Children, Climate Change and Pollution: Challenges and Solutions
Children, Climate Change and Pollution: Challenges and Solutions
1. Get a phone! Share a phone!

2. Get Wifi!
   Network: UNICEF
   Password: CFCI2019
3. Open your browser and go to www.sli.do
3. Enter event code: #CFCISUMMIT
Objectives

• Discuss the role and responsibilities of cities and municipalities in addressing pollution and the effects of climate change
• *Share ideas and innovations on possible solution*
• *Leave the workshop with the conviction that the issues can be addressed, and it is possible to build better and cleaner cities for children*
CARING FOR CHILDREN IN A DETERIORATING CLIMATE

DIR. JULIET STIPECHE, CITY OF HOUSTON MAYOR'S OFFICE OF EDUCATION
THE IMPACT

- Hurricane Harvey dropped over 40 inches of rain on Houston and caused over 100 billions dollars in damage
- Hundreds of schools closed for weeks
- Thousands of families displaced
HURRICANE HARVEY TIMELINE

AUGUST 19TH, 2017
Harvey weakens to a tropical wave

AUGUST 27TH, 2017
Harvey touches down in Southeast Houston, and flooding begins immediately

SEPTEMBER 1ST
First contact between UNICEF and the City of Houston.

SEPTEMBER 9TH
The proposal to support Houston children is ratified by all parties

AUGUST 23RD TO AUGUST 26TH, 2017
Harvey evolves into a Category 4 Hurricane

AUGUST 30TH, 2017
Heavy rain stops, but showers continued. Harvey causes 88 fatalities and billions of dollars in damage

SEPTEMBER 5TH
UNICEF arrives

NOW
THE COST OF OUR CLIMATE

U.S. 2017 Billion-Dollar Weather and Climate Disasters

- North Dakota, South Dakota, and Montana Drought Spring–Fall 2017
- Western Wildfires, California Firestorm Summer–Fall 2017
- California Flooding February 8–22
- Colorado Hail Storm and Central Severe Weather May 8–11
- Midwest Severe Weather June 27–29
- Midwest Severe Weather June 12–16
- South/Southeast Severe Weather March 26–28
- Minnesota Hail Storm and Upper Midwest Severe Weather June 9–11
- Midwest Tornado Outbreak March 6–8
- Central/Southeast Tornado Outbreak February 28–March 1
- Missouri and Arkansas Flooding and Central Severe Weather April 25–May 7
- Southeast Freeze March 14–16
- Southern Tornado Outbreak and Western Storms January 20–22
- Hurricane Harvey August 25–31
- Hurricane Irma September 6–12
- Hurricane Maria September 19–21

This map denotes the approximate location for each of the 16 billion-dollar weather and climate disasters that impacted the United States during 2017.
LESSONS LEARNED
Children, Climate Change and Pollution:
Challenges and Solutions
Capital city of Mongolia, Ulaanbaatar
Child friendly Ulaanbaatar program
2017-2021

Air pollution reduction
Reducing the impact of air pollution on maternal and child health
Maternal and child health crisis
1. Reduce air pollution
2. Reduce exposure to air pollution
3. Strengthen health care
Data, evidence, information
Action on the ground
Policy advocacy
АГААРЫН БОХИРДОЛ БА ЗУРАГЛАЛ ГАРГАГЧИД
Улаабаатар хот, 2018 оны 2-р сар
#Ulaanbaatarcity #Bayanzurkhdistrict, #Airpollution #VoiceofYouth
Partners:

Government
Civil society
Academia
Private sector
Development Partners
Children and the Youth
Children, Climate Change and Pollution: Challenges and Solutions
BUILDING BROOKLYN’S FUTURE

BY

RECOGNIZING, ACCESSING & RESPONDING TO

CLIMATE CHANGE
PRESENTER:

Ama Dwimoh, Esq.

SPECIAL COUNSEL TO THE BROOKLYN BOROUGH PRESIDENT
CHIEF COMPLIANCE OFFICER
CHIEF EEO OFFICER
AGENCY PRIVACY OFFICER
1. The Gowanus Canal is a 100-foot wide, 1.8-mile long canal in New York City’s (NYC) borough of Brooklyn, New York.

