



GREENOVATE  
BOSTON

# 2014 Climate Action Plan Update

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# Overview

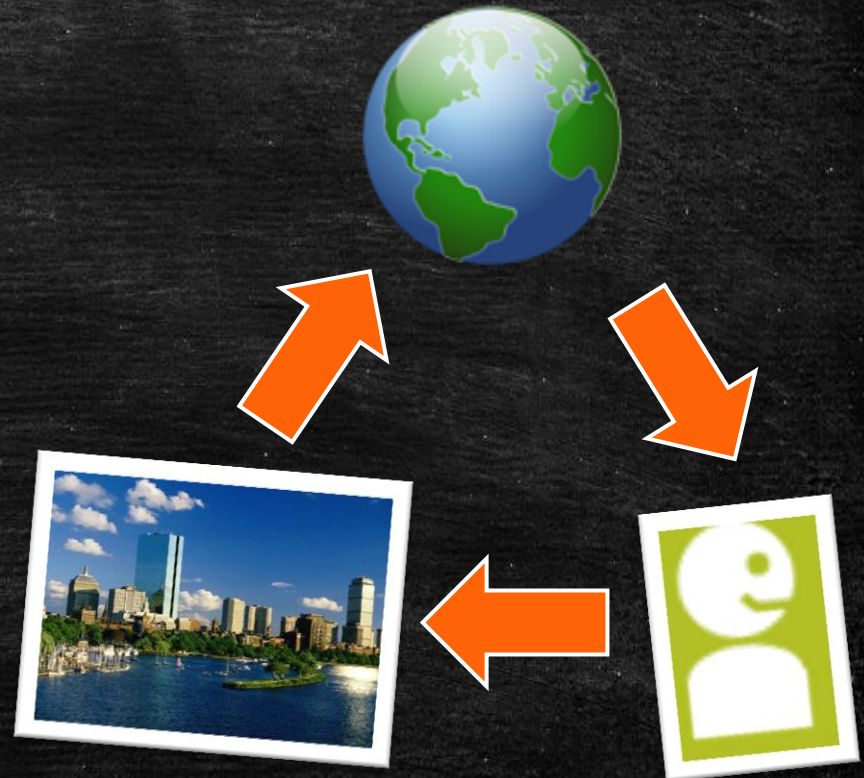
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Why is our climate changing?

How does it affect me?

What is Boston doing?

What can I do?





