THE CLIMATE FOR CHANGE IS NOW.

TO PITTSBURGH

NARRATED BY EMMY® AND GOLDEN GLOBE® WINNER **RACHEL BROSNAHAN**

NATIONAL GEOGRAPHIC DOCUMENTARY FILMS PRESENTS A RADICALMEDIA PRODUCTION IN PARTNERSHIP WITH BLOOMBERG PHILANTHROPIES Producers of the production of the producting of the producting of the production of the pro

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DOCUMENTARY FILMS

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INTRODUCTION

DISCUSSION GUIDE OVERVIEW



This discussion guide on the *Paris to Pittsburgh* film is part of Bloomberg Philanthropies' efforts to inform and rally citizens, businesses, and civic leaders to vote for and implement ambitious green practices. We hope it serves as a tool for you to start conversations about climate change in your community. Whether your screening group is small or large, grassroots events provide an opportunity to kick-start local action. Faith and her father, Dan Lutat, climb to the top of the wind turbine at Iowa Lakes Community College in Estherville, Iowa.

WHY "PARIS TO PITTSBURGH"?

"Paris to Pittsburgh shines a light on the many forgotten communities and people who have been affected by climate change in our country, as well as solutions for how we can fight back and reduce our carbon footprint. I'm proud to be part of this poignant and powerful documentary, and admire the pro-active approach Bloomberg Philanthropies has taken with this project and this issue; we need meaningful change."

Rachel Brosnahan, Emmy® and Golden Globe® Award-winning actress, activist, and narrator of Paris to Pittsburgh

"Americans are determined to uphold our end of the Paris Climate Agreement, with or without Washington's help. *Paris to Pittsburgh* shows how disconnected Washington is from the American people on climate change, and how communities across the country are taking action to confront the severe health and economic threats it poses."

Mike Bloomberg, founder of Bloomberg Philanthropies, UN Special Envoy for Climate Action, and former Mayor of New York City In July 2017, President Trump announced his decision to pull the U.S. out of the Paris Agreement, saying he was "elected to represent the citizens of Pittsburgh, not Paris." Pittsburgh Mayor William Peduto immediately responded: "I can assure you that we will follow the guidelines of the Paris Agreement for our people, our economy & future." Pittsburgh is one of the cities leading the fight on climate change, and Mayor Peduto's response inspired the title of our film.

The president's announcement came during the release of *From the Ashes*, the first feature-length documentary film created by Bloomberg Philanthropies and RadicalMedia, which focused on the legacy and future of the U.S. coal industry. Audiences at screenings of *From the Ashes* around the country expressed frustration at the lack of federal leadership, but continued to push for action in their own communities. Their enthusiasm was so contagious and their momentum so strong that we felt compelled to tell the story of climate leadership taking place in communities nationwide.

Produced by RadicalMedia in partnership with Bloomberg Philanthropies, *Paris to Pittsburgh* brings to life the incredible actions of individuals, communities, businesses and local governments to combat the threat of climate change in their own backyards. Set against the national debate over the energy future of the U.S. — and the Trump administration's explosive decision to exit the Paris Agreement — the film captures what's at stake for Americans around the country, and the inspiring ways they're responding.

The film is narrated by Rachel Brosnahan and directed by Sidney Beaumont and Michael Bonfiglio. It premiered on National Geographic on December 12th, 2018.

FILM THEMES

PARIS AGREEMENT: CONTEXT AND SIGNIFICANCE

"If American states, cities and businesses cut emissions by 2% a year, they would achieve more than a 75% reduction by 2050."

Report from the Natural Resources Defense Council (NRDC)

At the 2015 United Nations Climate Change Conference, the countries of the world reached an unprecedented consensus to reduce greenhouse gas emissions and prevent the worst effects of climate change. The Paris Agreement, the international policy framework they agreed to, aims to limit global temperature rise to well below two degrees Celsius, which scientists agree represents a dangerous threshold for our planet.

Nearly all the parties to the agreement set national goals or targets for curbing their emissions by 2030 or sooner. The U.S. pledged to reduce its emissions by 26-28 percent below 2005 levels by 2025. More information on the agreement can be found <u>here</u>.



ON DECEMBER 12, 2015, 195 countries agreed to the Paris Agreement.

ON JUNE 1, 2017, the Trump administration announced its intent to pull out of the agreement.

JUST DAYS LATER, an extraordinary coalition of U.S. interests mobilized to declare "We Are Still In."

 More than 1,200 U.S. states, cities, tribal nations, companies, and universities pledged their support for the Paris Agreement and committed to climate action in the absence of federal leadership.

AND JUST DAYS AFTER THAT, Mike Bloomberg and California Governor Jerry Brown launched "America's Pledge."

