011, the Hoosier Lottery headquarters has called The Buick Building home. The building is certified Gold by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Building Rating System. The building was designed and constructed to reduce human impact on the environment.



Illinois Lottery

Last May we launched e-claims as another way for players to quickly, safely and efficiently claim prizes via an online portal, saving players time, energy and money. By using e-claims players do not need to drive to one of five claim centers to process winnings over \$600 (up to \$10,000), or do not need to spend time and money sending in a claim via regular mail. Our Illinois Lottery employees have also seen efficiencies, saving time and costs.

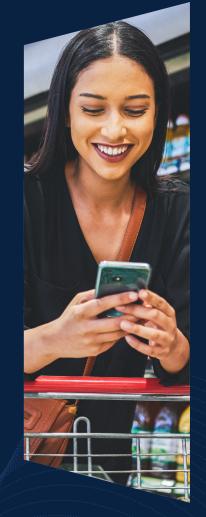
From May 2021 to early January, almost 10,000 claims were submitted and completed from almost 13,000 Illinoisians. We also estimate about 1,300 pounds of paper have been saved, creating a smaller carbon footprint for our claim centers.

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"WHERE"

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Target users based on where they've been and how often they've visited lottery retailers



lowa Lottery

Two paperless initiatives decrease the use of natural resources while providing convenience and time savings for players and retailers. One allows some Iowa Lottery winners to file prizeclaim forms electronically, while the other allows businesses to apply electronically for licenses to sell Iowa Lottery products.

The first paperless project went live in April 2020, allowing members of the Iowa Lottery's VIP Club to sign claim documents electronically for prizes they win in our Play It Again promotions.

We utilize the secure DocuSign site for the process. When winners are selected in an Iowa Lottery VIP Club promotion, a notification email is sent to the

player that they have won a prize. DocuSign gives them the option of completing and signing their claim documents electronically. As part of the process, the winner scans their government-issued ID, or takes a photo of it with their mobile device, and uploads the file to the DocuSign site.

The electronic process is a convenience for players, and reduces consumption by eliminating hard-copy correspondence along with a trip to a lottery office to file paperwork. While we currently utilize the DocuSign process for prizes won in promotions, we continue to evaluate whether paperless prize claims could be implemented on a wider basis.

The second lottery initiative went live in November 2021 as part of a state licensing portal in Iowa that provides many applications and license renewals in one location. By using the new self-service tool, business filers can register or renew certain business licenses and permits, file tax returns and reports, make payments, and communicate with the state agencies involved.

Iowa Lottery retailer applications are among those being processed through the new licensing portal, which is called GovConnectIowa. Businesses that want to sell Iowa Lottery products file their lottery license applications electronically and also make electronic payment of the \$25 application fee through GovConnectIowa.



The GovConnectIowa process is designed to provide a linear path that ensures a business has completed a necessary step, such as providing tax information, before it can go on to the next. And, as with the lottery's electronic prize claims, it eliminates the need for those involved to make trips to lottery locations to obtain and complete hard-copy forms.

Kentucky Lottery

The Kentucky Lottery's environmental initiatives include:

Energy conservation. All energy systems in the building (lights, HVAC, etc.) are computer-controlled. Everything is designed to dial back after business hours. The HVAC system has been changed to a variable speed system, by which the hot/ cold air needed for a particular space can be throttled to meet that need and not push air everywhere, which saves on energy consumption. All lighting has been changed to be energy efficient; this was especially challenging in a building which is the age of ours (built in 1947). Thanks to

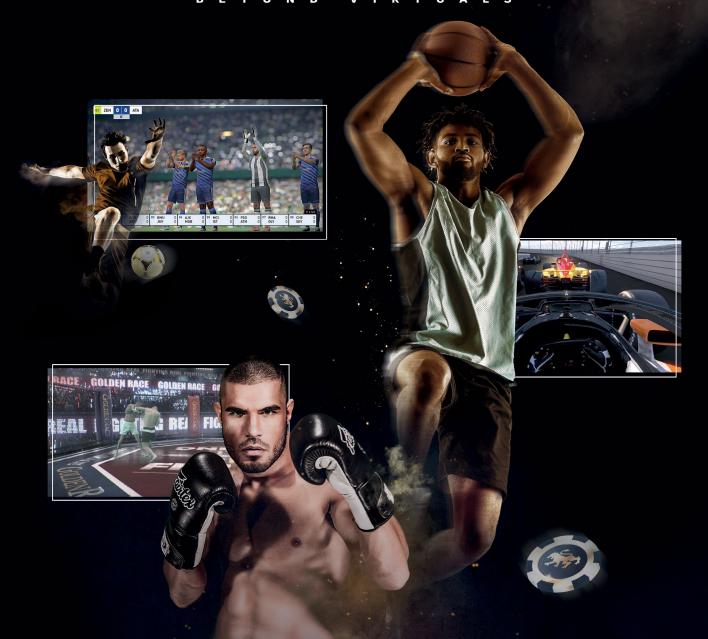
these measures, our monthly energy bill is the same as it was when we first moved into the building back in 1997 (while the cost of energy has risen during that period).