# The greenhouse gas (GHG) effect is causing climate change.





# Climate change is impacting Boston.

Flooding



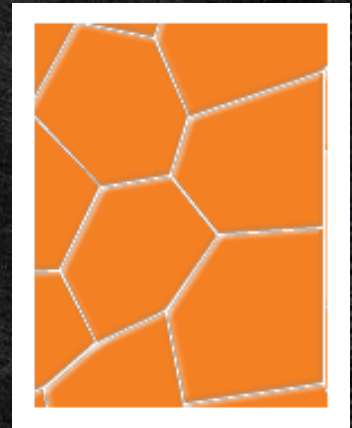
Sea-level Rise



Rising cost of  
food & energy



Heavy  
Precipitation



Warmer  
summers &  
extreme  
heat

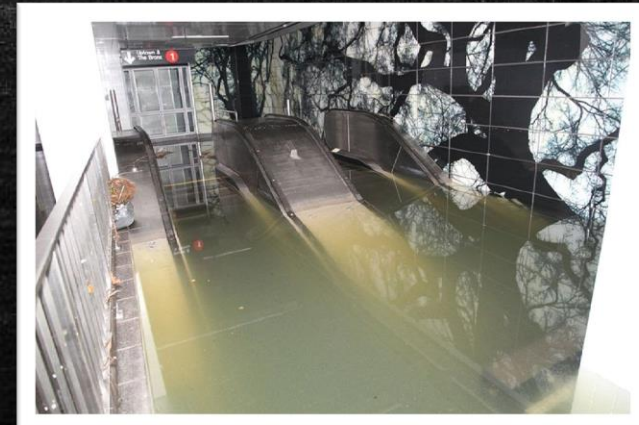


Power  
outages



Reduced air  
quality

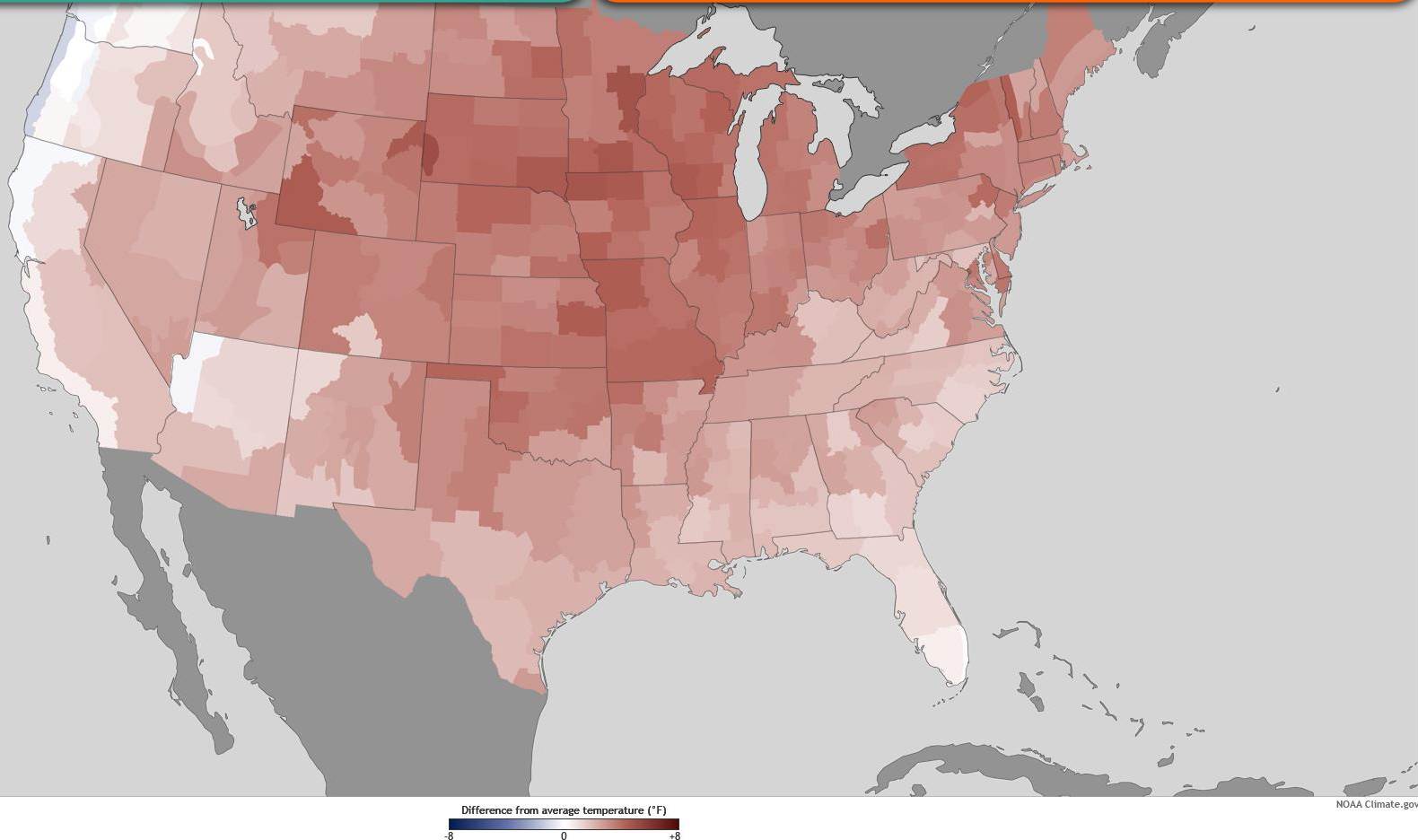
Extreme  
weather &  
storms



