Pennsylvania Regional Reference Packet

Harrisburg	2
Climate Impacts	2
Extreme Heat	2
Heavy Rainfall & Flooding	2
Pollution Impacts	3
Air Pollution	3
Water Pollution	3
Clean Energy	4
Clean Energy Saves Money	4
Harrisburg's Growing Clean Energy Economy	4
Philadelphia	5
Climate Impacts	5
Extreme Heat	5
Wildfires	7
Extreme Rainfall & Flooding	7
Pollution Impacts	9
Air Pollution	9
Water Pollution	9
Clean Energy	10
Clean Energy Saves Money	10
Philadelphia's Growing Clean Energy Economy	10
Pittsburgh	12
Climate Impacts	12
Extreme Heat	12
Wildfires	13
Extreme Rainfall & Flooding	13
Pollution Impacts	14
Air Pollution	14
Water Pollution	14
Clean Energy	16
Clean Energy Saves Money	16
Pittsburgh's Growing Clean Energy Economy	16

Harrisburg

Climate Impacts

Extreme Heat

- Harrisburg is experiencing warmer winters. The average winter temperature in Harrisburg has <u>risen</u> nearly three degrees since 1970.
 - In 2023, Harrisburg saw <u>13 more</u> warm winter days than usual.
 - In 2022, Harrisburg saw <u>ten more days</u> above 90 degrees compared to 1970.
- Due to climate change, Harrisburg will <u>experience</u> 15 days above 101 degrees Fahrenheit in 30 years, compared to just seven days in 2024.
- Harrisburg is experiencing <u>more risky heat days</u>. In 2022, Harrisburg saw 20 more days per year above the 90th temperature percentile compared to 1970.
- There are <u>19,694 out of 19,721</u> properties in Harrisburg that are at major risk of experiencing infrastructure issues, increased air conditioning usage and energy costs, and other impacts from extreme heat.
- Harrisburg's average temperature for summer 2021 was 78.1 degrees, which topped its previous record of 77.6 degrees set in 1966.
- July 2020 was the <u>hottest</u> July on record in Harrisburg, with a recorded monthly average temperature of 81.8 degrees, breaking the record set in 1999.

Heavy Rainfall & Flooding

- There are <u>7,123 properties</u> 44% of properties in Harrisburg that are at some risk of being affected by flooding over the next 30 years.
 - In Harrisburg, <u>6,014 out of 14,717</u> homes have an extreme risk of being affected by flooding over the next 30 years.
 - In Harrisburg, <u>140 out of 225</u> miles of road have an extreme risk of being flooded over the next 30 years.
 - In Harrisburg, <u>70 out of 107</u> social facilities have an extreme risk of being flooded over the next 30 years.
 - In Harrisburg, <u>14 out of 62</u> infrastructure facilities have an extreme risk of being flooded over the next 30 years.

- In Harrisburg, <u>1.589 out of 2.061</u> commercial facilities have an extreme risk of being flooded over the next 30 years.
- Heavy rainstorms <u>threaten</u> unmaintained trees in Harrisburg. The loss of tree coverage is exposing communities to additional pollution and heat.

Pollution Impacts

Air Pollution

- Dauphin County <u>received</u> a D grade for 24-hour particle pollution in the American Lung Association's 2023 State of the Air Report.
- In 2023, the Harrisburg-York-Lebanon metropolitan area was the 47th <u>most</u> <u>polluted</u> in the U.S. for 24-hour particle pollution and 37th <u>most polluted</u> for annual particle pollution.
- According to the Pennsylvania Environmental Justice Mapping and Screening Tool, Harrisburg is an <u>environmental justice area</u>. Parts of the city experience heightened levels of environmental exposures that affect air quality, including diesel particulate matter, fine particulate matter, toxic air emissions, and traffic density.

