

Interactive Environmental Engagement

# ICLEI Canada- Resiliency Card Game

ICLEI has been working with Intact Insurance to develop the gamification concept.

Gamification is an engagement tool used to inform people about climate change, care about it, be motivated to do something about it, and be able to take action afterwards.

The goal is to target people’s visceral emotional response to climate change; it is through targeting a person’s emotional response that change is far more likely to occur.

## Game #1 (Trump card type of game)

* 2 decks of cards (each deck display one of two mechanisms; actions or events)
* Points are awarded based on how appropriate/helpful/preparatory the player’s response is to the event expressed by the event card.
* Each player receives 5 action cards. There is a scorecard to track the number of points accumulated, a booklet is also provided to inform the player's how many points are to be received by each action card used.
* While playing the game, the player is able to convince the other players the validity of the action selected for the subsequent event dealt. There must be a consensus within all the players as to which action is best suited for the dealt event.
* The objective of the game is to be the player with the most points.
* The goal is to learn about climate change impacts.

## Game Theory Background

RBC conducted a survey in 2014 that resulted in illustrating 74% of people in Canada believe that extreme weather events will occur more frequently due to climate change. What is troubling is that only 9% of people have done anything about it. The ideal goal is to have the amount of people who believe in increased extreme weather events equal to the number of people who have taken action to adapt and mitigate the risks.

The above-mentioned game provides examples of solutions and preventative actions for decreasing the negative effects of extreme weather events in a medium that is fun and accessible.

Gamification has been very popular and widely used in society; something as simple as a Leader Board possesses gamification elements. (Other examples include collecting rewards, points, Canadian Tire Money etc.)

### Key Elements to Maintaining Engagement

* Accelerated Feedback Cycles: uses the idea of instant gratification
* Clear Goals and Rules of Play: empowers the user based on the specific mechanics highlighted to them
* Setting Challenging but Achievable Paths: it is important to establish goal-setting components to the game, this encourages the player to continue playing to meet and surpass the set goals (Increasing the addictive nature of the game). There has to be a balance in how easy/difficult the goals are to achieve since it will determine the popularity of the game played.
* Compelling Narrative/Heightened Reality: Any aspect of life can be gamified; recent technological applications have successfully gamified the aspect of completing daily tasks, which can be incorporated into various forms; rebate programs, loyalty programs, Apps, etc.

**Now, in the current age of smartphones, social media tie-ins are endless. This means that there is an unlimited potential to reach the public domain.**

There is an array of motivations to get people involved in gamification—by giving away prizes, it offers entertainment, increases social interactions. The game can also develop into a leaderboard status, which appeals to our competitive nature.

Gamification offers solutions to tackling issues related to the limited understanding of Climate Change, Low uptake of adaptation/mitigation actions, the limited sense of the need to combat the threats of climate change, and the low sense of urgency to enact change.

## 8 Core Drives of Gamification

1. Ethics, Meaning, and Calling: Players are empowered to play as they acquire the sense of doing/being apart of something greater than themselves. This brings about the feeling of “being chosen” also expressed as “Beginners Luck.”
2. Sense of Development and Accomplishment: addresses the internal drive of making progress, skills and eventually overcoming **challenges**. Challenges are essential as it gives worth to the resulting badge or reward received from winning the game.
3. Empowerment of Creativity and Feedback: players are encouraged to be a part of a creative process where they have to repeatedly come up with solutions to solve the challenges presented. Games also provide a form in which people are able to see the benefits of using their creativity.
4. Ownership and Possession: Players become motivated as they feel they are able to own something; when this happens, the player becomes motivated to make what they own better and require more aspects to own (this usually relates to some sort of currency).
5. Social Influence and Relatedness: Incorporates all the social influences that drive people, this includes mentorship, acceptance, social responses, companionship, competition, and envy.
6. Scarcity and Impatience: The fact that people are not able to get something right away makes them think about the product/item even more.
7. Unpredictability and Curiosity: Are harmless features that increase people’s engagement with the game; when the brain does not know what is going to happen next, it tends to think about it more often. This is the core drive to what makes people enjoy reading and watching a movie.
8. Loss and Avoidance: people are driven to avoid something negative from happening; to avoid losing previous work or avoid admitting that all the work you have done thus far is now useless when faced with the possibility of quitting.