# It is getting warmer.

**2012: Warmest Year on Record in the U.S. by one full degree**

**By 2047, coldest years will be warmer than today's warmest.**



-8

Difference from the average temperature (°F) 2012

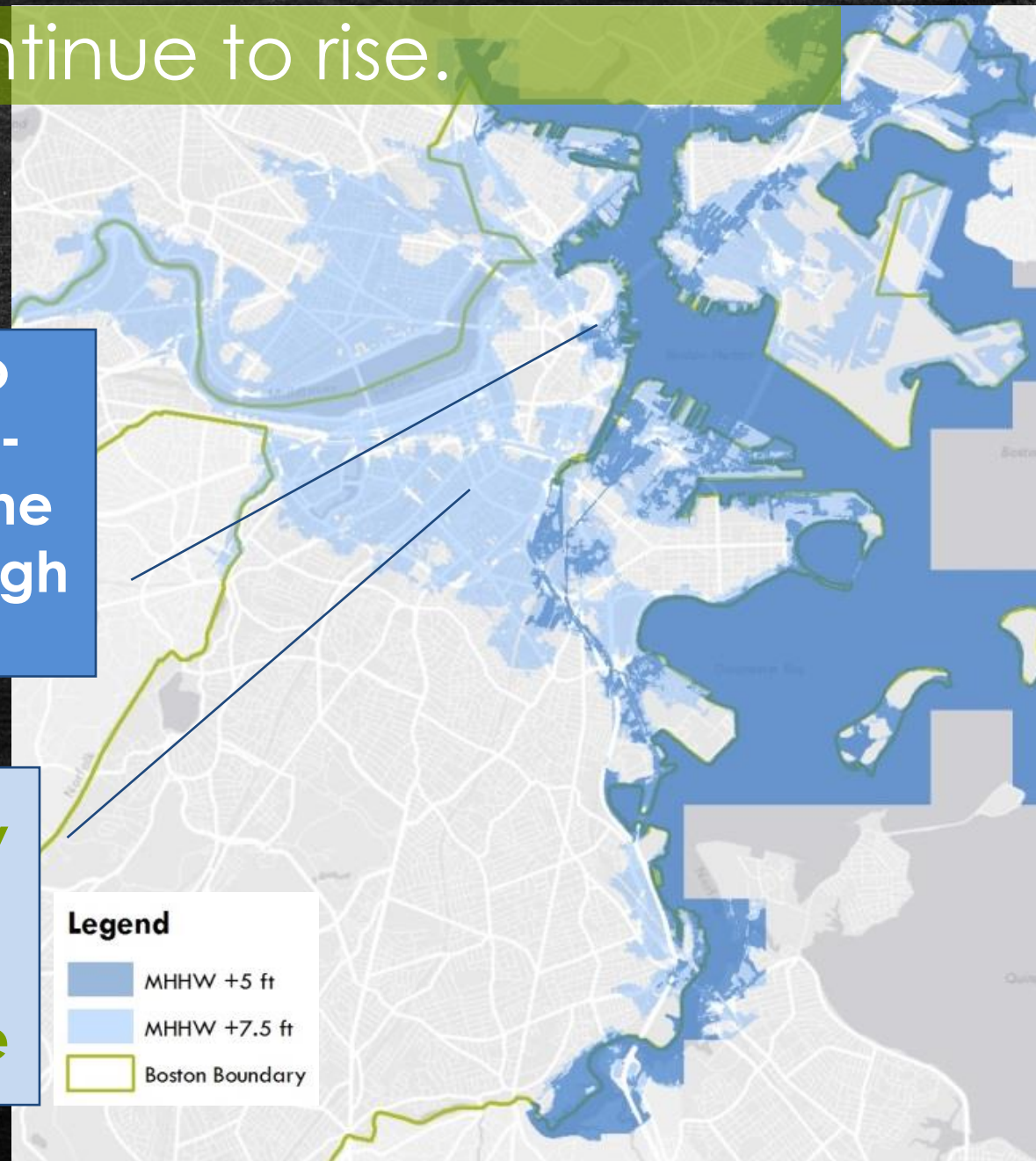
+8



# Sea-level will continue to rise.

Potential mid- to late-century sea-level rise; Hurricane Sandy today, at high tide

Potential late-century sea-level rise; Hurricane Sandy at mid-century high tide



*Mean Higher High Water (MHHW) is the average of the higher of the two daily high tides*



