

"Politicians Discussing Global Warming" by artist Isaac Cordal

# Climate Refugees: Stateless By Degrees

July 10, 2019

"Saving Hopes" Team
Be Proactive and Save Lives

# Business Model – Stop Waiting, Start Anticipating

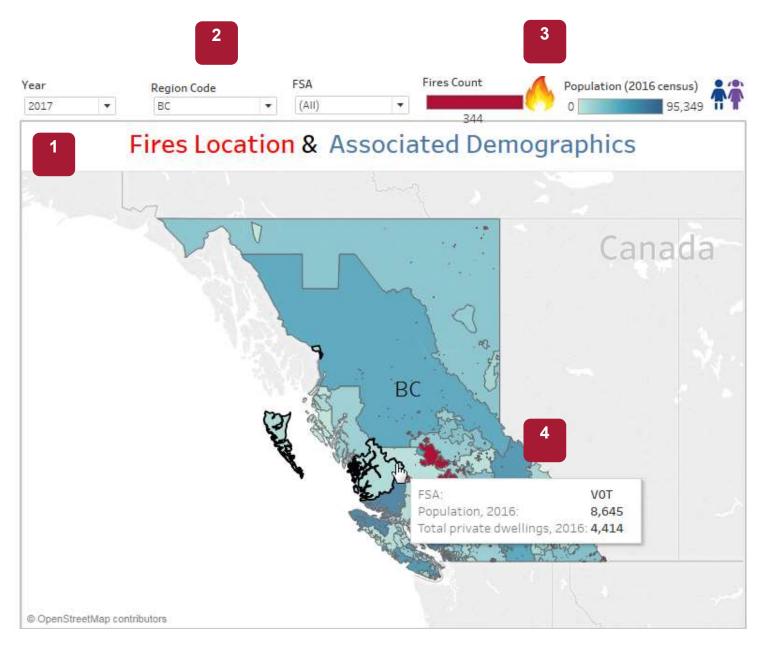
The Frequency of natural disasters is on the rise because of the global warming.

Our solution aims at:

1. Predicting affected areas and estimate future damages 2. Detecting the number of impacted dwellings and resident 3. As a result, governments and humanitarian agencies will be able to plan then allocate the required relief aids and evacuation strategies and tactics and improve operational efficiency

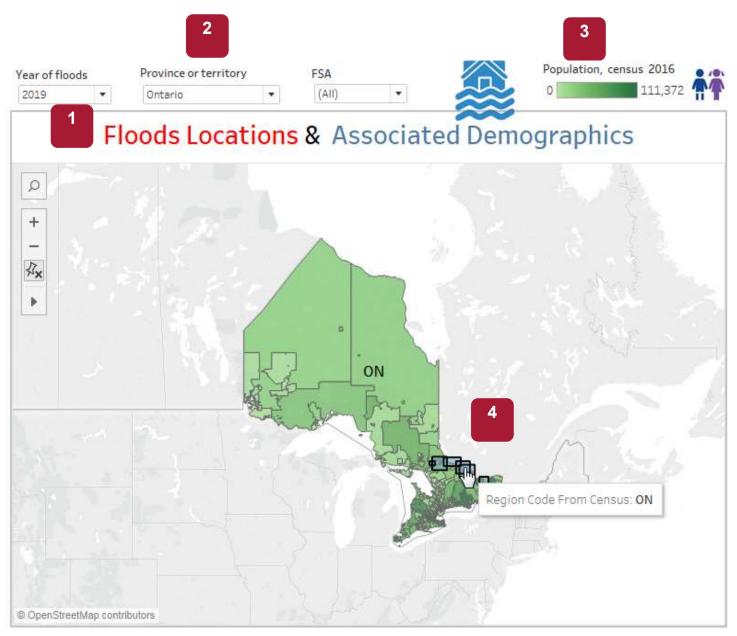
# 1. Prediction & Detection (1/3)

