

October 24, 2019 | Croton Public Library | croton100.org

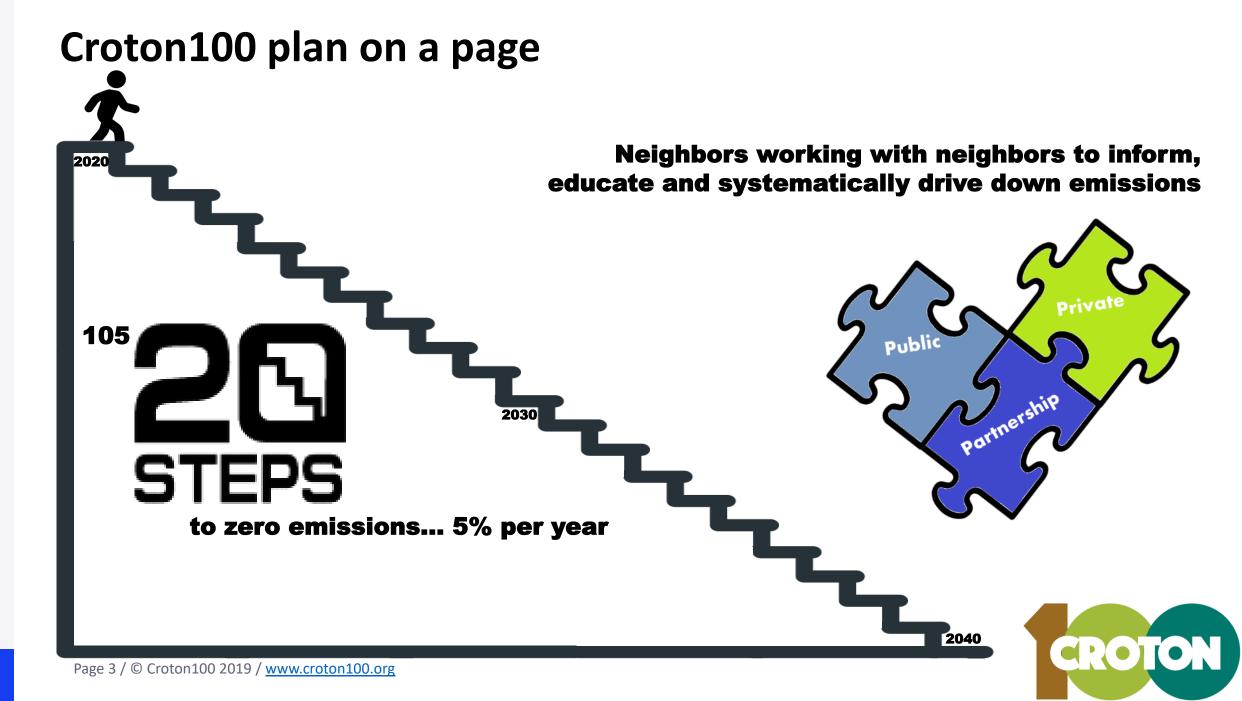


"Limiting global warming to 1.5°C would require rapid, far-reaching and unprecedented changes in all aspects of society."

- IPCC Summary for Policymakers, October 8, 2018

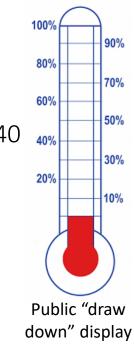
"The climate and the biosphere don't care about our politics and our empty words for a single second."