2. The Gowanus Canal was built in the mid-1800s and was used as a major industrial transportation route.

3. Manufactured gas plants, paper mills, tanneries and chemical plants operated along the Canal and discharged waste into it. In addition, contamination flows into the Canal from overflows from sewer systems that carry sanitary waste from homes and rainwater from storm drains and industrial pollutants.
The Gowanus Canal has become one of the nation's most seriously contaminated water bodies.

- More than a dozen contaminants, including polycyclic aromatic hydrocarbons, polychlorinated biphenyls and heavy metals, including mercury, lead and copper, are found at high levels in the sediment in the Canal.
- It was once so polluted that locals called it “Lavender Lake.”

2. The Gowanus watershed is also one of the areas in the City at highest risk for flooding.

3. An 86-page report released in 2017 from the New York State Dept. of Health revealed children and women under 50 should not swim in the canal, and fish from the canal should not be consumed.

4. Gowanus-area locals are also concerned with potential upscale real-estate developments that might displace the established community.
GOWANUS CANAL

THESE PHOTOS SHOW WHAT THE DECADES OF POLLUTION LOOK LIKE IN THE GOWANUS CANAL
THE GOWANUS CANAL

1. The Environmental Protection Agency added the Gowanus Canal to the Superfund National Priorities List on March 2, 2010.

2. The federal government led cleanup started in 2016, and is expected to be clean by 2022.

3. At the same time, New York City is spending about a billion dollars to reduce sewage discharge into the canal and street flooding around it.

4. Around 377 million gallons of overflow from raw sewage and rainwater pours into the canal every year, and the City is required under the Federal Superfund program and the Clean Water Act to invest in infrastructure to reduce the amount to 115 million gallons per year.
6. In 2016, locals were concerned about the potential of rezoning Gowanus: That it will only benefit developers, causing displacement of longtime residents, and that any affordable housing put forth in the plan would still be out of reach for the lowest income residents.

- The NYC Department of City Planning initiated a Gowanus Neighborhood Planning Study in 2016 to determine strategies for the future development of the land around the Gowanus Canal.
- In March 2019, DCP released their Draft Scope of Work, laying out proposed rezoning’s environmental analysis.
- The Gowanus Canal Conservancy is a community-based environmental group leading the Gowanus Lowlands community-based planning process for the public realm. They responded to the City’s proposal asking for the plan to further address sustainability and resiliency goals.

5. November 2018 marked the first time that a portion of the canal has a clean bottom in 150 years.
1. The BQE issue concerns a 1.5 mile stretch of deteriorating roadway between Atlantic Avenue and Sands Street.

2. The highway was built by renowned urban planner Robert Moses in the 1950s, and was intended to carry 47,000 vehicles.

3. In 2016, New York City Department of Transportation (NYCDOT) conducted an in-depth inspection of the structures within the corridor.

“BUT IT’S NOT CLEAR WHAT THE FULL IMPACT WOULD BE”
1. Sixty-five years after the expressway was built, it is collapsing.

2. The DOT inspection found that if significant repairs and replacements are not made by 2026, large trucks may no longer be able to use it.
   a. Although the expressway was built for 47,000 vehicles, is now used by 153,000 cars and trucks a day.
   b. The roads were built in the 1950s, and meant to last fifty years.
   c. If nothing is done, the City says it will have to issue weight restrictions and reroute trucks – some 25,000 use the expressway every day.
   d. New York City’s transportation commissioner has described fixing the elevated expressway as “the most challenging project not only in New York City, but arguably in the United States.”
   e. There are many obstacles to the BQE that are formidable:
      i. There is an immense sewer line that runs directly below Furman, serving much of Brooklyn.
      ii. There are venting plants and substations for the Metropolitan Transportation Authority that are in the way.
3. Complicating matters is that the Brooklyn Heights Promenade is perched on top of the BQE’s triple-cantilever section.
   • The 1,825-foot esplanade, with sweeping views of Manhattan and the East River, is structurally connected to the roadway, so any changes that happen to the BQE inevitably extend to the promenade, which has become a “communal backyard” for Brooklyn Heights.