Water Pollution

- Pennsylvania ranks <u>ninth</u> in the U.S. in coal ash production, with 70 coal ash dump sites <u>leaking</u> pollution into groundwater across the state.
 - The Burner Island Power Plant is located south of Harrisburg and contains 15 groundwater monitoring wells, 11 of which are <u>polluted above federal</u> <u>advisory levels</u>. The site was found to have arsenic levels in the groundwater that were 23 times EPA's safe drinking water standards. Arsenic was <u>23 times</u> above the standard, Cobalt <u>14 times</u>, Lithium <u>five</u> <u>times</u>, Molybdenum <u>eight times</u>, and Sulfate <u>one time</u> higher than EPA's standards.
- In 2019, water stations at the Harrisburg International Airport contained PFAS levels of 168 parts per trillion, <u>2.4 times higher</u> than the acceptable amount.
- Between June and July 2021, the Lower Susquehanna Riverkeeper Association <u>found</u> that 52% of river water samples had levels of E. coli bacteria that made the water unsafe for swimming, kayaking, or other water contact recreation.
 - In the summer of 2022, there were <u>more than 200</u> sewer overflows from Harrisburg into the Susquehanna.

- In August 2019, the Susquehanna River around Pennsylvania's Harrisburg City Island was <u>found</u> to have E. coli bacteria levels ten times higher than the acceptable safe levels due to discharge from a local sanitary sewer system.
- Parts of Harrisburg <u>experience</u> heightened levels of environmental exposure affecting water quality, including pesticide runoff and toxic water emissions in the Susquehanna River.

Clean Energy

Clean Energy Saves Money

- Investment in clean energy and decreased spending on gasoline are <u>projected</u> to reduce average annual household energy spending by \$85 per year in 2030 and a cumulative \$9.5 billion through 2050 across all households in Pennsylvania.
- With the widespread implementation of zero-emission transportation and electricity resources, the Harrisburg-York-Lebanon metropolitan area could <u>experience \$8.8 billion</u> in cumulative public health benefits by 2050. By 2050, the Harrisburg-York-Lebanon metropolitan area could also <u>avoid 78,700 lost work days</u>.

Harrisburg's Growing Clean Energy Economy

- Funding from President Biden's clean energy plan is helping Harrisburg minimize the impacts of climate change, achieve its climate mitigation goals, and prepare for a clean energy future.
 - In September 2023, Harrisburg received a total of \$2 million from the Urban and Community Forestry Grants to support two projects to combat climate change, expand access to green spaces, and create healthier communities. The Inflation Reduction Act funds the Urban and Community Forestry Grants Program Act.
 - Harrisburg <u>received</u> \$1 million to implement systematic and proactive care and management of street trees in non-disadvantaged sections of the city through contracted tree pruning and removal services, along with new approaches to volunteer plantings.
 - Harrisburg <u>received</u> another \$1 million to allow for the expansion of the city's community tree program.

- In 2022, the Harrisburg City School District received \$3.95 million to replace ten school buses with electric models as part of the Bipartisan Infrastructure Law's Clean School Bus Rebate Program.
- In 2022, the Steelton-Highspire School District, south of Harrisburg, received \$2.37 million to <u>replace</u> six school buses with electric models as part of the Bipartisan Infrastructure Law's Clean School Bus Rebate Program.

Philadelphia

Climate Impacts

Extreme Heat

- Philadelphia sees an <u>average</u> of 14 days with a heat index above 100 degrees each year. By 2030, Philadelphia is expected to see almost a dozen more days above 100 degrees annually, and <u>by 2050</u>, Philadelphia is projected to experience an average of 35 days per year over 93.7 degrees Fahrenheit.
 - Elderly people are particularly vulnerable to heat-related illnesses as the ability to regulate internal temperature declines with age. Philadelphia has the <u>highest</u> poverty rate of seniors aged 60 or older among the ten most populous cities in the United States.
- More than <u>900,000 people</u> in the Philadelphia area live in a neighborhood made eight degrees Fahrenheit or hotter by the urban heat island effect.
- A 2020 study of urban areas across the U.S. <u>found</u> that formerly redlined neighborhoods of nearly every city were hotter than the non-redlined neighborhoods by an average of almost 5 degrees.
 - In Philadelphia, which has a population of <u>40.1% Black, 15.7%</u>
 <u>Latino/Hispanic, and 7.6% Asian</u>, formerly redlined neighborhoods are up to <u>9.38 degrees hotter</u> than non-redlined areas.
- Black, Latino, and people of color in Philadelphia are <u>more likely</u> to live in the hottest neighborhoods of the city, more prone to heat-related illnesses and death, and less likely to have air conditioning.
 - Hunting Park, a predominantly low-income, Latino, and Black neighborhood, <u>suffers</u> from temperatures up to 22 degrees hotter than other areas of Philadelphia as a result of the heat island effect.