- Greta Thunberg, Climate Activist



Overall goal

- Draw down net greenhouse gas emissions to <u>ZERO</u> in the twenty-year period from 2020 to 2040
 - Note that Croton is more wasteful than the national average of emissions per household
 - Every day of inaction means another 700+ tons of Croton emissions in the atmosphere
- In keeping with the UN's IPCC report
- Scope
 - Zip code 10520 (12,810 population, 5,540 housing units)
 - Economy-wide, not just electricity
 - Economy-wide, not just municipal operations
- We will use 2019 as the baseline and reduce by 5% of the baseline every year for 20 years
- We will mimic the private/public partnership idea from Bedford and create a not-for-profit called Croton100 (web site <u>Croton100.org</u>)
- We will encourage sharing of costs and best practices with other towns and municipalities
- We want to be the first community to announce an economy-wide zero emission goal by 2040, to be a shining example, to be able to look the young people in the village in the eye and say yes, we did something about that



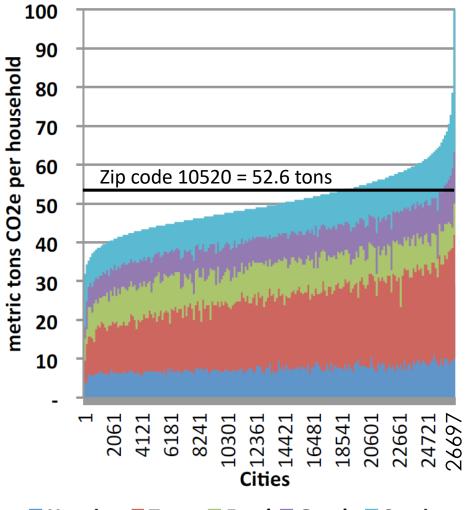
Student Presentations

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Hand over to Chandu

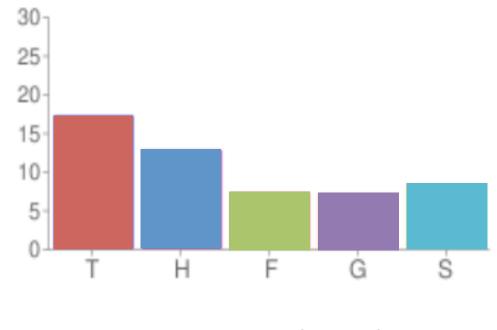
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Emissions goals



52.6

metric tons CO₂ equivalent



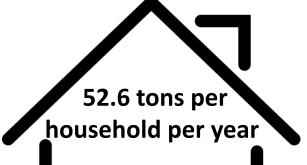
Trans Housing Food Goods Services

https://coolclimate.berkeley.edu/maps

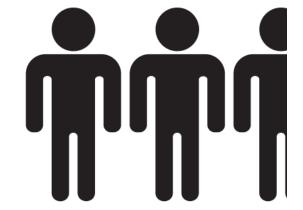
Housing Trans Food Goods Services

<u>Christopher M. Jones and Daniel M. Kammen, Spatial Distribution of U.S. Household</u> <u>Carbon Footprints Reveals Suburbanization Undermines Greenhouse Gas Benefits of</u> <u>Urban Population Density</u>. *Environ. Sci. Technol.*, 2013, dx.doi.org/10.1021/es4034364 Page 7 / © Croton100 2019 / <u>www.croton100.org</u>

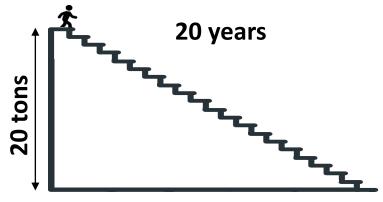
Croton emissions



2.6 people per household



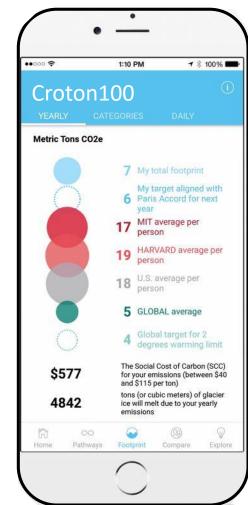
20 tons per person per year



1 ton of reduction per person per year

Easy-to-remember goals

- Croton has per-capita emissions of 20 metric tons of CO₂e (give or take a few percent)
 - Reduction goal = 1 metric ton per person per year
 - = 1,000 kg per person per year
 - = 1,000 <u>points</u> per year
- Some people will drag their feet on emissions reductions, so we have to get the rest to over-achieve in the early years
- Point system will be used for various purposes
 - Track and measure goals (voluntary/honor system)
 - Recognize outstanding achievements
 - Gamification
- Specialized point systems for renters, landlords, businesses, public spaces
- Points will be tracked by means of a smartphone application
 - The application will allow us to keep residents informed, engaged and educated



The five Es of emission reduction



Efficiency



Electrification

Insulation, smart thermostats, carpooling, LED bulbs, biking, no idling, public transport, ...