4. The BQE has become a corridor for pollution and high asthma rates.
   • The district around the BQE is the eighth most polluted in the City, according to a 2013 Community Air Survey conducted by the New York City Department of Health and Mental Hygiene.
THESE PHOTOS ARE OF THE SLOWLY COLLAPSING BROOKLYN QUEENS EXPRESS WAY (BQE)
1. NYCDOT proposed two $3.2-3.6 billion-dollar plans: The first would turn the Brooklyn Promenade into a highway and construction site for at least six years while a 1.5-mile stretch of the BQE gets repaired; the second plan was a lane-by-lane approach which would close the promenade for up to two years.

2. However, the City’s BQE plan could bring dangerous levels of toxic pollution to Brooklyn Heights.
   - Raising the BQE to sit atop the Promenade will bring a toxic cloud to street and garden level.

3. The plan elicited a firestorm of protest, and in response to community, preservationist, and urban planners’ concerns, Mayor de Blasio convened a panel of 16 experts to consider alternative proposals, composed of engineers, civic leaders, architects, and also local community groups.
4. City officials and community groups have been proposing their own alternatives:
   • The Brooklyn Heights Association proposed an alternative, known as the “Temporary Parallel Bypass Method.”
   • This approach would erect a freestanding, two-tiered temporary highway a few feet west of the existing triple cantilever.
   • Instead of replacing the promenade with a temporary road, one stretch would run beside the expressway, enabling the promenade—and local businesses that depend on the foot traffic it attracts—to remain open during the majority of construction.
   • An alternative plan has been identified as a “middle ground” approach would present a dramatic reimagining of part of the BQE while maintaining the expressway. The plan calls for converting the triple cantilever into a truck-only highway topped with a nearly two-mile-long “linear park.”
RE IMAG I NG THE BROOKLYN QUEENS EXPRESSWAY

BROOKLYN QUEENS EXPRESSWAY
OF THE FUTURE

RE IMAG I NG THE BROOKLYN QUEENS EXPRESSWAY
SUPER STORM
SANDY
&
CONEY ISLAND
SUPERSTORM SANDY & CONEY ISLAND

When Hurricane Sandy hit New York City, the City had never experienced a storm of this size or damage in its recorded history.

On October 29, 2012, Hurricane Sandy hit New York City, destroying around 300 homes and damaging 69,000 residential rental units. Displacing thousands of New Yorkers. Forty-four residents died - including 8 residents who drowned in their own homes - and the cost of damage and lost economic activity was estimated at $19 billion.

Nearly 2 million people were without power, 1.1 million children were unable to attend school for a week, and 700,000 tons of debris remained in the storm’s wake.

When the storm made landfall, its tropical-storm-force winds extended 1,000 miles – three times that of a typical hurricane. It was those winds, as well as the storm’s low pressure, that were responsible for its catastrophic storm surge.

“DO NOT UNDERESTIMATE THIS STORM”
SUPERSTORM SANDY & CONEY ISLAND

1. Brooklyn’s waterfront neighborhoods were not prepared for a storm surge when Hurricane Sandy hit in 2012.
   - A nearly 14-foot storm tide broke across the Coney Island boardwalk in 2012. Low edges and topography contributed to ‘backdoor’ flooding that caused enormous damage.
   - During Sandy, a storm surge flooded streets, parks, homes and businesses in Red Hook with more than 10 feet of water.

2. Brooklyn’s New York City Housing Authority (NYCHA) was particularly affected by the hurricane:
   - In Brooklyn, there are 99 developments with 58,422 apartments and 131,024 residents.
   - Red Hook, the largest public housing development in Brooklyn with 2,878 apartments, was one of the hardest-hit areas and suffered profound losses of electricity, heat and water. Some residents were forced to hike twelve flights of stairs to get in and out of their homes.