Recycle/reuse. We maintain office recycling programs and work on reducing waste through reusing. We recycle all cardboard, all shredded documents are recycled, and all returned tickets are shredded and then recycled.



Sustainable transportation. We encourage sustainable transportation for regular employee commuting and on-the-job routes by lottery sales reps. Our reps use an iPad-based system (Sales Wizard) which, along with Google Maps, helps them plan their routes most efficiently. We also remotely monitor idling time in vehicles to make sure reps aren't leaving their vehicles running longer than they should.

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Massachusetts Lottery

While the Lottery's instant tickets and bet slips are made from recycled paper and are themselves recyclable, there have been several new programs designed to have significant additional impact in the area of environmental sustainability.

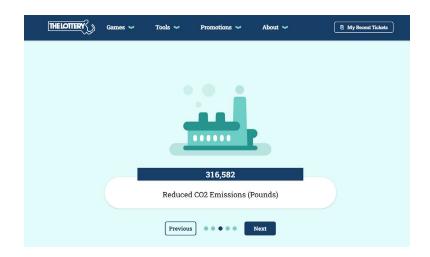
We launched a mobile cashing feature in our app last year. It not only provides customers with the obvious convenience of being able to claim prizes of \$601 to \$5,000 without having to visit one of our claim centers, it is already proving to have a significant environmental impact that will continue to grow as more customers adopt this new technology. Fully launched in September of 2021, through mid-January almost 8,100 prize claims were processed through the app. By eliminating these vehicle trips to our claim centers, this amounts to a reduction of over 316,000 pounds in carbon emissions and a preservation of over 16,000 gallons of gas, resulting in over \$55,000 in gas cost savings for our customers. These statistics are being tracked in real time on our website.

"Given the rapid rate at which consumers continue to convert to mobile transactions, we are excited about the enormous potential this feature offers in the area of sustainability," said Michael Sweeney, Executive Director of the Massachusetts State Lottery. "As we modernize additional areas of our operations, sustainability is an important consideration in our decision making."

Another recent initiative is a new online licensing module for existing and prospective retailers that eliminates paper files for all new applicants and converts annual renewals to a paperless process. As part of this, criminal background checks for retailers are also becoming a paperless process.

We recently sought and received authorization to purchase our first hybrid vehicles. The Lottery currently has a fleet of about 160 vehicles that are used by employees to service our 7,000-plus retailers across the state. The new vehicles will replace ones with over 110,000 miles on them. We look forward to continuing this conversion as additional vehicles in our fleet are in need of being replaced.





Minnesota Lottery

The Minnesota Lottery's environmental initiatives include:

Weekly ticket delivery. Minnesota Lottery retailers are now on a weekly delivery schedule, supplemented by emergency orders for immediate need. During the first six months of this change compared to the same time period the year before, we shipped essentially the same number of packs of tickets but reduced the number of deliveries by 80,000. This not only cuts down on fuel consumption, it has also saved the Minnesota Lottery over \$244,000 in delivery costs. Previously our system



was more of a Just in Time delivery model, so retailers didn't have to manage and store a ton of inventory. That system was really smart, but we shipped a lot of oneand two-pack shipments and some retailers would receive three, four or five

deliveries in some weeks. The idea now is to try to better forecast or predict the needs of the retailer further out, and also look to see if they have an emergency order or if there is anything else they will likely need before the next scheduled shipment; if so, we combine those orders into one shipment. The retailers seem to appreciate fewer and more predictable ticket delivery days and we save in shipping costs as well as improve our environmental footprint.

