

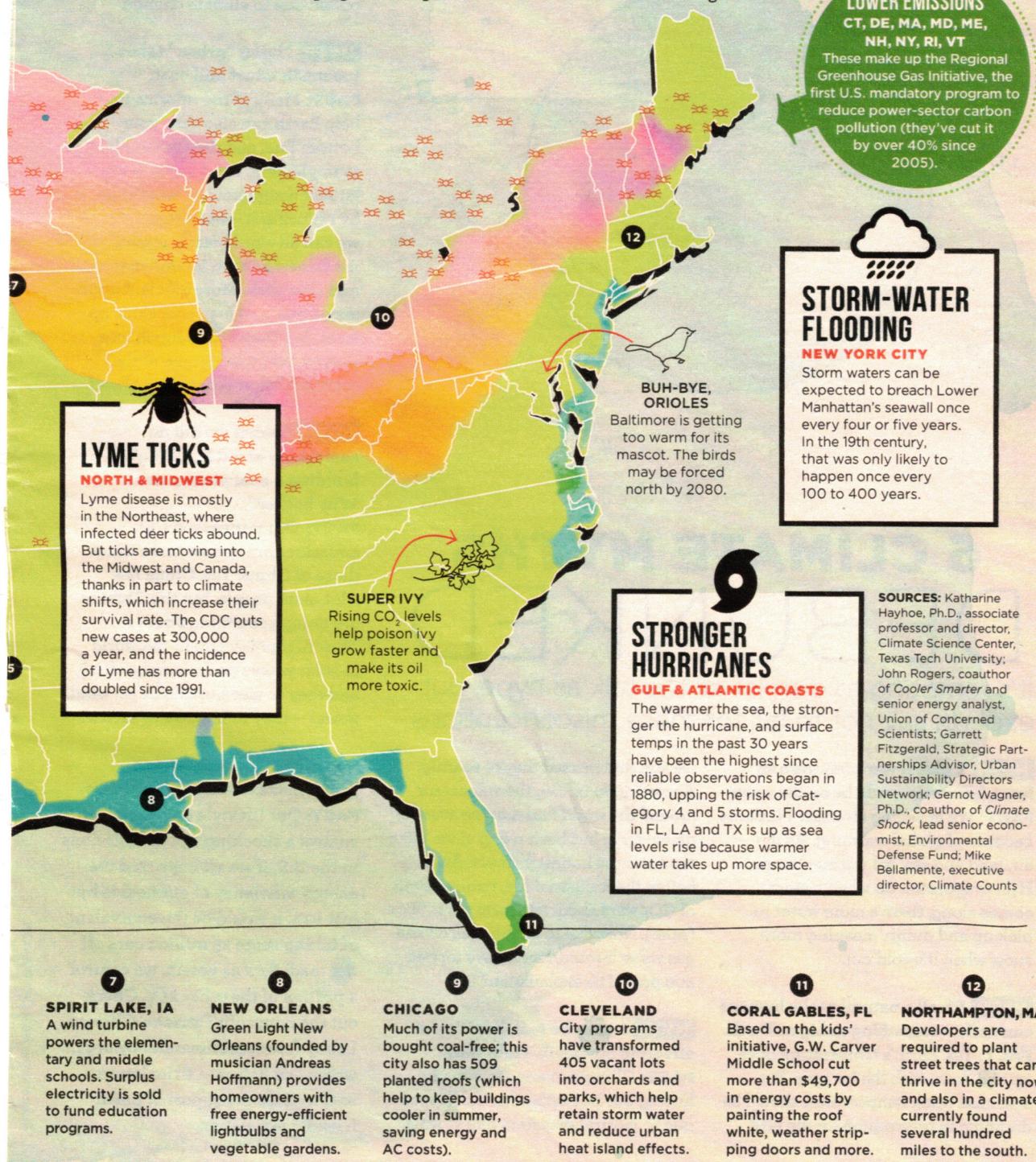
HOW CLIMATE CHANGE AFFECTS YOU



12 CITIES GOING GREEN

- 1 PORTLAND, OR**
The city has the highest bicycle commuting rate of any large city, thanks in part to 319 miles of bike paths.
- 2 SAN DIEGO**
Its Miramar landfill keeps more than 700,000 tons of CO₂ equivalent (CO₂e) emissions out of the air each year by capturing methane gas.
- 3 PHOENIX**
About 149,000 utility customers use a pay-as-you-go program that shows, in real time, how much they use, empowering them to shrink their usage 12% on average.
- 4 BOULDER, CO**
Many city residents use the Eco Pass system to ride mass transit for free; they drive 47% fewer vehicle miles, cutting emissions in half.
- 5 DALLAS**
New buildings over 10,000 sq. ft. need LEED (Leadership in Energy & Environmental Design) certification. (LEED is an industry green-building standard.)
- 6 GREENSBURG, KS**
In 2007, a tornado leveled 95% of the city. It rebuilt using low-carbon choices (green space, eco-buildings) and is the first city to use all-LED streetlights.

SOME OF THE DRAMATIC CHANGES we hear about seem so far away (case in point: melting polar ice caps), but some surprising effects of climate change are closer to home. To find out what's really going on across our country, we consulted scientists and local officials. Here's a snapshot from coast to coast—plus, places that are doing cool things to help Mother Earth and her inhabitants. Then turn the page for a quick lesson in Climate Change 101.