- In 2019, 75% of <u>land cover</u> in Hunting Park was buildings, roads, and paved surfaces, compared to 52% in Philadelphia overall.
- 59% of Hunting Park households have an <u>annual income</u> of less than \$25,000, making it difficult to upgrade to air conditioning or to weatherize a home.
- Higher temperatures and poor air quality in Hunting Park challenge residents who suffer from chronic illnesses like asthma. Asthma rates are <u>2 to 3 times</u> higher among residents of Hunting Park than in other neighborhoods in Philadelphia.
- Philadelphia's outer neighborhoods of Far Northeast and Chestnut Hill have average temperatures <u>14 degrees cooler</u> than neighborhoods located closer to the center of the city.
- Philadelphia is experiencing warmer winters. In 2023, Philadelphia saw <u>22 more</u> warm winter days than usual. The city's average winter temperatures have <u>risen</u> 4.8 degrees since 1970.
- Philadelphia set a record on March 11th, 2021, when the Philadelphia International Airport <u>measured</u> a temperature of 74 degrees, 23 degrees above normal for the day.
- Philadelphia also <u>broke</u> its record for warmest January 11th in 2020 at a high of 69 degrees.
- Heat-related costs in Philadelphia are <u>expected</u> to increase due to increased temperatures driven by climate change:
 - Philadelphia expects an <u>increase</u> of up to \$1 million in annual electricity costs for air conditioning in municipal buildings.
 - Heatline, a Philadelphia-run phone service that advises residents on how to stay cool and refers them to emergency services if necessary, could see its costs <u>rise</u> to \$60,000 from increased demand.
- Extreme heat <u>negatively affects</u> children in schools without air conditioning. Philadelphia Public Schools could <u>face</u> costs of up to \$140 million to upgrade building infrastructure for air conditioning installation.

Wildfires

• There are <u>18,190 properties</u> – 3% of properties – in Philadelphia that are at some risk of being affected by wildfires over the next 30 years.

- In Philadelphia, <u>16,468 out of 469,452</u> homes have a moderate risk of being affected by wildfires over the next 30 years.
- In Philadelphia, <u>33 out of 576</u> infrastructure buildings have a moderate risk of being affected by wildfires over the next 30 years.
- In Philadelphia, <u>812 out of 31,646</u> commercial buildings have a moderate risk of being affected by wildfires over the next 30 years.

Extreme Rainfall & Flooding

- Philadelphia has a <u>major</u> risk of flooding. There are <u>112,763 properties</u> 32% of properties in Philadelphia that have a greater than 26% chance of being severely affected by flooding over the next 30 years.
 - In Philadelphia, <u>115 out of 576</u> infrastructure buildings have a severe risk of being flooded over the next 30 years.
 - In Philadelphia, <u>14,392 out of 31,646</u> commercial buildings have a severe risk of being flooded over the next 30 years.
 - In Philadelphia, <u>147,893 out of 469,452</u> homes have a major risk of being flooded over the next 30 years.
 - In Philadelphia, <u>1,731 out of 3,413</u> miles of roads have a severe risk of being flooded over the next 30 years.
 - In Philadelphia, <u>752 out of 1,926</u> social facilities have a moderate risk of being flooded over the next 30 years.
- Annual precipitation in Philadelphia is projected to <u>increase</u> from about 45.5 inches to about 49.5 inches by 2050.
- Philadelphia's waters could <u>rise</u> by 1.5 to 2.7 feet by 2050 and 2.4 to 6.8 feet by 2100.
 - With a 4-foot sea level rise, 2,515 homes at an estimated value of \$686 million and 63 miles of road would be <u>at risk</u> in Pennsylvania, mainly in the Philadelphia region.
- The Philadelphia International Airport is located in one of the city's <u>most</u> <u>vulnerable</u> areas to sea-level rise.
 - Parts of the Philadelphia International Airport and surrounding neighborhoods are within <u>two or three feet above the average</u> high tide on the Delaware River.