Scratch ticket packing. To decrease costs and increase business optimization, we combined the bill of lading and shipping label within our new ACCLAIMS system. The small form, lighter-weight paper has reduced paper consumption for the scratch ticket packing process by 78%.

Paperless billing. In the fall of 2016, the Minnesota Lottery implemented paperless retailer billing. We no longer mail retailer billing statements and introduced the Retailer Services Portal that allows retailers to view their account activity online. Since the inception of paperless billing, the Minnesota Lottery has decreased paper consumption by over 1,000 reams of paper annually and saves an estimated \$85,000 in paper and postage annually.



New Hampshire Lottery

We recognize that we have a social responsibility to make changes in order to help the environment. Our initiatives include the following:

Lighting. We have a huge lighting project that will be fully completed by February 2022. We are switching out all of our fluorescent lighting to energy efficient LED lighting for the whole lottery campus – inside and outside lighting. It looks to provide a savings of \$3,500 a year and the project will pay for itself in a scant five years.

Reducing plastic waste. We installed a bottle filler bubbler, and according to the provided analytics we have saved over 20,000 bottles of water since the bubbler was installed two years ago.

Recycling. Our campus-wide recycling efforts equate to an excess of 35,000 pounds of recycling annually.

Vehicle transitions. In replacing sales representative vehicles, we have tried to purchase more fuel-efficient vehicles. Our current fleet is getting about four miles to the gallon better than our previous vehicles. Electric and hybrids have not been considered due to lack of an abundance of charging stations here in New Hampshire.



Ohio Lottery

The Ohio Lottery has focused sustainability efforts on the use of physical infrastructure, including the following:

Use of renewable energy. Seven of nine regional offices, as well as the Ohio Lottery's warehouse, transitioned to 100% renewable energy for electric utilities between the end of 2019 and mid-2020. Energy usage for the remaining two regional offices are landlord responsibility.

Lighting usage. Our Cleveland regional office transitioned to LED bulb usage as of November 2021. We expect the change to decrease energy consumption and provide a monthly savings benefit. Project results will be reviewed in February. If the review meets expectations, the remaining regional offices will transition to LED lighting.

Recycling. All nine regional offices and the warehouse are set up with a secured shred vendor to pick up and recycle documents. All regional offices have a recycle dumpster for cardboard and other larger recyclable items. Shred and waste/recycling are set up through state term contracts.

Pennsylvania Lottery

We utilize recycling stations at our headquarters and area offices for recyclables and paper. Through our vendor, we recycle unused Scratch-Off tickets.

The Pennsylvania Lottery already had a telework policy in place before the pandemic, although the majority of our employees still worked at the office. Since the start of the pandemic, most employees are teleworking. We do have a small staff of employees who need to work from the headquarters building in order to be able to file claims and process other forms, and our District Sales Representatives are also working in the field. The health and safety of our employees is top priority and so things will remain as they are for now.



We are also moving to a paperless claims process that will eliminate some paper claim forms, and plan to launch a paperless licensing process. As an arm of state government, we utilize certain apps to help paperless office initiatives. One is called ESS - Employee Self-Service, which includes Concur, a feature that allows employees to do things like manage travel expenses online. Additionally, the Company Portal is another app that allows employees to securely access resources.

Texas Lottery

The Texas Lottery has enacted several environmentally friendly initiatives over the years. Our facilities staff regularly participates in a state training curriculum on sustainable building practices. These trainings have resulted in the creation of space designs that include large work spaces that are adjacent to natural exterior light and reduce interior fluorescent lights. In addition, fluorescent lights in the headquarters building have been refurbished with more energy efficient



electronic ballasts and LEDs. Motion sensors have been installed in restrooms and break rooms to reduce energy consumption for space not in use, while energy misers have been installed into break room vending machines to further increase energy efficiency. The headquarters building also utilizes a computer-operated energy management system, which times-out use of zoned heating and cooling after hours. This monitoring system improved the operating efficiency of six high efficiency heating and cooling units.

Since March 2020 when the COVID pandemic began, most staff at the Texas Lottery's headquarters location have been working from home. This has resulted in a noticeable reduction of electricity costs for the agency. Prior to the pandemic, the Texas Lottery replaced all copiers with new Energy Star rated equipment that have a power save feature to power down the equipment during periods of inactivity. As the agency transitioned to a telework environment, most physical paperwork processes were converted to a digital format. Since the installation of the copiers and conversion from physical paperwork to digitized formats, the agency eliminated some of the copiers throughout its headquarters location, which has further contributed to energy reduction. In an effort to promote recycling, all suites and offices have their own recycle bin.