 The initiative aggregates and quantifies the actions of more than 3,000 states, cities, tribal nations, businesses, and other U.S. organizations to drive down emissions and reach the goals of the Paris Agreement.

ECONOMIC IMPACTS AND POTENTIAL

The conversation around climate change often centers on direct threats it poses for humanity, like sea level rise, but its indirect threats have the potential to be even more far-reaching. National Geographic estimates that climate change worsens extreme weather and creates harms to public health that together cost the U.S. economy at least \$240 billion a year from 2007–2017. These costs are expected to reach at least \$360 billion annually over the next decade.

Taking action against climate change will do more than just decrease the economic costs — it will also yield new jobs and greater opportunities for innovation and economic growth. Already, powerful economic forces are pushing America and the world toward a sustainable future. Despite the Trump administration's pro-coal policies, cheaper, cleaner energy has helped a partnership between Bloomberg Philanthropies and the Sierra Club to retire more than half of all coal-fired power plants since 2011. Since June 1, 2017, the U.S. has added enough renewable energy to power more than three million homes. And as a result, in 2017, U.S. energy-related carbon dioxide emissions fell to the lowest levels in 25 years.

Cities, states, and companies across the country are recognizing the benefits of a greener future. The collective economic activity of America's Pledge members is equivalent to that of the third-largest country in the world, and they represent over half of the U.S. economy, over half of the U.S. population, and more than 35% of U.S. emissions. States that account for 35% of the U.S. economy are expected to have a price on greenhouse gas pollution by the end of 2019. And more than 70 U.S. companies have announced emissions targets in line with the Paris Agreement.





Through America's Pledge, local actions taken across the country are measured and reported to the UN to help reach the U.S. goals in the Paris Agreement.

Credit: Fulfilling America's Pledge 2018 Report

CITIES' ROLE IN CLIMATE ACTION

In the absence of federal leadership, cities — home to 55% of the world's population today and an estimated 67% by 2050 — continue to lead efforts to combat climate change by reducing emissions and developing new, more sustainable technologies.

Cities have the unique power to take action on a local level to develop and implement targeted solutions.

TRANSPORTATION—Since 1990, transportation has accounted for 26% of all U.S. greenhouse gas emissions, the second-largest share of any sector of the economy (Environmental Protection Agency).

City Response: In cities like Los Angeles, where commuters rely heavily on cars, transportation accounts for a particularly high percentage of emissions. In response, L.A. is developing the Zero Emissions 2028 Roadmap, which will work across sectors to ensure that electric vehicles make up a majority of both public and private transportation (Fast Company).

FOOD SUPPLY—The food system produces much of the world's CO2 and methane emissions. We can significantly reduce those emissions by localizing food and using zero-emission transportation for transporting it.

City Response: The city of Orlando is currently home to Fleet Farming, a food production initiative that converts lawn space to grow local produce. Homeowners pay a startup fee and then get to keep as much food as they want, and Fleet Farming takes the excess, reducing emissions from transportation and food processing. "L.A. is known as the car capital of the world, and really the epitome when you think of a city with traffic. With the Olympics arriving in 2028, in 10 years, we really believe that L.A. and the region needs to lead by example by moving further, faster."

Matt Petersen, President and CEO of the Los Angeles Cleantech Incubator (LACI)

FUEL AND POWER IN BUILDINGS—In large cities, the building sector can account for more than 70% of emissions. Even in smaller cities, a significant portion of emissions come from building energy use (Center for Climate and Energy Solutions). In response, cities across the country are retrofitting old buildings, establishing clean energy practices, improving building codes, and more.

City Response: In 2016, Seattle enacted legislation that included the Buildings Tune-Up Ordinance, which helps building owners try low- and no-cost fixes to improve energy efficiency and reduce energy use by as much as 10–15%. The policy is expected to reduce citywide commercial energy consumption by 5% (Center for Climate and Energy Solutions).

WASTE—Cities across the country add hundreds of millions of tons of waste to landfills every year. These landfills release large amounts of methane gas, which is 25 times more damaging to the environment than CO2 over a 100-year period (Time Magazine).

City Response: New York City is the largest city in the U.S., and demands a similarly large-scale waste management plan. Its programs to recycle, reuse, repurpose, and compost waste require active resident participation. That's why the city's Zero Waste Campaign works to develop educational programs to encourage new consumer disposal habits. The initiative also collects and recycles more than 10 million pounds of highly toxic electronic waste, and ultimately seeks to send zero waste to landfills, mitigating the greenhouse gases they release. The city is the first in the world to commit to meeting at least 90% of the Zero Waste goal, by uniquely combining programs for waste reduction, reuse, recycling, and wastewater treatment.