Example of Gamification—NEST

NEST is a thermostat that adjusts according to the person’s habits within the household and compares them with their previous month’s statistics and/or with other people’s habits that live in the same neighbourhood. This sense of competition with oneself or with neighbours helps to reduce the amount of energy wasted. Rewards are given away, there is a social aspect as various members of the community are participating, and there is a sense of empowerment as the participants/ “nesters” are contributing to a positive end-goal.

* NEST puts together a report, in the form of an infographic, and sends it to participants highlighting the accomplishments achieved while also providing recommendations for future actions.
* This has been a successful application but the limitations are dependent on people who are already interested in reducing their energy consumption and are willing to invest in its continuation.

## ICEI Canada & the Co-operators of the Gamification Project

This relationship has resulted in the creation of the “Resiliency Cards” game and “Downspouts and Ladders;” which was influenced by the classic game of Snakes and Ladders but takes on a resiliency twist.

* These games are available online @ <http://icleicanada.org/games>

A new game is in the works! It is called “Get Ready, Get Prepared,” which is an app that is based on the game “Game of Life.” There will be a mechanism of Chance, Intention, and Cause and Effect, which has been designed to be directed towards homeowners. This App will be launched THIS FALL 2017 at the 2017 Livable Cities Forum in Vancouver. Presentations and Workshops are also in the works so please stay tuned.

This entire process developed from a climate change communications framework report that started 5 years ago. It focused on highlighting and sharing mechanisms in which governments can use to spread information about climate change in an interactive format—gamification was one such mechanism and these games have been a by-product of this communications report.

# People Power Challenge—an Employee Engagement Initiative

Pearson Eco-Business Zone is the largest community known for its corporative, high-performance and eco-friendly business climate. It encompasses businesses within the airport zone within Mississauga, Brampton and Toronto.

People Power Challenge was the by-product of stakeholder engagement.

The goal of The People Power Challenge is to engage employees and motivate them to take on sustainability actions and push sustainability projects within their own organization.

## Reasons Why to Engage Employees:

* Leads to increased productivity and buy-in
* Leads to innovation (within the organization’s processes)
* Increased employment satisfaction
* Increased retention and recruitment

## Key Benefits of the Program

* Drive engagement and involvement within your sustainability program. This program provides a mechanism to track what organizations are already doing in order to get points/rewards for what existing actions.
* Participants are able to gain access to an App that incorporates the gamification aspect, incorporates environment awareness piece, and users can be exposed to the organization’s management levels as well.
* The app also has a feature that can enhance social media coverage of the organization’s progress (Twitter).
* Provides information sharing and access to competitors. The PPC rewards and encourages collaboration among participants even though there is a competitive aspect to the Challenge.
* A total of $20,000 of cash prizes up for grabs. There are monthly prizes that range from $30 -$500.

## Key Features

* Incentive=Prizes
* Platforms:
  + Mobile App: fulfills two main functions; sends out knowledge sharing fun facts. Employee engagement through fun quizzes based on weekly/monthly themes that result in the organization gaining points. Employees engage with the app by providing recommendations on the App, which are sent to upper management levels. Exclusive to members only.
  + Website/Online Management: Ongoing Live leaderboard illustrates where companies are in comparison to each other and where each one is receiving points. Companies are also able to enter in points, enter projects, and have access to coaching and other resources. Exclusive to members although the public has access to viewing the leaderboard. 2 weeks before the Challenge deadline, the Leader Board gets blacked out to increase the suspense and influence companies to incorporate more sustainable practices.
  + Social Media: Not limited to competing participants.