Virginia Lottery

A new policy effective last October addresses single use plastics. The objective is to reduce plastic pollution and solid waste. The Lottery has discontinued the purchase of disposable plastic bags, single-use plastic and polystyrene food service containers, plastic straws and cutlery, and single-use plastic water bottles that are not for public safety use. One big focus of this policy relates to items that we might purchase and use for players at events throughout the state. Employees are encouraged to use alternative reusable, compostable, and/ or recyclable solutions as applicable. In addition, our headquarters building and customer service centers already have water fountains and taps to eliminate the need for water bottles among our employees.

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Alpharetta, Ga.

Scientific Games Lottery

Scientific Games is committed to reducing our impact upon the environment and to building a more sustainable future across our global business.

With worldwide lottery operations spanning five continents, environmental responsibility is a core part of our overall Environmental, Social and Governance commitment business plan.

As part of our ESG commitment, our strategic environmental goals are to:

- Achieve net zero carbon emissions by 2040
- · Understand and mitigate our impact upon global ecosystems

The foundation to achieving these goals has already been established through ongoing governance and investment in both resources and innovative solutions.

Governance

Our global instant game production facilities based in metro Atlanta, U.S.; Montreal, Canada; Leeds, U.K.; and Santiago, Chile, all carry out permitted environmental practices and comply with both national and state regulatory requirements.

The Atlanta, Montreal and Leeds facilities are certified to the ISO 14001:2015 Environmental Management System standard. Our facility in Santiago will be certified in 2022.

This ISO (International Organization for Standardization) standard requires a set of effective operational policies, procedures and controls that are focussed upon the prevention of pollution and waste. These practices ensure that there is a solid foundation to build upon and implement any environmental improvement initiatives.



Leeds, U.K.

Our sites in Atlanta, Montreal and Leeds are also certified to the Forest Stewardship Council Chain of Custody Scheme. The FSC is a non-profit organization, focused upon promoting responsible management of the world's forests. This certification requires that Scientific Games ensures that the board and paper supplies are from certified sources and that they are managed in a sustainable manner. These types of certifications are vital in preventing illegal deforestation and environmental damage, and we can deliver FSC approved paper to all customers requiring that accreditation.

Looking forward, as part of our ESG business plan, we are working to formally align our current processes and practices with the UN Sustainable Development Goals and the Global Reporting Initiative.



Tree planting in Montreal.

Operations

Our commitment to building environmental sustainability into all our products and operations has been ongoing for over 20 years.

Investment at each of our production facilities has resulted in the following initiatives:

- We developed a set of proprietary formulated, secure water-based inks and coatings for use on our products, which enabled us to provide a product that is 100% recyclable and eliminated all solvent inks which contain harmful VOCs (Volatile Organic Compounds).
- The use of water-based inks on our products in conjunction with improvements to processes such as plate making has resulted in a significant reduction in the quantity of VOCs being emitted into the air from the cleaning process.
- Our very latest advanced instant game production technology being installed utilizes an energy recuperation system that reduces the gas consumption within the ink drying process by up to 25%.
- The installation of more energy efficient LED lighting in conjunction with proximity and lux sensors across the sites have vastly reduced energy consumption.

- The recent installation of more energy efficient heating, ventilation and air conditioning systems across the plants has reduced both our electricity and natural gas consumption.
- · When it comes to waste, our focus is upon reducing and preventing waste within our process; however, where waste does occur we look to recycle as much of that waste as possible with the aim of total landfill avoidance. Waste segregation and collection points are provided across the manufacturing facilities and all employees are trained on the correct means of disposal. Our recycle programs include board used on tickets, packaging, waste inks, plastics, metals, used light bulbs, electrical items and office waste.
- · Finally, we ensure that we use suppliers that are aligned with Scientific Games sustainability requirements.

With the onset of the pandemic, Scientific Games reassigned 60% of our Lottery employees to a work remote status, with only essential employees working on site. We are reviewing future remote work policies which will help us decrease our carbon footprint and consumables such as water, energy and office paper and of course, reduce the need for employees to travel as regularly to and from work.