GREEN ENERGY AND TECHNOLOGY

As Paris to Pittsburgh makes clear, individuals and communities that have adopted clean, renewable energy are helping to reduce greenhouse gas emissions and creating thousands of new jobs in forward-looking industries.

There are roughly 768,000 renewable energy jobs in the U.S., more than 15 times the number of coal mining jobs. In 2016, the solar industry alone employed more than 260,000 people, including jobs in solar installation, manufacturing, and sales, a 25% increase over 2015. The renewable energy job sector is predicted to continue its explosive growth into the future (Union of Concerned Scientists). New technologies and areas for continued expansion include the following sectors. **WIND ENERGY**—Wind energy (or wind power) refers to the process of generating electricity using the wind. Modern wind turbines produce electricity by capturing and redirecting the kinetic energy of air flowing across the angled blades of the turbine (American Wind Energy Association).

SOLAR ENERGY—Solar power is energy from the sun that is converted into thermal or electrical energy. Solar energy is the cleanest and most abundant renewable energy source available, and the U.S. has some of the richest solar resources in the world (Solar Energy Industries Association).



PUBLIC HEALTH IMPLICATIONS OF CLIMATE CHANGE

The public health implications of climate change are a huge driving force for action. Governments, businesses, and individual citizens are working together to address the current and looming public health issues, but more needs to be done. As outlined in the film, climate change is exacerbating existing risks and introducing new challenges:

HEAT WAVES

- Dangerously hot weather occurs more frequently than it did 60 years ago — and scientists expect both the frequency and severity of heat waves to rise.
- Heat waves present serious health risks, and can lead to heat exhaustion and heat stroke, and can aggravate existing medical conditions. Research has shown that intense heat diminishes workers' capacity, increases work-place accidents, and impacts productivity, and thus our economy (Milken Institute School of Public Health).

WILDFIRES

- Wildfire season is on average more than two months longer than it was just 30 years ago.
- Higher spring and summer temperatures and earlier spring snow-melt result in forests that are hotter and drier for longer periods of time, priming conditions for wildfires to ignite and spread.

FOOD SCARCITY

 Reports predict that U.S. corn yields will decrease by 30-46% (Proceedings of the National Academy of Sciences U.S.A.).



- Intense heat waves in the Northwest have led to poor yields of hops, an essential ingredient in beer.
- While these are items that people can live without, there are more dire circumstances across the planet where food and water scarcity will threaten hundreds of thousands of lives in the next few decades (Washington Post).

LOSS OF FRESH WATER

- Both groundwater and surface water are at risk from saltwater intrusion due to rising sea levels, changing water demands, and drought (Environmental Protection Agency).
- Saltwater intrusion would diminish the availability of drinking water and limit resources for watering crops

 creating even greater food scarcity issues.

DISCUSSION QUESTIONS

- Have you seen any strategies implemented by your city or region to help fight climate change? Strategies that improve access to clean public transportation? Fight waste? Improve energy efficiency or use clean, renewable energy?
- 2 What were the impacts of climate change that surprised you? Have you noticed any climate impacts in your community?
- 3 What role do you think that individuals should play in combatting climate change? Cities? States? Countries? Businesses?
- 4 Fleet Farming is a volunteer-run, communitysupported agriculture program that engages people in growing food and localizing Orlando's food system. How else can communities be brought into climate solutions?
- 5 lowa has invested \$13 billion in the wind industry, which helped the state attract tech giants like Google and Facebook. Were you surprised to learn that lowa is the leading producer of renewable energy in the country? If yes, why?
- 6 How did you react to the depictions of the catastrophic lowa flooding in recent years? Were you aware of these issues occurring so far inland? What trends or patterns do you see in how the media portrays climate impacts?

- What did you learn from Casa Pueblo? How do you think the lesson of its sustainability could be adapted for communities in the U.S.?
- 8 More than 250,000 Puerto Ricans have arrived in Florida alone since Hurricane Maria, and experts anticipate that Orlando and other parts of Northern Florida will soon experience an influx of "climate refugees" from Miami due to climate change. Did learning about this migration impact your opinion on the issue of climate change and/or the refugee crisis?
- 9 Were you surprised by the depiction of climate change as a catalyst for international conflict? Can you think of any examples where extreme weather changes worsened or triggered unrest?
 - Los Angeles is combatting fossil fuels by helping to make solar power an accessible option for its residents. How have other cities strived for "solar equity?" What ideas do you have for this?
 - How were you inspired by Zero Hour and Youth for Climate Change? What other ways of activating younger generations can you think of?
- 12 What changes do you want to make in your daily life? What changes would you ask your local, state, or federal government representatives to make?