# Climate change will impact you.



Hurricane Sandy in NYC, '12

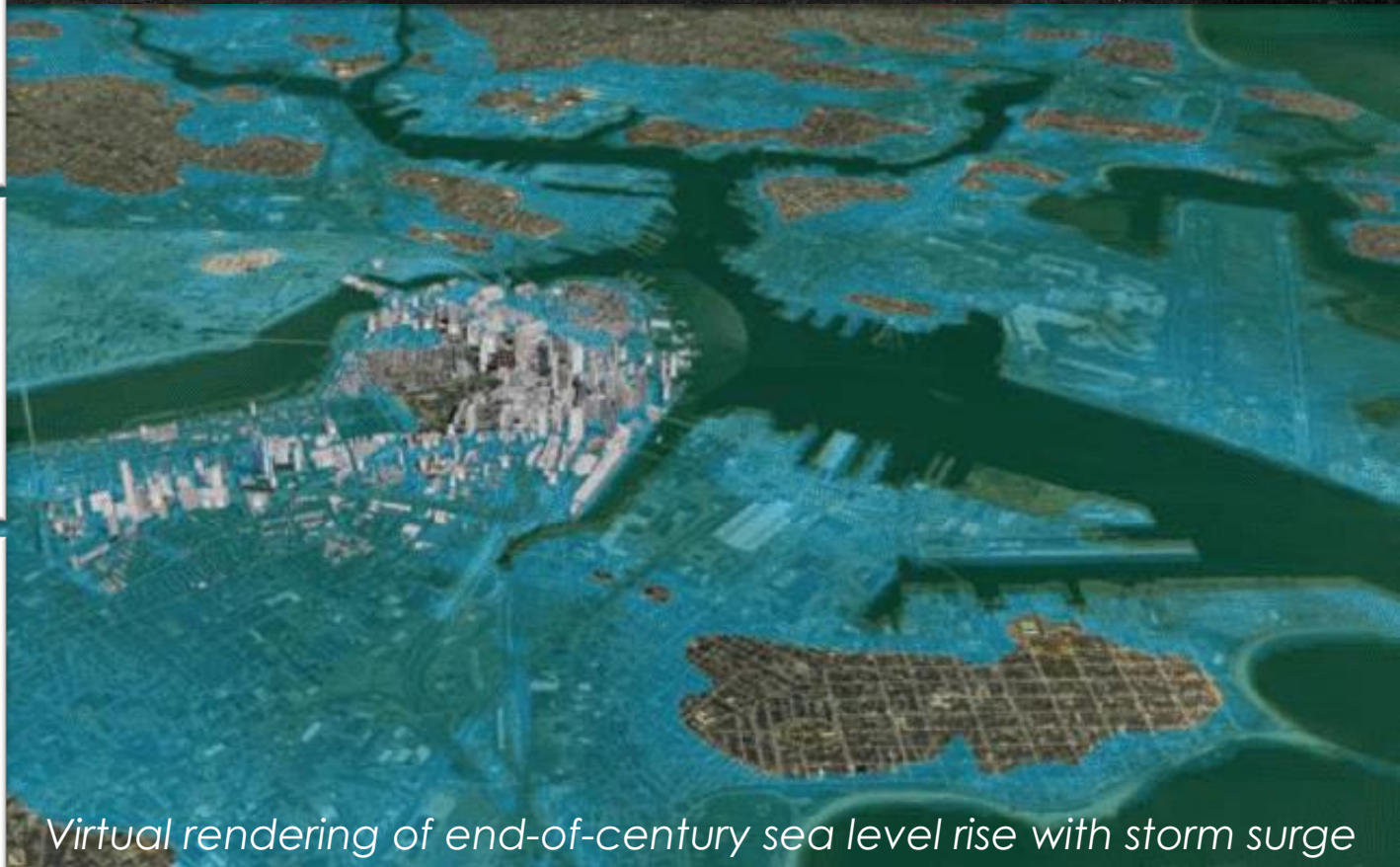


Transformer fire blackout, '12



Northeast Heat Wave, '06

← Short-term and long-term impacts ↘



Virtual rendering of end-of-century sea level rise with storm surge



What is Boston doing?

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# Boston has been taking climate action since 2007.

2007 - Executive Order on Climate Change



2011 - *A Climate of Progress*

2007 - First Climate Action Plan

2009 - Climate Action Leadership and Community Advisory Committees formed

2010 - Sparking Boston's Climate Revolution

2014 -  
Next  
update



The 2014 update will achieve the following:

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Create a comprehensive climate preparedness plan

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Re-evaluate our strategies

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Engage 10,000 Bostonians

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Measure our progress



# This is how we'll get there.

## **Analysis: July '13**

Update GHG inventories  
Draft performance indicators  
Complete climate preparedness reports

## **Community Engagement: Nov '13**

Online engagement tool  
Work with community to host meet-ups  
Greenovate Boston Community Summit

