

Invest \$1.1 Trillion in Renewable Energy to Address Climate Change and Build Thriving Communities



1.3M

JOB'S COULD BE
CREATED EACH YEAR
WITH A \$1.1 TRILLION
INVESTMENT

Burning fossil fuels to power our economy is the main driver of catastrophic climate change, and air pollution from fossil fuels is directly responsible for more than **300,000 deaths** in the U.S. every year – harms that disproportionately fall on low-income communities and people of color. **To achieve President Biden's climate goal of cutting greenhouse gas emissions in half by 2030, we need at least \$1.1 trillion in public investments in renewables.**



300K

US DEATHS EACH
YEAR ARE DUE TO AIR
POLLUTION

This investment can be spread across several policy instruments including tax credits for renewable energy uptake, direct grants, investments in research and development, and funding for residential solar. What is critical is the total scale of investment – **research** from the Political Economy Research Institute (PERI) at the University of Massachusetts Amherst has shown that anything less than \$1 trillion for renewable energy deployment will jeopardize meeting our climate goals.

We need renewable energy to take on the crisis of climate change.

Combating climate change requires transitioning away from fossil fuels toward renewable energy. Fossil fuels burned for electricity alone account for a **quarter of U.S. greenhouse gas emissions**. However, to cut these emissions, we don't just need 100% clean electricity by 2035. We need 200% clean electricity, as **UCSB Professor Leah Stokes has demonstrated**. That is, we'll be creating a massive amount of new electric appliances - meaning we will need to double the electric grid to power our homes, buildings, electric vehicles, and public transit.



80%

OF AMERICANS
SUPPORT PRIORITIZING
DEVELOPMENT OF
CLEAN ENERGY

We can ensure a just and equitable renewable energy transition.

Dirty fossil-fueled energy disproportionately harms low-income communities and communities of color. Power plants, refineries, and extraction sites are more likely to be located near Black, brown, and Indigenous communities; as a result, **people of color face more of the**



\$1.1T

INVESTMENTS IN
CLEAN ENERGY NEEDED
TO CUT GREENHOUSE
GAS EMISSIONS IN
HALF BY 2030

health impacts from air pollution, like asthma and cancer. Studies published at the Journal of the American Medical Association have traced Black-white disparities in pregnancy outcomes like preterm birth, low birth weight, and stillbirth to increases in air pollution and heat exposure. Black mothers are exposed to these environmental harms - compounding the link between burning fossil-fuels and air pollution mortality.

This unjust reality means that a transition toward renewables can invest in equity and improve the health of marginalized communities. Abundant and cheap renewables will also reduce the portion of household income spent on electricity and gas bills. To ensure that the renewable energy transition is equitable, public investment must be tied to strong equity standards guaranteeing that historically marginalized communities, and groups whose livelihoods, healthcare and pensions will be impacted by the energy transition, will benefit.

Investing in renewable energy creates good jobs.



\$23.89

AVERAGE HOURLY
WAGE FOR JOBS IN
RENEWABLE
ENERGY IN 2019

Jobs-versus-environment is a false choice. In 2020, clean energy jobs accounted for more than 40% of all U.S. energy jobs, and 2.25% of the total workforce. As demand for solar panels and wind turbines creates millions of jobs, fossil fuel industry jobs are in decline. But there's no guarantee the investment-fueled green boom will come with worker protections.

Renewable energy jobs already improve on the abysmal conditions of workers in oil and gas sector—only 4% of which is unionized. In 2019, the average hourly wage for jobs in renewable energy, energy efficiency, and storage was \$23.89, more than \$4 above the national median wage of \$19.14. **A \$1.1 trillion investment in renewable energy is estimated to create an additional 1.3 million good-paying jobs every year.**

Now, we need strong public policies to ensure that green jobs remain secure, stable, and family-sustaining jobs that are accessible to Americans from all walks of life. Pairing investments in renewable energy with strong standards that ensure good wages, the right to organize, and equitable hiring practices will usher in a clean energy transition that helps all Americans thrive.

Renewable energy is popular.



40%

OF ALL US ENERGY
JOBS IN 2020 WERE IN
CLEAN ENERGY

Pew Research Center polling shows that almost 80% of Americans agree that the government should prioritize developing clean energy instead of fossil fuels. Additional polling from Data for Progress shows that almost two-thirds of Americans want the government to make the big investments needed to move to a 100% clean energy-powered electric grid by 2035.