6 CLIMATE MYTHS DEBUNKED

It's tempting to dismiss all the talk as hype, but experts say not to fall for these misconceptions

MYTH If global warming were an issue, blizzards would be on the wane.

FACT: We're seeing stronger blizzards because of global warming. As the air, land and sea get warmer, more H₂O evaporates. So when a storm comes along, there's more water to pick up and dump, meaning more snow when it's cold out.

MYTH It's all a natural cycle; humans can't affect something as big as Earth.

FACT: Yes, Earth's temperature goes up and down with the ice ages. But scientists think temperatures should be dropping in preparation for the next

ice age, and instead they're soaring. According to NASA, thermometers around the world find that the average global temp has been rising since 1880; 2014 was the hottest year yet. And before the Industrial Era, natural levels of CO₂ were about 275 parts per million (ppm). Now, due to all the coal, oil and gas we've burned, levels have topped 400 ppm. The explanation? Us.

MYTH It may be real, but it's not affecting my family right now.

FACT: Climate change is already hitting our pocketbooks: U.S. losses due to natural disasters like storms,

floods, droughts and wildfires rose between 1980 and 2014. Your family may also be affected by worsening allergies from plants that bloom earlier and produce more pollen due to climate change.

MYTH Living "green" takes too much effort and cost.

FACT: Many of the reforms that help Earth can also ease your bottom line, and they're simple to implement. Food waste is the largest component of landfill, so by reducing it—eat leftovers!—we can all significantly lessen methane-emitting landfill material and save cash. More efficient appliances and cars may cost extra up front, but they use so much less energy over the lifetime of the product that you come out ahead.

MYTH Even if we did do something about it, China's building a coal plant a week. Why bother?

FACT: Our per-person CO₂ emissions are almost three times those of China. Yes, China has a lot more people, but the Chinese are doing something about it: They're number two in the world in solar power (we're number five), and they're also beating us on wind power—they're first, we're second.

MYTH I'm just one person. I can't make much of a difference.

FACT: Our lifestyle decisions control a shocking 75% of emissions in the U.S. If we all improved the energy efficiency of our homes by just 10%, it would be the equivalent of taking some 25 million cars off the road! And as voters, we control a portion of the other 25%. Check out the nonprofit Citizens' Climate Lobby (citizensclimatelobby.org), which can help you write letters to Congress in support of Earth-friendly legislation.

CLIMATE SCIENCE 101

We asked Katharine Hayhoe, director of the Climate Science Center at Texas Tech University, for a quick lesson:

WHY IS A WARMING PLANET A BAD THING?

It alters weather patterns. We see more extreme and/or frequent events—droughts, floods, hurricanes, blizzards—affecting food production, water supply, the economy and our health.

WHAT CAUSES WARMING?

Greenhouse gases, which act like a blanket, trapping Earth's heat and keeping us warmer. The most harmful gases are CO₂ and methane; both exist naturally, so we already have a perfect blanket keeping us at the right temp. But man-made emissions are tipping the scale, trapping too much heat.

HOW DO WE CREATE GREENHOUSE GASES?

Most U.S. electricity is powered by fossil fuels (coal, natural gas); when they're burned at power plants, their CO₂ gets dumped into the air. Ditto when we burn gasoline (oil) for cars. Methane's released by the production of fossil fuels, livestock (yep, cow flatulence) and landfills' decaying waste.

HOW DO WE CUT EMISSIONS?

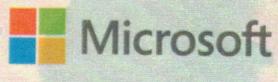
Reduce the use of fossil fuels: Drive less, opt for fuel-efficient cars and use less electricity (via energy-smart appliances and LED/CFL lightbulbs). Recycle, eat less red meat and look for companies that tap sun and wind energy. Measure your own carbon footprint at earthday.org/footprint-calculator.



GREEN THUMBS-UP



Kudos to these companies for recognizing that being environmentally responsible is the right thing to do—and good for business. They've earned praise from the Institute and our environmental consultants, Eric Wilmanns and Mike Brown of Brown and Wilmanns Environmental.

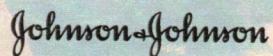
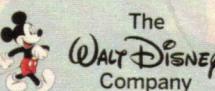


H₂O SAVERS

Water is one of our most valuable natural resources, and the apparel and footwear industries use lots of it: According to Nike, it takes 700 gallons of the wet stuff to grow enough cotton to make just one T-shirt. To cut consumption, the sportswear brand tracks H₂O runoff from contracted manufacturing plants and uses a water-free dyeing facility.

FRIENDS OF FARMERS

Most companies aren't as environmentally clued in as the Vermont-based ice cream maker, which has started using byproducts created during production for some of its power needs. It also offers a Caring Dairy program that teaches farmers how to do their work more sustainably.



TRASH BUSTERS

By the end of 2014, Disney was diverting from landfills 48% of operational solid waste generated at its owned facilities and theme parks around the world—through recycling, composting and having waste converted into energy. By 2020, the entertainment giant aims to raise that figure to 60%.

FUEL-EFFICIENCY STARS

To build greener cars, the Detroit automaker is developing cutting-edge technologies, more aerodynamic designs and engines that run on a range of energies—from electricity to natural gas to biofuels.

HOLISTIC HEROES

This company is reducing CO₂ emissions from its factories and delivery fleet, cutting water consumption, diverting trash from landfills and developing more sustainable packaging techniques—all to address its global environmental impact.