## **Formal Public Process: Jan '14**

Convene formal committees  
Draft CAP update

## **Complete CAP: End of '14**

Public comments  
Release plan  
Performance measurement



# Where are we now?

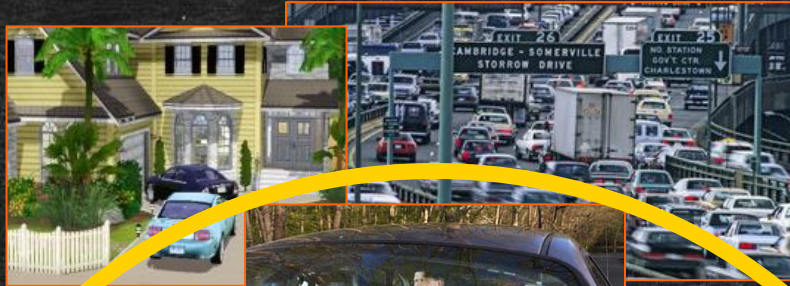
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Up Next: What can I do?

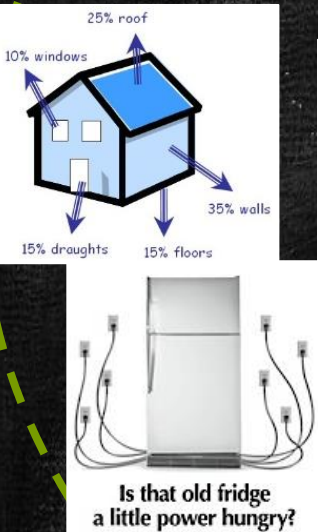


Boston's greenhouse gases (GHGs) come from buildings and transportation.

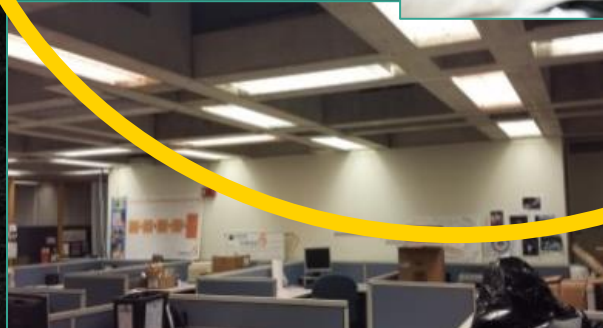
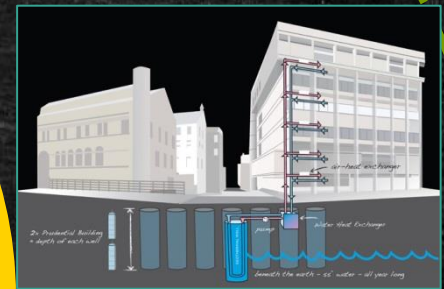
**GETTING  
AROUND: 31%**