In addition to \$1.1 trillion in renewables, Green New Deal Network recovery priorities include \$132 billion for the Civilian Climate Corps Act and \$625 billion in investments over a decade for the care economy, including care for children, the elderly, and people with disabilities.

Invest \$600 Billion in Clean, Accessible Public Transit

to Address Climate Change and Build Thriving Communities



45%

OF AMERICANS
CURRENTLY HAVE NO
ACCESS TO PUBLIC
TRANSIT

Addressing climate change and building thriving communities will require public investments in affordable, electrified mass transit that is accessible to everyone.

Electrifying the existing fleet of public buses - including 470,000 diesel school buses - and commuter rail across the country will require an investment of approximately **\$200 billion, according to analysis from [Data for Progress](#)**.



\$500B

IN TRANSIT
INFRASTRUCTURE
REPAIRS NEEDED OVER
THE NEXT DECADE

Since 1982, approximately **80 percent** of Federal transportation program funding has been allocated to highways and only 20 percent to public transit. In addition, the American Society of Civil Engineers has identified a **\$176 billion backlog of needed repairs to transit** infrastructure that is currently aging or in poor condition. Transportation for America has called for **\$500 billion over the next decade** to modernize transit. Finally, 45% of Americans currently have no access to public transit, and **expanding transit infrastructure to improve that access will require hundreds of billions of dollars** of public investment.

These investments would slash greenhouse gas emissions, connect people to economic opportunities and improve public health. Using public transit, people could get to more places – their jobs, their schools – in less time. Destinations that previously took too long to reach would become accessible.

Public transit fights climate change.

The transportation sector is one of the biggest drivers of climate change: in 2019, **transportation accounted for 29 percent of U.S. greenhouse gas emissions**. Preventing catastrophic climate change and achieving President Biden's climate goals will require rapidly expanding public transit while centering equity and environmental justice goals.



29%

U.S. GREENHOUSE
GAS EMISSIONS
COME FROM
TRANSPORTATION

Replacing car trips with transit rides is one of the most effective ways to cut greenhouse gas emissions: changing an average American's daily commute from driving alone to using existing public transit could **cut their carbon footprint by 10% or more**. Fully electric transit systems replace diesel fumes & tailpipe emissions thus producing a **healthy climate**.



1.2M

JOBES COULD BE
CREATED EVERY
YEAR WITH A \$600B
INVESTMENT



1M+

RURAL HOUSEHOLDS
RELY ON LIMITED
AND UNRELIABLE
PUBLIC TRANSIT



60%

OF AMERICANS
SUPPORT PROPOSALS
FOR INCREASED
PUBLIC TRANSIT
FUNDING

Transit creates good jobs.

Investment in transit has major amplifying effects; linking underserved communities to business districts, parks, and community hubs literally paves the way for green growth. One analysis estimates that every \$1 invested in public transit generates \$4 in economic benefits. Transit is already a critical engine powering the economy: more than 2,800,000 essential workers nationwide rely on public transit to travel to and from work.

Research from the University of Massachusetts Amherst suggests that a \$600 billion total investment in transit upgrades and electrification could directly create nearly 1.2 million jobs every year. Investments in public transit come with a strong return on investment for job creation, creating 70% more job-hours, dollar for dollar, than investments in highways.

Investments in transit are investments in equity.

Low-income people rely on public transit more than wealthier individuals – but in most of the country, lower-income communities are not adequately served by public transit. More than 1 million rural households rely on public transit to get to jobs and essential services – but what transit options exist for them are limited, slow, and unreliable. Large-scale investments in public transit flip this unjust reality. As the former Mayor of Bogotá explained, “A developed country is not a place where the poor have cars. It’s where the rich use public transport.”

Across the country, access to public transit is also an indispensable lifeline for seniors and the disabled. Finally, pollution from cars and trucks is worse in lower-income communities and disproportionately in low-income communities of color, contributing to higher rates of asthma and other chronic cardiovascular illness.

Improving public transit is popular.

The BUILD GREEN Act, proposed by Senators Elizabeth Warren and Ed Markey and Representatives Alexandria Ocasio-Cortez and Andrew Levin, calls for a \$500 billion investment in public transit. The Act has the endorsement of the nation’s leading environmental groups and dozens of congressional co-sponsors. Representative Chuy García and Hank Johnson have proposed amendments to the Surface Transportation Investment Act of 2021 that would fund equitable expansion and electrification of public transit systems nationwide.