TAKE ACTION

One of the key themes of *Paris to Pittsburgh* is the power of local action. Across the country, people are coming together to fight climate change in their communities, and their efforts continue to make an enormous difference. Through national coalitions like We Are Still In and America's Pledge, environmental groups like the Natural Resources Defense Council (NRDC), or local community organizations, you can make a difference, too. Here are some resources to help.

- Demand action from your local, state, and federal representatives, <u>here</u>.
- Get involved in the policy-making process, here.
- Make small changes to help fight climate change, <u>here</u>.
- Talk to your friends and family about climate change, <u>here</u>.
- Adopt a greener lifestyle, <u>here</u>.
- Help stop polluters, <u>here</u>.
- Stay up to date on important climate news, through <u>sources</u> like National Geographic.
- Donate or volunteer with the local chapter of an environmental organization like NRDC.

Organizations are working at the local, national, and international level to combat climate change, and many of them offer a wide variety of resources to help you get involved. Here is more information about some of the organizations working hard for a greener, healthier planet — including a few that made *Paris to Pittsburgh* possible. **NATURAL RESOURCES DEFENSE COUNCIL**—Since its founding in 1970, <u>NRDC</u> has been working to solve humanity's most pressing environmental issues, including access to clean air, safe drinking water, and healthy communities. NRDC safeguards the earth — its people, plants, and animals, and the natural systems on which all life depends. With the support of more than three million members and online activists, NRDC is ready to face any challenge to ensure a better, safer future for all.

NRDC is fighting in the courts, working with communities to build climate resilience, and joining forces with local governments, businesses, labor groups, and cultural organizations to achieve climate action. Some of its climate priorities include:

- Developing and supporting renewable energy and energy efficiency policies
- Helping local governments set standards to reduce carbon pollution in the energy and transportation sectors
- Stopping fossil fuel development, such as offshore oil and gas drilling and tar sands pipelines
- Providing the winning cities of the Bloomberg Philanthropies American Cities Climate Challenge with the technical support they need to turn their carbon-reduction goals into reality
- Helping communities to adapt and prepare for a warming climate and all its impacts
- Raising awareness of the links between climate change and infectious diseases

AMERICA'S PLEDGE—<u>America's Pledge</u> brings together leaders and organizations from the public and private sectors to measure their progress on climate change and deliver on the country's ambitious climate goals through the Paris Agreement. The initiative quantifies the impact of specific strategies and policy transformations covering buildings, transportation, power generation, and more. As part of that effort, America's Pledge has identified 10 high-impact opportunities for near-term, non-federal emissions reductions, where intensified engagement by states, cities, or businesses can significantly contribute to overall U.S. progress over the coming years. Read more about its Opportunity Agenda here.

WE ARE STILL IN—<u>We Are Still In</u> is a bipartisan coalition of more than 3,500 CEOs, mayors, governors, college presidents, and other leaders committed to climate action. It is a bottom-up network, coordinated by The American Sustainable Business Council, B Team, Bloomberg Philanthropies, Center for American Progress, Ceres, CDP, Climate Mayors, Climate Nexus, C40, C2ES, Environmental Defense Fund, Environmental Entrepreneurs, Georgetown Climate Center, ICLEI, National League of Cities, Rocky Mountain Institute, Second Nature, Sierra Club, Sustainable Museums, The Climate Group, We Mean Business, World Resources Institute (WRI), and World Wildlife Fund (WWF).

BLOOMBERG PHILANTHROPIES—Bloomberg

<u>Philanthropies</u> works to ensure better, longer lives for the greatest number of people by focusing on five key areas: the arts, education, the environment, government innovation, and public health. Encompassing all of Mike Bloomberg's giving, Bloomberg Philanthropies includes his foundation, corporate, and personal philanthropy. Mike has committed the vast majority of the profits from Bloomberg L.P., the global financial technology company that he founded in 1981, to support the work of Bloomberg Philanthropies. Read more about its environmental work <u>here</u>. Lee Perry and her fellow Fleet Farmer ride bikes during their biweekly swarm ride to teach community members about farming front lawns in Orlando, Florida.





ADDITIONAL RESOURCES

A 101 ABOUT CLIMATE CHANGE

<u>A GUIDE TO THE IPCC CLIMATE</u> <u>Change Report</u>

A BASIC GUIDE TO ENERGY EFFICIENCY

A BASIC GUIDE TO FOSSIL FUELS

A BASIC GUIDE TO RENEWABLE ENERGY

A 101 ON ELECTRIC CARS

TIPS ON HOW TO MAKE YOUR HOME ENERGY EFFICIENT