**AT HOME: 17%**



**But they  
ultimately  
come from  
people.**

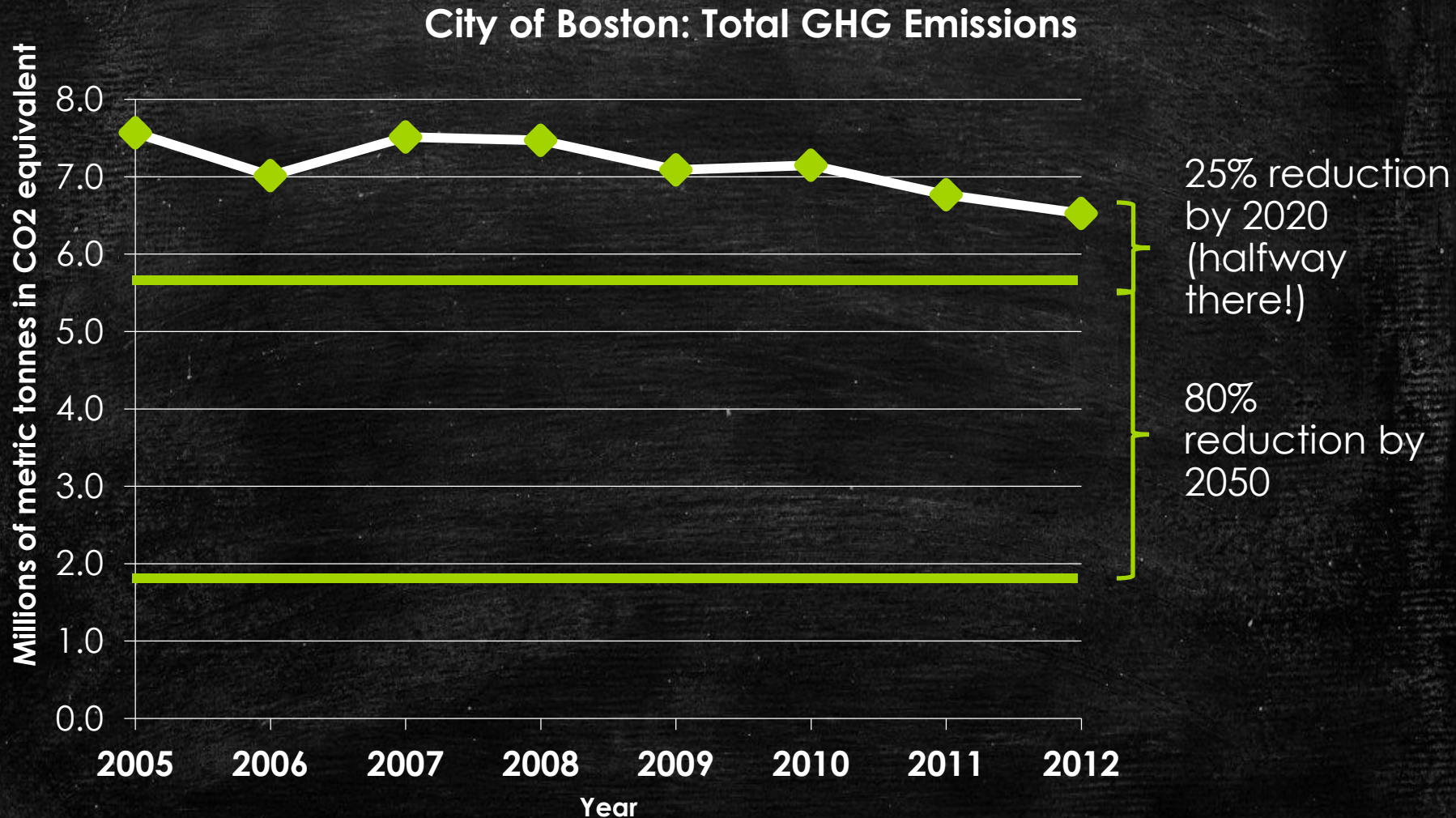


**AT WORK: 51%**

At work includes natural gas of large apartment buildings.  
Waste and rounding errors comprise remaining ~2% under our current methodology.



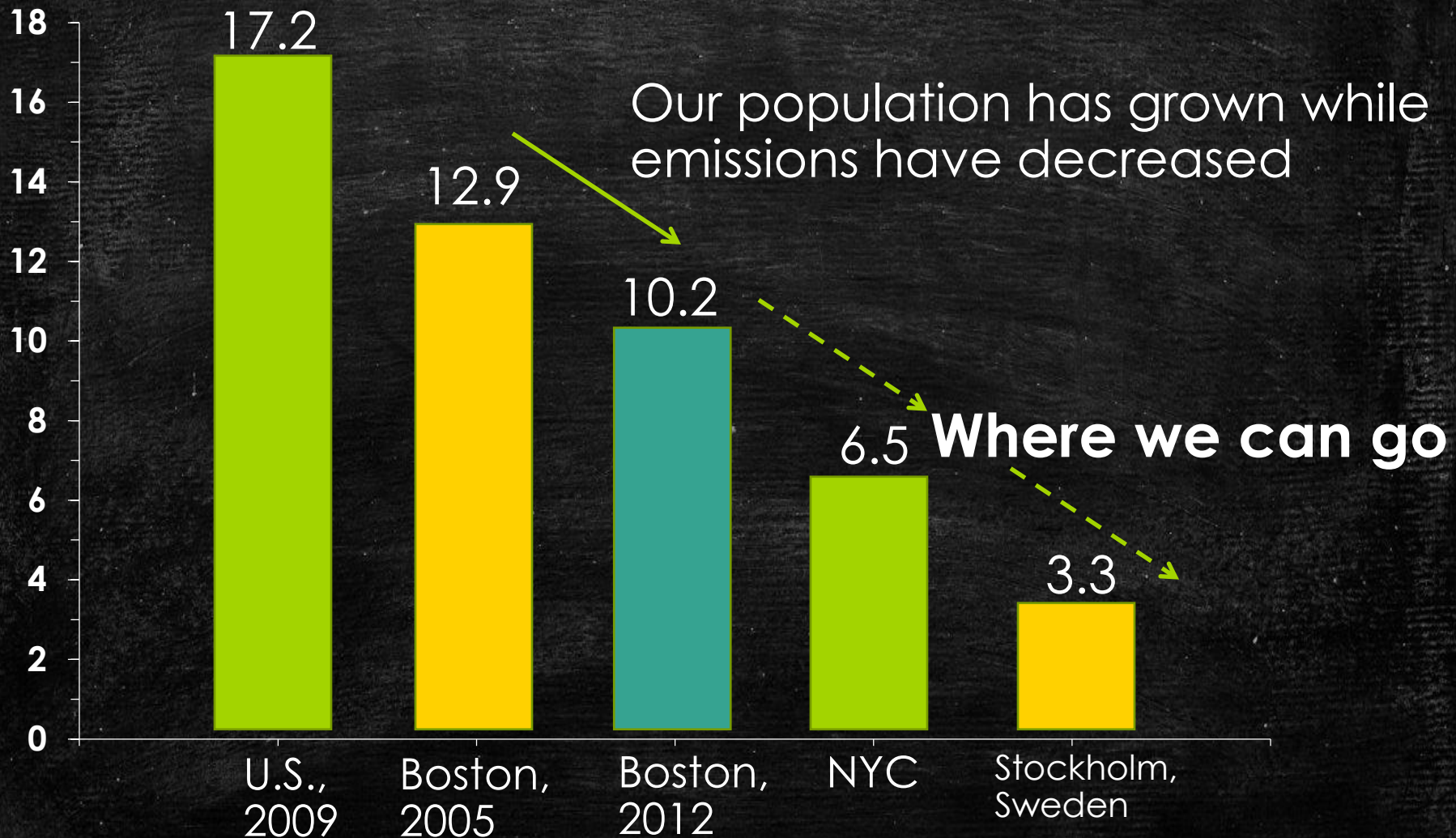
# We are making progress.