Electrifying public transit and commuter rail, along with increasing funding for public transit to at least match funding for roads and bridges, are popular, with more than 60% of Americans in support, as shown in Data for Progress polling.

Invest \$600 Billion in Green Public Buildings

to Address Climate Change and Build Thriving Communities



1.2M

JOB^S EACH YEAR
COULD BE CREATED
IN RETROFITTING
SCHOOLS & HOUSING



29%

U.S. GREENHOUSE
GAS EMISSIONS COME
FROM RESIDENTIAL
AND COMMERCIAL
BUILDINGS

Too much of our public building infrastructure – especially schools and publicly-supported housing – is unsafe, outdated, or crumbling. The pandemic illustrated that poor ventilation in public housing and schools is deadly; similarly our outdated buildings need funding from the federal government to cope with climate extremes. The American Society of Civil Engineers has given American public school buildings a near-failing grade of D+, citing unsafe buildings, HVAC systems in need of replacement, and other necessary upgrades to ensure students' safety, health, and comfort. **They estimate that at least \$380 billion** would be needed to raise that grade to a B. Rep. Jamaal Bowman has proposed going further with \$446 billion in investments to fund healthy, green, climate- friendly retrofits for K-12 public school facilities in greatest need.

To fight climate change, protect communities' health, and create good jobs along the way, these investments in improving schools and housing should also include energy efficiency and clean energy retrofits. Analysis by **Data for Progress estimates that \$154 billion would be needed to decarbonize the approximately one million units of public housing** across the country – upgrades that would also address lead, mold, and other health hazards.

Cleaner buildings will help fight climate change.

Buildings in the United States use about **40% of the country's energy** for heating and cooling, lighting, and operating appliances – a number that rises with a full life-cycle assessment of buildings that includes the energy costs of manufacturing and transporting building construction materials. As of 2018, residential and commercial buildings accounted for about **29 percent of all U.S. greenhouse gas emissions**. Decarbonizing and improving energy efficiency in public buildings would make an enormous

impact on greenhouse gas emissions, and will be a critical step in America's fight against climate change.



D+

GRADE GIVEN TO U.S.
PUBLIC SCHOOLS
BY THE AMERICAN
SOCIETY OF CIVIL
ENGINEERS

Greening buildings will create good jobs.

Upgrading America's schools and housing will be an enormous undertaking – one that, as a result, will put millions of people to work. Economic analysis from the Political Economy Research Institute (PERI) at the University of Massachusetts Amherst shows that a \$600 billion investment in energy efficiency, weatherization, electrification, and other building upgrades could **create more than 1.2 million jobs each year**. Pairing investments in building upgrades with strong **standards** that ensure good wages, the right to organize, and equitable hiring practices will usher in a clean energy transition that helps all Americans thrive.

Investments in green buildings are investments in equity.

The students in America's most dilapidated public schools, and the residents of our crumbling public housing, are overwhelmingly low-income people of color. Majority Black, brown, or Indigenous school buildings are disproportionately likely to be aging, crowded, or contain harmful materials like asbestos or lead – **disinvestment that contributes to worse educational outcomes in those schools when compared to whiter and wealthier districts**. **Retrofitting and electrifying these schools and housing is a much-needed investment in racial, social, and economic justice.**

Green buildings are popular.

Upgrading America's schools and housing improves health and comfort. They enable cuts to public buildings' carbon footprint to zero and make public buildings resilient to extreme weather.

Polling has shown that approximately **half of Americans favor green retrofits of schools** and support a Green New Deal for Public Housing, which would retrofit public housing units across the country. **Labor unions, including the American Federation of Teachers, support a \$500 billion investment in clean building upgrades**, as outlined in the **THRIVE Act of 2021**.

Political momentum is building behind the push for clean buildings: Rep. Jamaal Bowman has proposed a Green New Deal for Public Schools with more than **\$446 billion in investments in healthy, climate-friendly retrofits and other upgrades to public schools across the country**.



\$154B

NEEDED TO ADDRESS
CARBON, LEAD, MOLD,
AND OTHER HEALTH
HAZARDS IN PUBLIC
HOUSING



\$446B

NEEDED TO IMPROVE
U.S. SCHOOLS'
CLIMATE RESILIENCE,
SAFETY AND HEALTH

Take Action: GreenNewDealNetwork.org/congress

GREEN NEW DEAL
— NETWORK —