- During a Category 1 storm, 10 to 11 hangars out of 12 and 5 to 18 terminals out of 20 could be <u>flooded</u>.
- In downtown Philadelphia, Penn's Landing and the Northeast Corridor railroad tracks at 30th Street Station are <u>included</u> in the city's 100-year floodplain.
 - At least 30% of Philadelphia's expressways and 18% of the city's major roads are <u>included</u> in the city's 100-year floodplain.
- The average sea level of the Delaware River, which marks Philadelphia's eastern border, has <u>increased</u> by more than 11 inches in the past 100 years, substantially higher than the global average of seven to eight inches.
 - Water level rise has <u>increased</u> the number of days Philadelphia experiences nuisance flooding. From 1950 to 2014, roughly 53 percent of days with nuisance flooding in the city would not have <u>occurred</u> without human-caused sea level rise. From 2005 to 2014, an estimated 69 percent of days with nuisance flooding would have been <u>avoided</u> if not for human-caused sea level rise.
 - In the Delaware River Basin, approximately 147,000 jobs and \$20.4 billion in residential property values could be <u>affected by</u> flooding, storm surge, and sea level rise.
- In August 2021, Hurricane Ida <u>caused</u> flooding and tornadoes that damaged homes in the Philadelphia area.
 - More than 400 homes in southeastern Pennsylvania were <u>destroyed</u> or severely damaged, and another 400 were reported with minor damages.
 - Bridgeport, just north of Philadelphia, <u>experienced</u> at least 75 boat rescues and 300 evacuations, causing at least 500 people to be <u>displaced</u> by the flooding from Hurricane Ida.
- In July 2020, Tropical Storm Fay dropped about 5 inches of rain across the Lehigh Valley, <u>inundating</u> the area with floods that stranded drivers, filled basements, and forced evacuations. Part of I-676 in Philadelphia was also <u>flooded</u>.
- Philadelphia's aging sewer system, which <u>handles</u> stormwater runoff and sewage, uses 164 combined sewer overflows (CSOs) to move water into rivers and streams during periods of heavy rain.
 - From July 2017 to June 2018, the CSOs <u>overflowed</u> a combined 6,500 times, discharging 12.5 billion gallons of stormwater runoff and sewage into local waterways.

Pollution Impacts

Air Pollution

- In the American Lung Association's 2023 State of the Air Report, Philadelphia County <u>received</u> an F grade for high ozone days.
- In 2023, the Philadelphia- Reading- Camden metropolitan area was <u>ranked</u> 28th for worst high ozone days, 55th for worst 24-hour particle pollution, and 46th for worst annual particle pollution in the U.S.
- There are 7,366,346 people in the Philadelphia- Reading- Camden metropolitan area <u>at risk</u> from air pollution, including children, the elderly, and people of color.
- In the summer of 2023, several <u>"code red"</u> and <u>"code orange"</u> alerts were issued in Philadelphia after wildfires in <u>Canada</u> brought unhealthy levels of smog, putting vulnerable groups such as the elderly, young children, and those with heart or lung conditions at particular risk.
- The personal burden of deteriorating air quality <u>falls heavily</u> on low-income families and children of color in cities across Pennsylvania, including Philadelphia, in part because of their proximity to local sources of pollution.

Water Pollution

- 17 sites in Pennsylvania, including one in central Philadelphia, have been found to be <u>contaminated by PFAS chemicals</u>.
 - In 2019, the Philadelphia NS site <u>tested positive</u> for several types of PFAS in groundwater and on-base. The suspected source of contamination is from firefighting foam.