*Does not include life-cycle emissions from the things we consume which would increase our footprint by 10 to 20%.*



# Emissions per resident are declining.





# The City is taking action to reduce GHG emissions.



Complete Streets guidelines & expanded bike infrastructure



Renew Boston Solarize



BOSTON  
BIKES

Energy positive (E+) homes on vacant lots



Greenovate Boston

Building Energy Reporting & Disclosure Ordinance



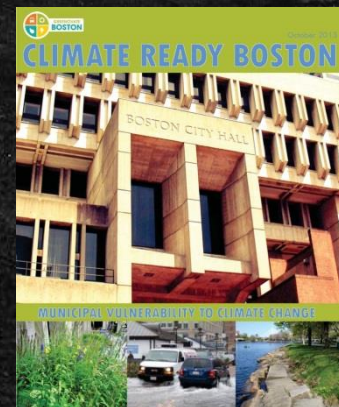
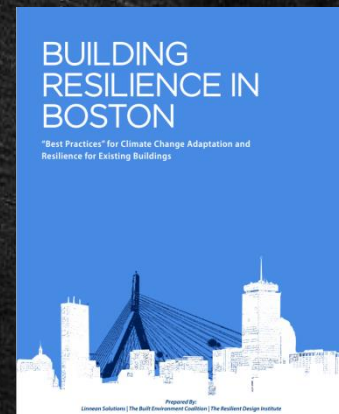
Expanded Renew Boston to reach more residents & small businesses



# Boston is also preparing.

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- Green infrastructure
  - Complete Streets
  - Parks Open Space Plan Update
  - 35% tree canopy coverage by 2020
- *Climate Ready Boston: Municipal Vulnerability to Climate Change*
- *Building Resilience in Boston*
- Climate Change Preparedness and Resilience Guidelines for large development project review





# Community and individual action is making it happen.

## Ditching the car

- Twice as many bike commuters since 2000
- 50,000 less vehicles registered in Boston than we did 5 years ago.



## Going solar

- Bostonians have Installed over 11 MW of solar energy.