By using interactive maps, stakeholders can simply enter the year and the region on interactive maps that will show the count of fires, demographical information and areas of fires saturation once they hover over any area as a result as shown in step 4. Finding the amount of impacted residents and dwellings is simple and fast. Other layers of weather variables will be added to the future fully fledged solution



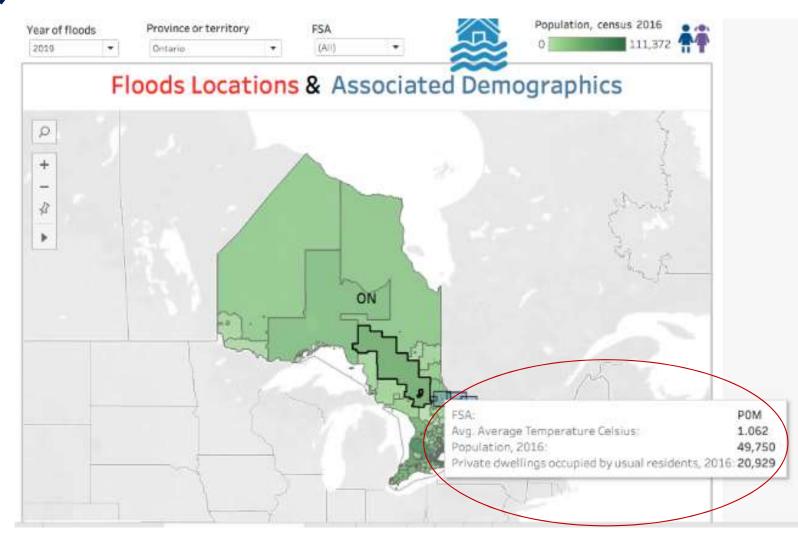
# 1. Prediction & Detection (2/3)

Our interactive maps can also show floods per geolocation so impacted areas (dwellings, infrastructure and mainly residents) can also be visually revealed, The governmental agencies and other humanitarian organizations can rely on this visual to address any natural hazardous situations, plan then allocate relief resources. Other layers of weather variables will be added in the future fully fledged solution



# 1. Prediction & Detection (3/3)

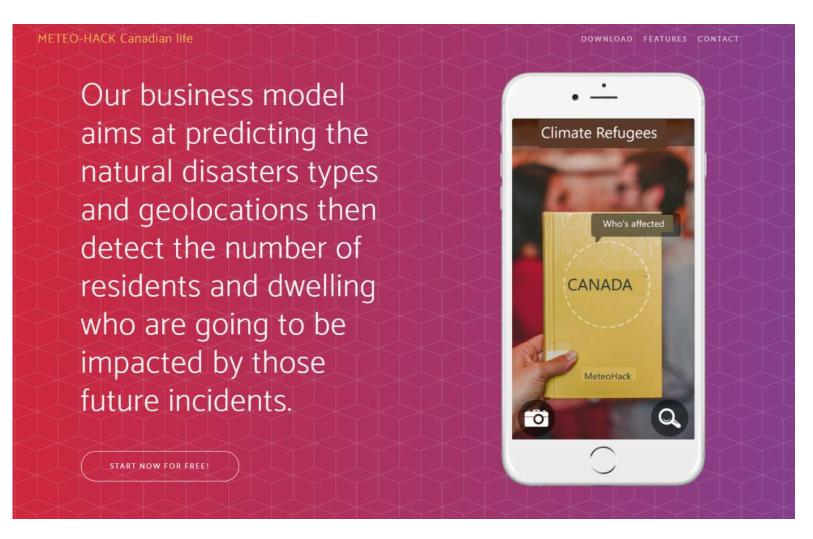
Example on how the weather data can be incorporated.



# **Delivery mode**

# **Mobile App**

When disasters happen, people rely heavily on their cell phone to receive/exchange information. Our App designed to be indispensable to both citizens and governments in hard times. Push messages and emergency aids will be available and interactive.