Clean Energy

Clean Energy Saves Money

- In Philadelphia, 27.03% of all households and 56.88% of low-income households are extremely <u>energy-burdened</u>, meaning their energy burden is more than twice the city median.
 - Families with higher energy burdens are at <u>greater risk</u> of developing respiratory diseases and stress-related ailments.
- In Philadelphia, 47.44% of Latino households are extremely <u>energy-burdened</u>, meaning their energy burden is more than twice the city median.

- In Philadelphia, 43.52% of Black households are extremely <u>energy-burdened</u>, meaning their energy burden is more than twice the city median.
- With the widespread implementation of zero-emission transportation and electricity resources, the Philadelphia metropolitan area could <u>experience \$86.8</u> <u>billion</u> in cumulative public health benefits and <u>avoid 735,000 lost work days</u> by 2050.
- Investment in clean energy and decreased spending on gasoline are <u>projected</u> to reduce average annual household energy spending by \$85 per year in 2030 and a cumulative \$9.5 billion through 2050 across all households in Pennsylvania.
 - In Philadelphia, the median EV driver could save between <u>\$917 per year</u> compared with the cost of driving the average new gasoline vehicle.

Philadelphia's Growing Clean Energy Economy

- The City of Philadelphia <u>developed</u> its Climate Action Playbook, which outlines the city's plans to respond to climate change through 2050. Some of these goals include:
 - <u>Reduce</u> carbon pollution from the City-owned buildings and street lights by 50% by 2030.
 - <u>Generate</u> or purchase 100% of all electricity for City operations from renewable resources by 2030
 - <u>Provide</u> energy and building improvements for 2,500 small food and grocery businesses by 2026.
 - <u>Create</u> 10,000 jobs in energy efficiency and clean energy projects by 2026.
 - <u>Achieve</u> a clean electricity grid by 2050.
 - <u>Achieve</u> a citywide waste diversion rate of 90%, with the remaining 10 percent of waste being processed through waste-to-energy by 2035.
- Funding from President Biden's clean energy plan is helping Philadelphia minimize the impacts of climate change, achieve its climate mitigation goals, and prepare for a clean energy future.
 - In September 2023, the Public Health Management Corporation <u>received</u> \$12 million to advance the Philly Tree Plan and restore a healthy tree canopy.
 - In March 2023, the Biden-Harris Administration <u>announced</u> the Philadelphia- Camden- Wilmington Metro Area would receive a \$1 million

grant to tackle climate pollution. The funding from the Climate Pollution Reduction Grants program created by the Inflation Reduction Act was <u>allocated</u> to the Delaware Valley Regional Planning Commission.

- In 2023, Centennial Parkside CDC in Philadelphia was <u>awarded</u> \$400,000 to upgrade rowhomes in East Parkside through the Buildings Upgrade Prize (Buildings UP).
- In 2023, Philadelphia <u>received</u> \$25 million to construct multimodal, accessibility, and mobility improvements around six schools and high-injury corridors to improve safety and accessibility from the Rebuilding America Infrastructure with Sustainability and Equity (RAISE) program.
- In 2023, the John Bartram Association in Philadelphia <u>received</u> \$500,000 in funding from the EJCPS Program for its Strengthening Southwest Philadelphia's Environmental Sovereignty and Climate Resilience through Greening and Youth Workforce Development project.
- In 2023, the Nueva Esperanza, Inc. in Philadelphia <u>received</u> \$500,000 from the EJCPS Program to build the capacity of residents, leaders, and neighborhood infrastructure to improve the climate resiliency of Hunting Park against the disproportionate health and economic impacts of heat.
- In 2023, Philadelphia <u>received</u> \$1 million for its Enhancing, Strengthening, and Scaling Action on Environmental Justice in Philadelphia through the Environmental Justice Government-to-Government (EJG2G) program.
- In 2022, Philadelphia <u>received</u> \$25 million from the Sustainability and Equity (RAISE) program for the Revitalizing Philadelphia's Local Roadways Project, providing improvements along seven high-crash corridors totaling approximately five miles.
- In 2022, the National Significant Multimodal Freight & Highway Projects program (INFRA) <u>awarded</u> \$20 million to the Philadelphia Regional Port Authority to construct an approximately 100,000-square-foot warehouse at the Tioga Marine Terminal.
- In 2022, as part of the Bipartisan Infrastructure Law, the North Penn Area
 6 Superfund site located in Lansdale, just north of Philadelphia, was
 <u>selected</u> to receive \$5.1 million in cleanup funding.
- According to E2's Clean Jobs America 2023 <u>report</u>, Philadelphia County is home to 8,991 clean energy jobs, including 818 in renewable generation, 196 in energy storage, 7,356 in energy efficiency, and 503 in clean vehicles.