Future Forward and Purpose Driven

IGT has long been recognized as a leader within and beyond the gaming industry for our commitment to responsible and sustainable practices. We are working to advance gaming to the next level and secure future success for our customers by moving from the concept of corporate social responsibility to a broader commitment to sustainability - whether in reducing waste or addressing wider environmental and human rights issues.

It is likely that players, especially younger players, will continue to become more aware of how sustainable practices impact their day-to-day purchases, and we know that our practices can allow customers and players to participate in a sustainably minded supply chain.

Some specific steps we've taken to reduce our environmental impact with regard to energy consumption, emissions, waste production and material consumption include:

- · Remote working at IGT Italy pre-pandemic, and now an expanded corporate-wide program called "Future Ways of Working" to reduce the environmental impact of commuting, support work-life balance, and help ensure safe workspaces by using fixed and flexible working scenarios for IGT employees around the world.
- Award-winning improvements in instant ticket printing at our Lakeland, Fla., printing facility to reduce solvent-related air emissions and eliminate solvents from the plate manufacturing process, thereby removing air pollutants and volatile organic compounds.



• The Lakeland facility is also certified to use Forest Stewardship Council (FSC) paper products and has well-established programs for water-, plastic-, and ink-waste reduction as well as the conversion and recycling of all manufacturing waste. In 2020, Lakeland partnered with a waste processing company which converted most of the facility's packaging waste, scrap plastic and wood into fuel cubes.





- Reduction of IGT energy consumption through the use of smart energy management systems, the installation of more efficient air conditioning systems, the replacement of old lighting systems and more.
- · Reduction of IGT office paper consumption worldwide by measuring paper use.
- At our Reno production facility, the use of multiple balers to segregate the waste stream diverted 78% of its waste in 2020.
- In Italy, the use of FSC-certified suppliers for all lottery scratch tickets and playslips, and the identification of alternative solutions with greener materials for point-of-sale materials.

Flexibility and an environmental focus at IGT's award-winning printing facilities in Lakeland (pictured) give customers options as to how their tickets are made and allows lotteries and players to participate in a sustainably minded supply chain.



- · Use of consolidation hubs to reduce CO₂ emissions in the return of electronic gaming machines (EGMs) from casino properties.
- Machine end-of-life management for ITVMs and EGMs according to local regulations on reuse, recycling and waste management. In 2020, approximately 43% of some 7,200 pieces of equipment returned to U.S. warehouses were recycled.

IGT has created a governance structure including an executive Sustainability Steering Committee to guide our efforts, a dedicated team to coordinate the execution of the related work, and an annual GRI-compliant report (Global Reporting Initiative) to provide transparency and accountability to a standard recognized worldwide.

In January 2022, IGT announced that the company has joined the Science Based Targets initiative.

Through this commitment, IGT pledges to set targets to reduce greenhouse gas emissions, contributing to low-carbon emissions and furthering our environmental, social and governance (ESG) impact. Aligned with the most ambitious objective of the 2015 Paris Agreement, IGT will develop both near- and long-term greenhouse gas emissions targets to contribute to the effort to limit global warming to 1.5 degrees Celsius compared to the pre-industrial average temperature.

Our annual Sustainability Report, now in its 14th year, provides a full account of the wide-ranging initiatives and actions carried out through the efforts of IGT employees around the world. The report is available at IGT.com.



Operating in today's world, companies do not have to consider corporate responsibility as a business differentiator or an imperative, but rather as the right thing to do.

Being a global leading provider of gaming technologies and services in regulated markets, INTRALOT is fully committed to further deploy responsible practices and standards within its operations in five main areas of corporate responsibility: governance and compliance, responsible gaming, environmental impact, employee well-being, and societal support.

We are committed to minimizing our environmental impact and strive to conserve resources and reduce waste and emissions. The Company continuously reviews and improves its Environmental Management System (EMS) and systematically identifies and evaluates the environmental impact of its activities, while monitoring the environmental risks and ensuring constant operating efficiency.

We have developed a set of processes and practices that help our product line address regulatory requirements in a systematic and cost-effective manner, and achieve environmental goals through consistent review, evaluation and improvement of environmental performance. For example, we:

- Adopted the Restriction of Hazardous Substances (RoHS) Directive 2002/95/EC for all terminals, which limits or bans specific substances in electronic and electric equipment, and requires suppliers located in Europe to also comply with the Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC. Additionally, all retailer solutions are with UL and CE certifications awarded.
- Integrate NFC, QR code and barcode technologies (for cashless payment services, loyalty services and player journeys) in our retailer terminals and self-service/vending machines.
- · Promote the use of digital solutions, mobile applications and products that allow paperless game participation with paper footprint reduction.
- Introduced solutions to deliver information to digital signage displays inside retailer shops so players can access constantly updated information.
- Have efficient design and development with nomoving-parts retail hardware technologies that create a "free maintenance concept," reducing the carbon footprint for an operation.