3. If a hurricane or natural disaster hit New York City again tomorrow, would Brooklyn be any more prepared than seven years ago?
SUPER STORM SANDY
CONEY ISLAND WATER FRONT
SUPER STORM SANDY & CONEY ISLAND

- New York City has spent hundreds of millions of dollars in Sandy recovery in Coney Island and future storm defense and preparation: Renovating Coney Island Hospital, hardening infrastructure and funding studies on areas of risk like Coney Island Creek.

- Coney Island Creek was a major source of flooding during the hurricane. In 2016, the City completed a resiliency study on the area, and plans to raise the creek’s shoreline.

- Since Sandy struck, over 600,000 cubic yards of sand have been placed on the beach of Coney Island to prevent erosion and protect from storm surges.

- The City also has a $47 million-dollar plan to rebuild a wall protecting Coney Island Creek, although locals fear it is only designed to protect the shoreline from routine storms.

- Slow repair to the New York City Housing Authority buildings are still in bad shape.

- A 2017 study by the Waterfront Alliance found that 80,900 residents of Coney have a 50% chance of losing their home to flooding by 2060.
REBUILDING CONEY ISLAND

REIMAGINING CONEY ISLAND WATER FRONT
Brooklyn is a borough of New York City. Brooklyn is the most populous Borough in the state, and the second-most densely populated county in the United States. In 2010 Brooklyn’s population was an estimated 2,504,700 residents.

BOROUGH PRESIDENT: ERIC L. ADAMS
POPULATION: 2.533 MILLION (2011) UNITED STATES CENSUS BUREAU
LAND AREA: 69.5 MI²
FOLLOW US ON SOCIAL MEDIA!

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Children, Climate Change and Pollution: Challenges and Solutions
Youth-led social innovation for Cleaner Air

Ho Chi Minh city, Vietnam

Han Nguyen - Saigon Innovation Hub
What do children in Ho Chi Minh city think about a child-friendly city?
Tự liệu: Dự án “Trẻ em sáng tạo” - Thiết kế thành phố thân thiện với trẻ em.

Source: Children Innovate project - Child friendly city design.

and the environment is not polluted
“Just a few years ago, I breathed in and out without worrying. Now things are different,”

Nguyen Van Thanh Thong, 15 y.o. student in Ho Chi Minh city, at Clean Air workshop
“How children and youth think about air pollution?”
U-Report Poll – 2 weeks in Apr 2019,
2643 U-reporters (13-18 y.o., Vietnam)
“Who is most responsible for reducing air pollution?”

Over 90% of children responded that EVERYONE is responsible

How children and youth think about air pollution?- U-Report Poll – 2 weeks in Apr 2019, 2643 U-reporters (13-18 y.o., Vietnam nationwide)
How does Ho Chi Minh city empower children to **ACT** to make the city **safer** and **cleaner**?
Partnership building

Air pollution workshop raising awareness

CFCI partner, “Innovation” pillar
Social innovation clubs at schools & social protection centers
- 14-18 years old
- Design thinking process
- 21st century skill building + active citizenship
- Pitching day: connect teams with technical experts + potential supporters
“Dust-reducing castle” project - Son Vu, a secondary school student
Replacing single use plastic at school
New products
- Reusable cups made of coconut shells
- Biodegradable grass straws

- Tan Tao A Secondary-school
Ceporer Hoc Mon social protection center
- Little Farmers Project
- Child-friendly garden
Encouraging and mobilizing parents to park their vehicles 200m away from the school’s front gate and turn off idling engines to improve the air quality.
If every child is empowered and given right support, they can take active role, create innovative solutions to make their city more child-friendly. They even inspire adults to act with them.
Check out more at CFCI Inspire Awards


Category 4: Secure, safe and clean environments

Entry 3: Social Innovation Clubs project - 21st Century Skills and Active Citizenship Building for Adolescents

Thank You
Children, Climate Change and Pollution: Challenges and Solutions
Slido

What can CFCI do to reduce the impact of climate change