• According to E2's Clean Jobs America 2023 <u>report</u>, the Philadelphia- Camden-Wilmington metropolitan area is home to 48,468 clean energy jobs, including 5,550 in renewable generation, 1,624 in energy storage, 36,683 in energy efficiency, and 4,001 in clean vehicles.

Pittsburgh

Climate Impacts

Extreme Heat

- By 2050, Pittsburgh is <u>projected</u> to experience 42 days per year over 90.6 degrees Fahrenheit, compared to just seven days in 1990.
- Pittsburgh is experiencing warmer winters. In 2023, Pittsburgh saw <u>13 more</u> warm winter days than usual, and the city is seeing an average of <u>10 more</u> days above normal temperatures each winter than in 1970.
- Extreme heat <u>negatively affects</u> children in schools without air conditioning. Pittsburgh Public Schools could <u>face</u> costs of up to \$100 million to upgrade building infrastructure for air conditioning installation.
- A 2020 study of urban areas across the U.S. <u>found</u> that formerly redlined neighborhoods of nearly every city were hotter than the non-redlined neighborhoods by an average of almost 5 degrees. Redlined neighborhoods in Pittsburgh have reached average land surface temperatures as high as <u>3.8</u> <u>degrees</u> above the citywide average.
- Since 2000, the Lower Monongahela watershed, which includes parts of Pittsburgh, has experienced <u>323 weeks</u> of partial drought.
 - In Pittsburgh, the Allegheny and Monongahela Rivers converge to form the start of the Ohio River, which <u>supplies</u> drinking water to 5 million people.
- In 2020, the Ohio River Basin was <u>considered</u> one of the most toxic watersheds in the county due to the lingering presence of chemicals and toxins such as mercury and PCBs from Pittsburgh's coal, petroleum, and steel plants.
 - People and animals that consume fish with high levels of mercury or PCBs are at <u>higher risk</u> of developing neurological or reproductive impairments or cancer.

Wildfires

- There are <u>27,310 properties</u> 19% of properties in Pittsburgh that are at some risk of being affected by wildfires over the next 30 years.
 - In Pittsburgh, <u>19,597 out of 98,613</u> homes have a moderate risk of being affected by wildfires over the next 30 years.
 - In Pittsburgh, <u>28 out of 201</u> infrastructure facilities have a moderate risk of being affected by wildfires over the next 30 years.

Extreme Rainfall & Flooding

- Pittsburgh has an <u>extreme</u> risk of flooding. There are <u>22,002 properties</u> 21% of properties in Pittsburgh that have a greater than 26% chance of being severely affected by flooding over the next 30 years.
 - In Pittsburgh, <u>17,928 out of 98,613 homes</u> have a major risk of being flooded over the next 30 years.
 - In Pittsburgh, <u>629 out of 1,802 miles of roads</u> have an extreme risk of being flooded over the next 30 years.
 - In Pittsburgh, <u>27 out of 201 infrastructure buildings</u> have a severe risk of being flooded over the next 30 years.
 - In Pittsburgh, <u>4,062 out of 6,880 commercial buildings</u> have an extreme risk of being flooded over the next 30 years.
 - In Pittsburgh, <u>147 out of 423 social facilities</u> have an extreme risk of being flooded over the next 30 years.
- Flooding is <u>considered</u> the highest climate risk hazard for Pennsylvania. Pittsburgh's economy <u>relies</u> on 17 aging locks and 446 bridges and dams that control 200 miles along the Allegheny, Monongahela, and Ohio Rivers. Intense flooding events can cause costly shutdowns and threaten the safety and efficiency of transportation through these waterways.
- The annual precipitation in Pittsburgh is projected to <u>increase</u> from about 37.3 inches to about 40.0 inches by 2050.
- In April 2018, several rainstorms caused flash flooding and landslides, resulting in road closures across Pittsburgh and Allegheny County and <u>causing</u> over \$14.6 million in damage.