- Developed camera technology in retailer terminals to replace traditional page scanners, and have designed 40% of our gaming terminals as fanless, which reduces energy consumption, materials and parts required.
- Introduced ARM technology processors in our terminal devices, which combine high computing power and low energy consumption, optimizing the carbon footprint.
- Use category 6 external power packs in all terminals (the latest efficiency standard) to ensure the lowest energy footprint during operation and standby mode.
- Use plastic and metals that can be recycled in our terminals and most electronic components.
- Use recycled paper for the packaging cartons of our terminals, and all packaging material is durable and reusable.



Other Environmental Efforts

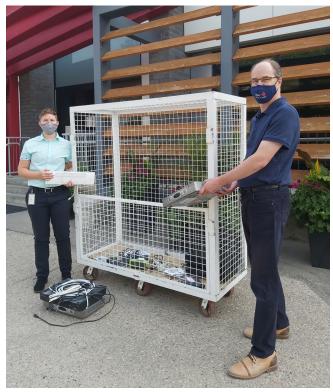
To continuously improve our environmental performance, we have identified the material environmental aspects and established an action plan to meet objectives and targets. Some of our good practices include:

Recycling. All waste is systematically collected and sent to a licensed recycling partner, who transports waste and handles waste disposal in an appropriate and environmentally friendlier manner. We have recycling bins at our locations for paper, aluminum, batteries and other recyclable materials under the campaign "Join the circular economy." We reuse telecommunication devices and IT equipment (such as personal computers and mobile phones) if they are in working condition. If they cannot be reused, we store certain components as spare parts (such as memory discs, batteries and hard discs) and forward the remaining materials for recycling.

Monitoring water consumption. Water scarcity is highlighted as an extremely important environmental aspect, as water needs and demand are intensifying. We monitor water consumption on our premises; direct all liquid waste to the public waste network; do not use hazardous cleaning materials; and have implemented control mechanisms to respond to potential water supply failures and water leakages.

Energy and Emissions. Although INTRALOT's operations are not energy intensive, we consciously seek to reduce energy consumption and limit our greenhouse gas emissions, with the main sources of energy consumption in our facilities being electricity and heating petrol. We monitor fuel consumption in our corporate vehicles and have replaced most of our lighting with energy-efficient LED lamps. We have taken measures to turn off lighting and heating/cooling in areas where no employees are present.

Reduced air travel. We take a number of voluntary measures to reduce air travel to help minimize the environmental impact of flights. These measures include combining trips and using other modes of regional travel, where possible, along with an increase in remote sessions, conference calls and e-learning training programs.



Electronics recycling drive kick off.

Pollard Banknote

As a leading lottery partner, environmental sustainability is an integral component of our operations at Pollard Banknote. Throughout our history, we have been committed to fulfilling our duty to conserve and protect our natural resources, and this commitment is reflected throughout our entire organization, from our corporate certifications and business management policies to our manufacturing processes and standards.

Recognizing that changes both large and small can produce significant impact, we constantly look for new and innovative ways by which we can enhance our sustainability measures across every facet of our business. For example, we always strive to use environmentally friendly products and sustainably-sourced raw materials. We offer multiple ticket stock options with up to 100% recycled content, as well as Forest Stewardship Council (FSC) certified stock, an international certification and labeling system dedicated to promoting environmentally appropriate management of the world's forests. Pollard Banknote is certified to the FSC Chain of Custody standard, the result of an independent evaluation, as well as annual audits of our systems and products to ensure continued adherence to FSC requirements.

POLLARD

We have expanded our use of UV-based and waterbased inks and coatings in recent years, thus reducing the usage of solvent-based inks and protective coatings; in fact, we use water-based inks for the vast majority of our instant ticket production. The introduction of a 100% water-based press signaled a new era of sustainability and innovation in our organization, facilitating the creation of a water-based scratch-off material that mimics the scratchability and appearance of its solvent-based predecessor. The shift to more environmentally friendly products has translated into meaningful, tangible results - among them, the reduction of our VOC emissions by more than half over the last decade.