Electric vehicles, heat pumps, ...



E lectric generation

Solar panels, community aggregation, community choice, ...

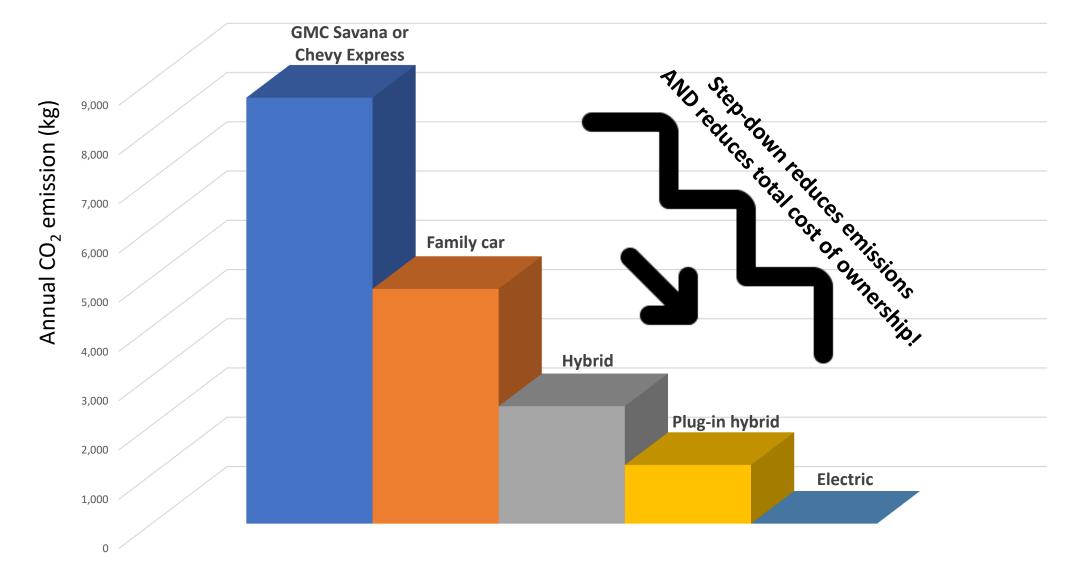
Eating

Low carbon diet, land use & agricultural impacts...

Build knowledge + engage with neighbors, friends, relatives, parishioners, politicians, regulators, ...