Pollution Impacts

Air Pollution

- Allegheny County <u>received</u> an F grade for high particle pollution in the American Lung Association's 2023 State of the Air Report.
- Allegheny County ranks 27th in cancer risk from point source air toxics emissions, making it in the top 1% of all U.S. counties.
- In 2023, the Pittsburgh-New Castle-Weirton metropolitan area was the 14th <u>most</u> <u>polluted</u> in the U.S. by year-round particle pollution and 20th <u>most polluted</u> for 24-hour particle pollution.
- The personal burden of deteriorating air quality <u>falls heavily</u> on low-income families and children of color in cities across the state, including Pittsburgh, in part because of their proximity to local sources of pollution.
 - A 2020 EPA study of 1,200 Pittsburgh-area students, 52% of whom were Black, found <u>22.5%</u> suffered from asthma.
 - A 2020 study found that environmental justice communities in Allegheny County were exposed to high levels of traffic pollution and were up to <u>25</u> <u>times</u> more likely to suffer from exposure to nitrogen dioxide.

Water Pollution

- In 2023, a study <u>found</u> heightened levels of PFAS near several Pittsburgh wastewater treatment plants along the Ohio, Allegheny, and Monongahela Rivers.
 - PFAS has <u>been linked</u> to certain types of cancer, hypertension, and even birth defects and does not <u>break down</u> in the body and environment and can accumulate over time.
- Between 2012 and 2022, oil and gas companies <u>injected</u> 160 pounds of undisclosed chemicals, which could include PFAS, in more than 5,000 wells across the state. At least 20 of these sites were located in Allegheny County.
- In 2019, testing <u>found</u> that lead was detected in 80% of community water systems in Allegheny County.
- Pennsylvania ranks <u>ninth</u> in the U.S. in coal ash production, with 70 coal ash dumpsites <u>leaking</u> pollution into groundwater across the state.
 - One former coal plant near Pittsburgh was found to have arsenic levels in the groundwater that were <u>372 times</u> EPA's safe drinking water standards.

Boron was four <u>times</u> above the standard, Cobalt <u>five times</u>, Lithium 54 times, Molybdenum <u>one times</u>, and Sulfate <u>three times</u> higher than EPA's standards.

- In 2020, Range Resources <u>agreed</u> to pay \$150,000 in fines due to leaks and spills at two separate fracking sites in Washington County, just outside of Pittsburgh.
 - In 2018, a storage tank <u>leaked</u> 2,000 gallons of fracking waste into a field and nearby creek at the Brownlee site.
 - The leak <u>contaminated</u> soil at a nearby farm and required the removal of about 100 trees and 12,000 square feet of soil.
 - Residents of Buffalo Township <u>sued</u> Range Resources, alleging the spill risked contaminating their water supply.
 - Range Resources <u>built an impoundment</u> at its Yeager site to contain fracking wastewater and solid waste from nearby drilling sites.
 - The wastewater in the impoundment became septic and was <u>contaminating</u> the nearby groundwater due to leaks.
 - Range Resources <u>continued</u> to use the site despite evidence of contamination.

Clean Energy

Clean Energy Saves Money

- In Pittsburgh, 23.57% of all households and 52.45% of low-income households are extremely <u>energy-burdened</u>, meaning their energy burden is more than twice the city median.
 - Families with higher energy burdens are at <u>greater risk</u> of developing respiratory diseases and stress-related ailments.
- In Pittsburgh, 34% of Latino households are extremely <u>energy-burdened</u>, meaning their energy burden is more than twice the city median.
- In Pittsburgh, 45.24% of Black households are extremely <u>energy-burdened</u>, meaning their energy burden is more than twice the city median.
- Investment in clean energy and decreased spending on gasoline are <u>projected</u> to reduce average annual household energy spending by \$85 per year in 2030 and a cumulative \$9.5 billion through 2050 across all households in Pennsylvania.