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Towards operational excellence when it's most needed.

METEO-HACK Canadian life

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# Authorities, humanitarians agencies and you dear citizen!

Our app will be able to allocate the required relief and evacuation strategies and tactics based on the number of residents and dwellings who are placed in the impacted areas.





# **Delivery mode**

# **Mobile App**





# Forest fire risk estimation

It run only when alters are on, very efficient for mobiles



Very accurate in all our provinces



# Choose your house with a better way

Best location with less risk and danger



#### Flood risk to watch

We inform you in advance so you can be prepare, your safety does matter!

# Future Applications – From Local to Global

How can we scale the use of Environment Canada data to reach out to those across the globe who need our help and to aid our government to do a better job by proving insight.

"An analysis of more than 7,000 disasters over the past two decades, in which 1.35 million people died, showed 90 percent of those deaths occurred in low and middle-income countries. Ban called it "a damning indictment of inequality ... High-income countries suffer huge economic losses in disasters, but people in low-income countries pay with their lives..."

#### Source:

https://mises.org/wire/why-natural-disasters-are-worse-poor-countries

# 1- Increase awareness and engagement - How long before 'you' become a Climate Refugee?

To spread awareness about the seriousness of global warming and its impact, Canada needs to "personalize the experience".

Predictive maps where people can enter their zip code and know when in the future they will lose their homes to climate change can serve a strong wakeup call.

- In order to develop such an idea, certain parameters need to be trained using a sophisticated AI algorithms need to be trained. Parameters that can be used for such a platform are:
  - Location approximation from watersides/forests
  - Average water level rise over the years
  - Average escalation in weather heat
  - Amount of snow fall/Count of fires
  - Speed of snow melting in relation to average rising of temperature
  - Dwelling construction date, material and type.
  - Municipality infrastructure and record of maintenance and history of natural disasters affecting the area

Reservation: In order to have a working platform we need much more time and resources which we didn't have in such a short time. Therefore we'r only suggesting ideas.

# 2- Canada to allocate and prepare for its next wave of 'Climate Change Refugees' ahead of time

Canada doesn't support openboarder policy. Choosing a vetting immigrants/refugees is a time consuming and an expensive process. The Canadian government has been frequently criticized for being too fast or too slow when it comes to accommodating refugees.

- In December 2010, Parties to the UN Framework Convention on Climate Change (including Canada) adopted the Cancún agreements, which promote "measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation."
- Environment Canada with the help with international organization of similar mandate can develop a predictive model that help anticipate the future wave of refugees. Such a model will:
  - Save lives by taking swiftly measures
  - Understand the demographical, educational, financial and cultural values of affected societies and plan a head of time to place strategies and human resources to accommodate the impacted regions.
  - Help Canada be better prepared when it comes to budget placement.
  - Logistical excellency

# 3- Canada to inspire UN organizations to improve processes

The solution and its application can be scaled out to an international level. The UN faces lot of challenges when it comes to addressing natural disasters and allocate much needed financial resources. The climate induced people displacement is rising every year.





# Resources

#### Flood Data

http://geo.weather.gc.ca/geomet?service=WMS&version=1.3.0&request=GetCapabilities&LAYERS=HOTSPOTS

https://open.canada.ca/data/en/dataset/b1afd8d2-6e14-4ec4-9a09-652221a6cb71

https://webservices.maps.canada.ca/arcgis/rest/services/NRCan/EGS\_Flood\_Product\_CurrentYear\_en/MapServer/1

### Fire Data

http://cwfis.cfs.nrcan.gc.ca/datamart/download/nfdbpoly?token=5839494ebfe00fd18ee7dd2ad9dfa8f3

#### 2016 Census Data

https://www12.statcan.gc.ca/censusrecensement/2016/dp-pd/hlt-fst/pdpl/Table.cfm?Lang=Eng&T=1201&S=22&O=A



Thank you for giving us the opportunity to shape a better planet.

We couldn't have asked for a better reward!