Education

Example of emission reduction: the car you drive

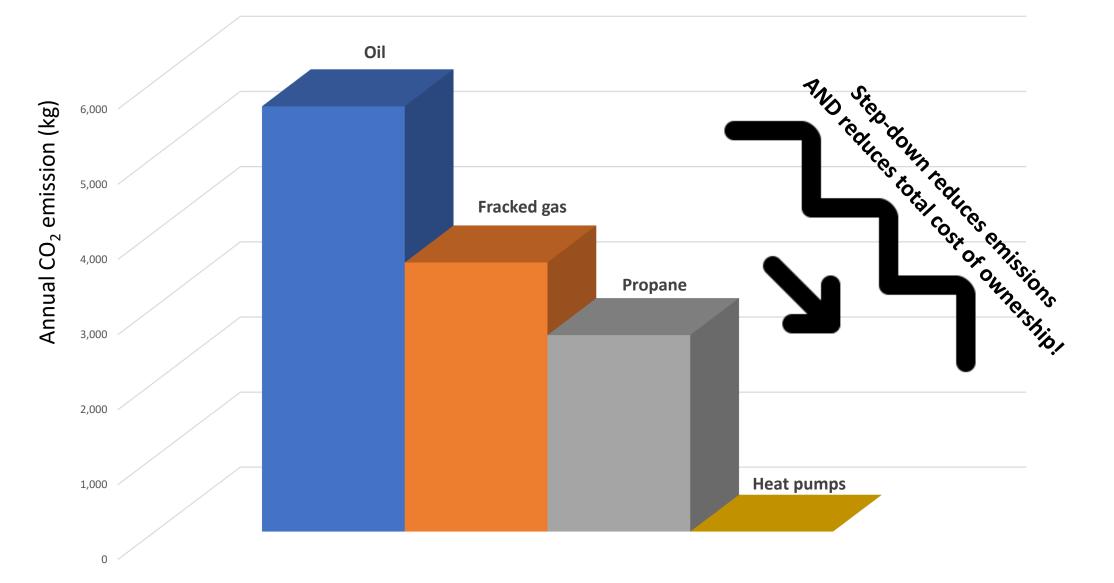




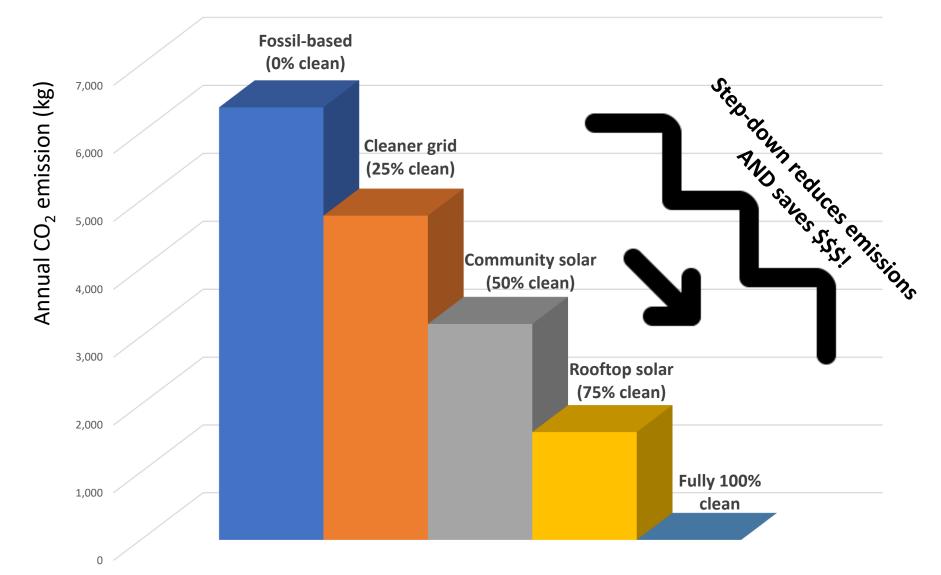
Example of emission reduction: how you heat your home