## Weatherizing

- Over 5,000 residential and 700 small business have weatherized through Renew Boston

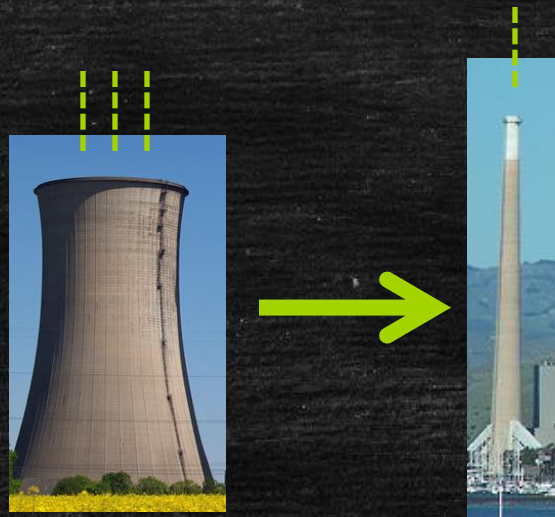


**But...**



# Future greenhouse gas reductions will be more challenging.

**Over 50% of our decrease in GHGs in the past five years came from something Boston doesn't control** – a switch from dirtier coal and oil to cleaner natural gas power plants



Coal replaced by Natural Gas

**We can't rely on this trend to continue.** Almost all coal and oil plants have switched over to natural gas in the past decade.



# We need to be better prepared.





# We need community and individual action to reach our goals.



All climate action comes down to individual choices and neighborhood actions.





# A sustainable city is a better city.

Parks that mitigate flooding



Bishan Park, Singapore

Local food production



Higher Ground Farm Rendering



Equitable Transit

Local, reliable & affordable energy



Healthy & affordable green communities



More trees to keep Boston cool



What can I do?

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# We need your help.

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Participate in  
CAP update

Take climate  
action



Spread the  
word



# The Climate Action Plan is important

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More or less parking in Boston?

Where should new bike lanes go?

Where should we plant trees?

Should residents have to pay for their trash?

What should we do with food waste?

Should Boston be more dense?

How can everyone in Boston go solar?



# Your input is important.

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- City needs to hear from you.
- The plan will determine the City's sustainability priorities.
- We must implement the plan together, so everyone should help shape it.





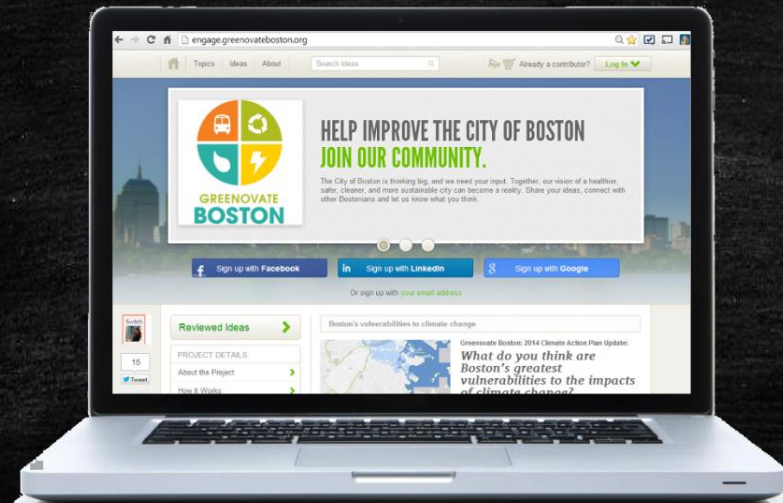
# There are many ways to provide input.



Log on to [Engage.GreenovateBoston.org](http://Engage.GreenovateBoston.org) and join the conversation.

Attend (or host!) a Greenovate Boston Meet-up.

Check out the Summit in April.





# Take individual actions now.

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Go to  
GreenovateBoston.org  
to learn about actions  
you can take.

Want to get credit? Text  
a **yellow** word below to

**617-945-8867**

to join the Carbon  
Challenge.



**TRY BIKING.** Don't have a bike yet? Look into a used or new bike, or Hubway membership for one quick trip and some outdoor fun.



**TURN IT DOWN.** Set your thermostat 2 degrees lower this winter. It's one of the best actions for fighting climate change!



**CONVINCE A FRIEND.** Convince a friend, family member, or co-worker to do any of these actions by texting the above number!

**CAN YOUR  
NEIGHBORHOOD GET 200  
ACTIONS?**





# Take action in your community.

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Use this slide to highlight organizations and sustainability activity going on in your community that people can participate in.



# There is power in numbers.





# Key takeaways

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Climate change has serious implications for Boston.

We must work together to both reduce our emissions and prepare for the impacts of climate change.

We need your input and action to reach our climate goals!



# Questions and Discussion

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[Engage.GreenovateBoston.org](http://Engage.GreenovateBoston.org)