## Program Development

The program has been around since 2013

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| --- | --- |
| 2016 | 2017 |
| -12 Participants  -reach over 10,000 employees.  -generated over 16,000 pledges.  -50,000 suggestions.  - ~380 projects, 74 of which came from employee suggestions and 83 of these projects were joint initiatives between two companies. | -19 Participants  -Challenge Kicks off April 17, 2017. (5 months long)  -There will be a focus on measurable pledges to track employee progress.  -There will also be a focus on total environmental impact and total environmental savings when it comes to point allocation. In previous years, the points were allocated according to the amount of money spent for each project.  -This year, there will be more incentives for companies to collaborate, especially in bigger groups. |

## Key Pillars for the Challenge

* + Pledges: employees are encouraged to take individual commitments to sustainability that can be incorporated into their daily lives and not necessarily be limited to the workplace.
  + Suggestions: essential for the Challenge as they are continuously aiming to make the program better. Empower sustainability managers to know what is going on within the different area/departments of the company. Suggestions have led to projects. Suggestions have also been encouraged to be “outside-the-box” to crowdsource innovative ideas that do not have to be necessarily feasible now but for future projects. The goal is to be simplistic and not burdensome.
  + Projects: tangible community actions with measurable results. The goal is to maximize resource usage, awareness, improve connectivity with nature, and engage with your community and your staff. Some projects include installing a bike rack, replacing normal light bulbs with LED lights in the parking lot, adding more indoor greenery to improve air quality etc.
    - Canadian Tire had a department that built their own bikes which they were able to send to a third world country. In a different department, the employees were given Sunflowers seeds and the person who was able to grow it the largest received a mini reward.
    - The Toronto Zoo worked in partnership with other companies to recycle used cell phones. The profits of recycling the phones were sent to a fund that protected ape habitats, which have been the most affected by the mining process required for the materials needed for cell phones.
    - Companies also participated in Bike to work days, company picnics, The CN tower climb etc.

At the end of the challenge, participants receive a progress report throughout their entire Challenge period, which also describes how they compared to other companies. A reward ceremony is held to address the most interesting projects and award the companies that showed the most amount of improvement.

Next year, there will be two separate groups; one focused on municipal organizations and the other focused on corporate companies since they both operate differently.

# Town of Oakville: Resiliency Card Game

The Town of Oakville have been using the ICLEI Resiliency Card games for their fairs and they have been able to incorporate Poker chips according to the points allocated to the subsequent actions. The Town likes this game because it gives the opportunity for a player to play once or several times if they want to so it is great for getting people talking and interacting.

## 2015- KEEP CALM AND ADAPT FAIR

The Town will be hosting this fair to coincide with Emergency Preparedness Week and it focuses on everything that deals with Climate Change Adaptation and Mitigation. (Will occur May 6th, 2017). Meteorologists have been asked to participate, alongside with other 20+ exhibitors.

The point of these Fairs is to start getting community members to start taking action in incorporating measures that would make their homes more resilient to extreme weather events.

* Riddle Me Ready: Participants (usually a group eg. Families, brownies, scouts, etc) have to answer 30 riddles in order to receive all the components to a 72-hour preparedness kit. It is modeled after the 72-hour preparedness kit from Red Cross (minus the knives).
* Prepare to be Prepared: addresses the need to protect yourself; these actions range from protecting your valuables in the basement to protecting yourself from West Nile Virus. The goal would be to gather all the actions people are taking according to the 40 challenges selected by the town (making sure these challenges are widely accessible) using social media, a scorecard or submitting the actions through email. After tallying up the actions, prizes will be allotted accordingly—participants can be registered as groups or as individuals. To be launched in April for the month of May\*\*
  + Examples of the Challenges: Making an emergency Plan, introducing yourself to your neighbour, if you get to talk to them about emergency planning and take into account any special needs; then they would receive additional points etc.
  + This game came out of talking with the Emergency Planners and the Storm Water Engineers as they are in the process of the second phase of Master Plan for Storm Water.
  + There is a buy-in from the Insurance Bureau of Canada and Emergency Management Ontario.
  + Anyone is able to participate but it is only the people living in Oakville that will receive the prizes.
* Spin-the-Wheel—Everyone is always a winner
  + Wheel of Waste
  + Wheel of life
  + Wheel of Climate Change
* Lego Challenge
  + Worked with the Planning department to develop this game; everyone gets the same amount of legos and the goal is to build a sustainable community.
* Seconds to Sort
  + During Waste Reduction Week
  + They have a limited amount of time to sort waste and whoever gets the most right wins a prize