<u>....</u>

CO2

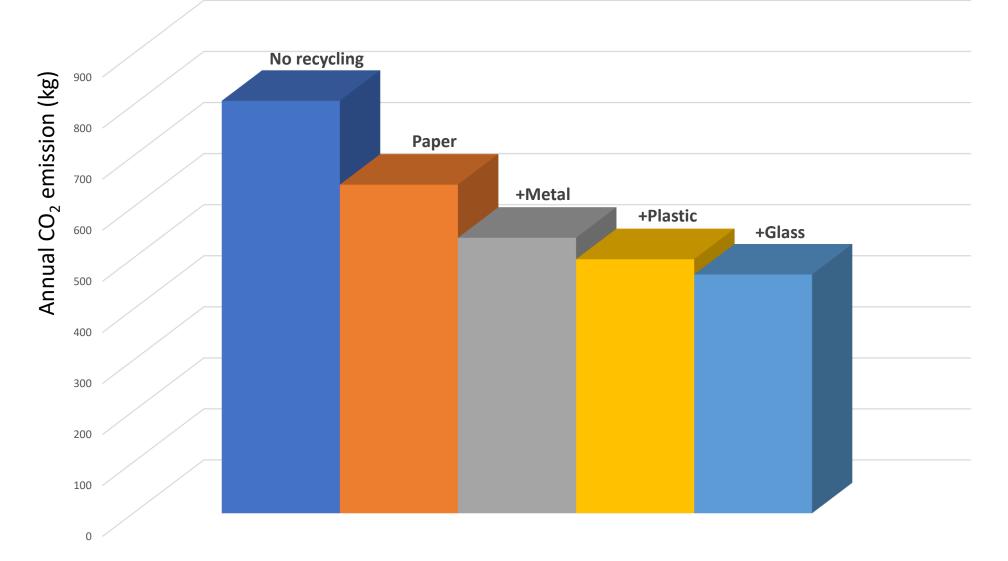


Example of emission reduction: electricity source





Example of emission reduction: waste and recycling





Hand over to Lisa

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Funding of our Croton100 not-for-profit





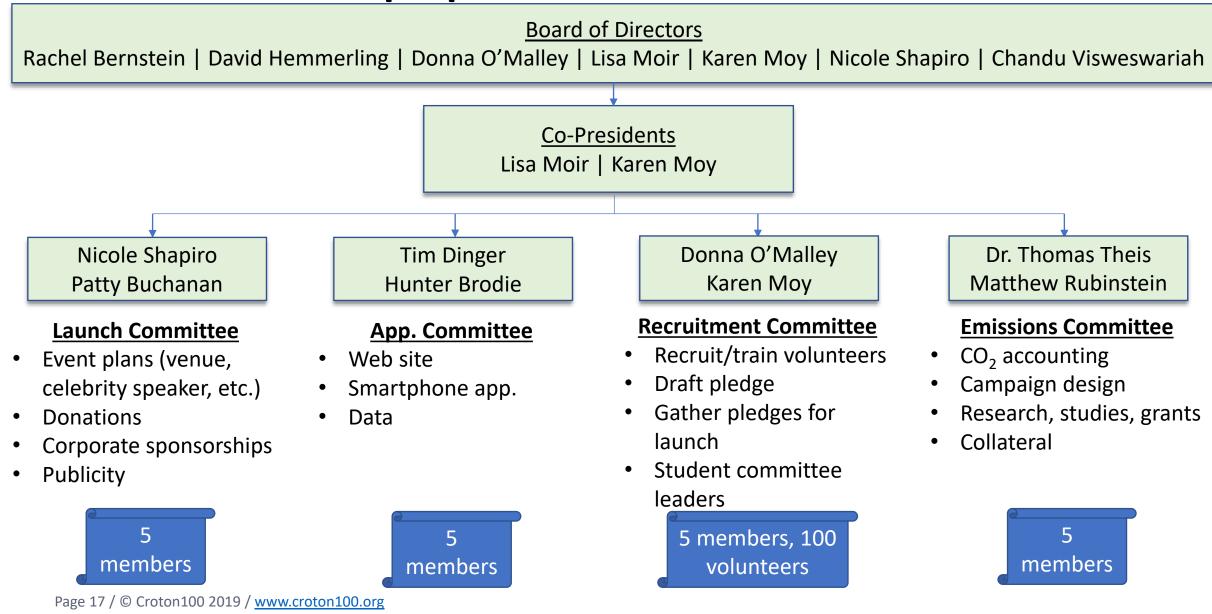


Private donations

Corporate sponsorships

Grant proposals

Croton100 launch preparations



Conclusions and call for help

Comprehensive, aspirational, draw-down plan Clearly measured metrics and goals Deliberate and systematic approach "Neighbors influencing neighbors" We will only succeed if we can get every Crotonite fired up!!! Your presence today is a strong sign of commitment Please sign up to be committee members and volunteers Please lead by example! Please join one of the break-outs to help us plan for a big launch event

in early 2020

Croton100 launch preparations