To further minimize our environmental impact, we recycle and reuse as many materials as possible. Among other initiatives, 100% of our shredded paper from the manufacturing and administrative process in our Michigan facility is recycled. In order to reduce electricity usage, we introduced energy efficient lighting systems in multiple facilities. Recently, our employees initiated an electronics recycling drive, encouraging staff at our Winnipeg facility to donate their old and unwanted equipment - including computers, telephones, cell phones, cameras, stereo equipment and batteries, among many other items - to ERA (Electronic Recycling Association), a Canadian non-profit organization that refurbishes donated electronics.

Appreciating that we can all take action to make a difference, Pollard Banknote continues to seek new ways to promote and encourage environmental sustainability throughout our workforce. This has taken many forms, including a subsidized public transit program for employees, participation in a carbon offset program for air travel, and trialing a hybrid work model by which employees spend part of their week working from home, reducing overall commuting time and thus vehicle emissions.

Invested in Good. Since our inception, Pollard Banknote has been invested in doing the right thing when it comes to our industry, our people, the planet and the communities we live and operate in. We are committed to helping our lottery partners deliver entertainment to their players across all channels in the most sustainable manner possible.



Abacus

As a company we undertook an internal review of our carbon footprint last year, and as a result we have signed up with a company called **Ecologi** to offset our carbon footprint. Ecologi plants trees on our behalf every month based on our total number of employees and the carbon footprint we have calculated.

We get our energy from a company called Bulb, a totally green energy based company, so all of our energy comes from renewal sources. This partnership means that we are offsetting 4.06 tons of CO, every year.

We have of course reduced travel significantly and we don't believe we will go back to previous levels of travel ever again. Zoom is a wonderful thing, although it doesn't replace meeting face-to-face. We can still do that, but on fewer occasions. Also, we now have hybrid working in place for all staff with most people working from home most of the time.

Finally, we are doing whatever we can to recycle what we use and to reduce waste wherever possible.

























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NASPL and Lottery Industry Schedule of Events

2022 SCHEDULE

March 2022

NCPG Problem Gambling **Awareness Month**

March 9-10, 2022

New Horizons in Responsible Gambling

Hosted by the British Columbia Lottery Corporation

horizonsrg.bclc.com

April 11-14, 2022

NASPL Lottery Leadership Institute

Hyatt Regency Cleveland Arcade Cleveland, OH Hosted by the Ohio Lottery

July 25-29, 2022

NASPL Professional Development Seminar Indianapolis, IN Hosted by the Hoosier Lottery

August 1-4, 2022

NASPL Directors' Meeting

Nashville, TN Hosted by the Tennessee Education Lottery

October 16-20, 2022

World Lottery Summit Vancouver Convention Center Vancouver, BC Hosted by BCLC worldlotterysummit.com

December 2022

NCPG/McGill University Gift Responsibly Campaign

2023 SCHEDULE

March 2023

NCPG Problem Gambling Awareness Month

April 23-27, 2023

NASPL Lottery Leadership Institute Hyatt Regency Cleveland Arcade Cleveland, OH Hosted by the Ohio Lottery

July 17-20, 2023

NASPL Professional Development Seminar Denver, CO Hosted by the Colorado Lottery

October 30 - November 2, 2023

NASPL Annual Conference Milwaukee, WI Hosted by the Wisconsin Lottery

December 2023

NCPG/McGill University Gift Responsibly Campaign

2024 SCHEDULE

March 2024

NCPG Problem Gambling Awareness Month

April 2024

NASPL Lottery Leadership Institute Dates to be Determined

July 22-24, 2024

NASPL Professional Development Seminar Omaha, NE Hosted by the Nebraska Lottery

September 9-12, 2024

NASPL Annual Conference Kansas City, MO Hosted by the Missouri Lottery

December 2024

NCPG/McGill University Gift Responsibly Campaign



Find inspiration inside and out.

LEADING THE JOURNEY. INSPIRING THE FUTURE. The World Lottery Summit 2022 is set to take place in the breathtaking, forward-thinking, eye-opening city of Vancouver, Canada. A perfect location to learn, grow, engage and connect as an industry and discover what's on the horizon for the future. With the ocean, forests and coastal mountains close at hand, you'll wake up every day refreshed and ready to be inspired.

Save the date: Oct 16-20, 2022