CAC will be updated on how much uptake the new game has had at the end of the Prepare to be Prepared Project

# Complete Streets and TCAT (Toronto Centre for Active Transportation)

## Vision and Mission Statement:

TCAT is the active transportation project for the Clean Air Partnership. TCAT’s vision and mission is motivated by the idea that walking and cycling benefit Cities and the people living within them. Projectsinclude:

* Active Neighbourhoods Canada Project: which is a participatory planning project funded by the Public Health Agency of Canada that works with four different communities to highlight what the major barriers are to incorporating active transportation in their community plan.
* Scarborough Cycles Building a Culture Beyond Downtown:is delivered together with U of T, Cycle Toronto, and Culture Links and is working to understand factors that encourage cycling outside the Toronto downtown core, what the unique challenges are, and what the capacity would be in order to allow all four organizations to go in and create an impact.
* Bloor Street Pilot Cycling Impact Setting/ Bike Lane Project: TCAT is looking at the economic impact of the bike lane by talking to local businesses and customers to find out what mode of transportation they are using to get to the area, whether their behaviour has changed since the bike lane has been incorporated, and if their attitudes towards the bike lanes have changed. This information will be presented to council this fall.
* Active Transportation Practices on the Green Belt: is funded by the Ontario Growth Secretariat that looks into the challenges of implementing active transportation at and beyond the Green Belt.

TCAT aims to illustrate these projects, and their subsequent findings, in a visual display for the public to bring awareness to the different regional approaches to increasing cycling in the hope to get them interested in incorporating more active transportation in their life.

## Complete Streets

TCAT has a Complete Streets focus, they want to understand and spread Complete Streets policies to municipalities. Toronto has incorporated a Complete Streets Policy and has developed guidelines to implement that Complete streets policy.

## Complete Streets Game

The player gets to determine the features that will be included into a potential street retrofit or a new street in order to come to a consensus as to which configuration would work best and better understand the trade offs and considerations that need to be taken into account.

* The players receive a board game that has a centre line and the exact measurements of the road outline. Additional add-on components (such as bike lanes etc.) are all to scale according to the local standard. The game can be played with up to six players, the instructions provide the player with some context as to the type of street users the players are designing for; there are roles that could also be assigned to each player that will alter the requirements for the street design. At the end, players would photograph their design, take it apart, and then choose alternate contextual factors to redesign the street landscape once again.
* Through playing this game, people will get to experience the pros and cons of incorporating one aspect of the street landscape over another, this would spark interesting conversations as to what components they consider to be more important.

# Clean Air Council Joint Action Section

**The Clean Air Council Summit is OFFICIALLY BOOKED FOR THURSDAY JUNE 8TH, 2017.**

The goal of this Summit is to present any announcements—highlighting what the actions your jurisdiction will be undertaking to advance Clean Air and Climate Change.

For the Municipalities, the letters will be sent out to the Majors and the Councillors; we will notify the CAC member when their Major/Councillors have accepted the invitation.

Letters to the Federal Ministers have been sent out. The letters to the provincial Ministers have been sent out. For the Regional Representatives, the letters are sent out to the Regional Chair, once they have accepted the regional members will be notified.

We are going to use this opportunity to send out the Clean Air Council Story Books with the invitations to the Mayors and Councillors to announce the municipal Climate Change Champions.

Key areas CAC is currently working on:

* ECO Health Ontario has developed a Green Spaces Toolkit which will be presented to the CAC members at a future meeting.
* CAP is also working with the Green Infrastructure Ontario Coalition on an *infrastructure road map*, which will also presented at a CAC meeting. The meeting will address green spaces, green Infrastructure, and natural valuation.
* There are many jurisdictions working on health and vulnerability assessments, it would be useful to share what the assessments consist of, how they are being integrated into all other types of vulnerability assessments, and what actions have been undertaken thus far.
* CAC has looked into modeling regional inventory needed to establish a business case that would determine which municipal actions should be addressed first. There are challenges associated with quantifying the vectors; there isn’t much work being done but CAC is looking into the significance of having modeling data, which types of modeling would be the most effective, and is looking into the steps needed to establish such a resource in the future.