Pittsburgh's Growing Clean Energy Economy

- Since the passage of the Inflation Reduction Act, \$599 million in investments have been <u>announced</u> in clean energy projects that will create over 1040 jobs in Pittsburgh.
 - In August 2023, EOS Energy Enterprises <u>announced</u> Project American Made Zinc Energy (Project AMAZE), which provided a \$500 million investment to expand its Turtle Creek battery manufacturing facility in east Pittsburgh, creating 650 jobs.
 - In October 2023, Westinghouse <u>announced</u> an investment of at least \$18 million in Allegheny County to develop transportable nuclear battery technology. The eVinci Microreactor Development Facility will create 40 high-paying jobs.
 - In May 2023, Re:Build Manufacturing, which manufactures components for the clean technology and EV industries, announced an <u>\$81 million</u> investment in an advanced manufacturing park, creating 300 jobs at the new Westmoreland County regional headquarters.
- The City of Pittsburgh has <u>established</u> climate mitigation goals to achieve by 2030, including reaching 100% renewable energy in City facilities, 50% energy and water use reduction in City facilities, operating a fossil-fuel-free fleet, divestment of the City pension fund from fossil fuels, and achieving 50% transportation emissions reduction citywide.
- Funding from President Biden's Clean Energy Plan is helping Pittsburgh minimize the impacts of climate change, achieve its climate mitigation goals, and prepare for a clean energy future.
 - In March 2023, the Biden-Harris Administration <u>announced</u> the Pittsburgh Metro Area would receive a \$1 million grant to tackle climate pollution. The funding, which comes from the Climate Pollution Reduction Grants program created by the Inflation Reduction Act, was <u>allocated</u> to the Southwestern Pennsylvania Commission.
 - In September 2023, the City of Pittsburgh was selected as one of six community teams to <u>receive</u> up to \$25 million to deploy Smart Electric Energy Districts comprised of smart energy infrastructure such as rooftop solar and EV chargers to meet grid and community needs.
 - In September 2023, Pittsburgh <u>received</u> \$1 million to remove hazardous trees, install new trees, and ultimately revitalize and create usable natural

areas in underserved communities through the Urban and Community Forestry Grants.

- In 2023, Allegheny County <u>received</u> \$328,827 from the Environmental Justice Government-to-Government (EJG2G) program to improve climate preparedness for the 38 environmentally burdened communities within the county.
- In 2022, the Board of Public Education School District of Pittsburgh received \$6.4 million to <u>replace</u> 20 school buses with electric models as part of the Bipartisan Infrastructure Law's Clean School Bus Rebate Program.
- In 2022, the New Pathways to Equity Project <u>received</u> \$11.3 million to construct improvements to the Hill District in Pittsburgh, including the installation of traffic calming measures, sidewalks, and green infrastructure.
- The Consolidated Rail Infrastructure and Safety Improvement Grant <u>awarded</u> \$11.3 million to the Buffalo & Pittsburgh Railroad: Rebuilding Western Pennsylvania Project in 2022.
- The KV May Building LLC in Pittsburgh <u>received</u> \$5 million to renovate low-income households to be zero energy and resilient under the Green and Resilient Retrofit Program (GRRP).
- According to E2's Clean Jobs America 2023 <u>report</u>, Allegheny County is home to 12,705 clean energy jobs, including 1,834 in renewable generation, 506 in energy storage, 9,658 in energy efficiency, and 625 in clean vehicles.
- According to E2's Clean Jobs America 2023 <u>report</u>, the Pittsburgh metropolitan area is home to 19,448 clean energy jobs, including 2,729 in renewable generation, 838 in energy storage, 14,306 in energy efficiency, and 1,406 in clean vehicles.