Charleston Green Team Meeting Minutes
Tuesday, April 27, 2021

The Charleston Green Team held its second meeting at 6:00 p.m. via Zoom. Chair Emmett Pepper welcomed Team members Linda Frame, Justin Marlowe, Patti Hamilton, Ted Armbrecht, & Rod Watkins and they were joined by Brent Webster and Deputy City Clerk Nikki Smith.

Minutes from first meeting will be approved at the next meeting.

Guiding principles were reviewed. Linda made a motion to adopt the principles, Patti seconded the motion, and it passed unanimously.

Each member was assigned at the first meeting to find two sustainability ideas to share with the team:
Emmett:
Composting, citing a Washington DC pick-up service as an example
Benchmarking city buildings for their energy use; retrofitting existing buildings

Patti:
Tree planting - Louisville, KY pays residents a $30 rebate for each tree planted (up to 3)
Bike-sharing - Washington DC has a successful program (also check out Elkins' elevated bike trails)

Ted:
The Kanawha County trail plan for Upper Kanawha Valley
Investigate why glass is so difficult to recycle
Encourage property owners to get rid of kudzu and other invasive vines

Rod:
Bike trails
County Commission get behind recycling
Noted that city has composting facility in North Charleston

Linda:
Energy efficiency including solar panels in city buildings
FL has giant bins for all recyclables and trash & recycling are picked up on separate days. Green Team should visit recycling facilities.

Justin:
Concurred with recycling on different days & promotion by city to plant trees
Bike Sharing / Connect to rail trails

Aspects of recycling were discussed including what we want to accomplish and who will be main person to take the lead. Issues discussed & point person(s) to provide information at next meeting were:

(1) types of carts or bins (toters) and how they work with trucks
(2) market for glass - Ted
(3) compost facility - Justin
(4) economics of landfills - information to make a comparison with recycling
(5) education & communication - Patti & Linda

Councilman John Bailey joined the meeting and informed the group that the city currently picks up curbside and transfers recycling to Beckley. As chair of the City Council's environmental committee, they are actively looking to bring recycling back to Charleston and a collection point for glass is a goal.

Under non-recycling issues to address: The goal by consensus for next month's meeting is to have a recommendation to approve for presentation to City Council on energy efficient buildings. Emmett will take the lead on this

Announcements: Sign up for and share information about Team Up to Clean Up opportunities.

The next meeting is set for June 1st at 5:30 pm. Meeting adjourned.

June 30, 2021

Mayor Amy Shuler Goodwin
501 Virginia Street East
Charleston, WV 25301

Re: Endorsement of the Appalachian Climate Infrastructure Plan

Dear Mayor Goodwin:

The Charleston Green Team recognizes that we have a once in a lifetime opportunity to invest in a 21st Century economy through a major federal infrastructure package for our region. As part of our role to advise the city on sustainability, we are writing to ask for your support and recommend that you and the City Council join 100 other organizations and/or municipalities to officially pass a resolution endorsing the Appalachian Climate Infrastructure Plan, born out of the ReImagine Appalachia coalition.

The ReImagine Appalachia coalition was created through a broad recognition that the economy has not been working for most communities in our region. The coalition's Climate Infrastructure plan, built from quantitative and qualitative data, shows concrete opportunities for progress where local ownership is prioritized, prosperity is shared, everyone is paid enough to support themselves and their family, future generations can put down roots, and all people have clean air to breathe and water to drink. The summary of the plan is attached.

It calls for a $24 billion investment spread over ten years to create pro-worker jobs that also reduce carbon emissions. It includes expanding broadband, modernizing the grid, reclaiming abandoned land, growing clean manufacturing, building out sustainable transportation, and reviving the Civilian Conservation Corps, all of which will **create over 41,000 jobs in West Virginia**, with career pathways for young people in our community.

President Biden's transformative American Jobs Plan is exciting news for our country, and we know Charleston needs to be at the federal table to make sure these resources create lasting change where we live, work, and play. We know that our prosperity is reliant on a vibrant local tax base, and we can't do it alone.

Thus we recommend that:

- You sign on to the attached letter to show your support.
- City Council pass the attached resolution as a body to show the support of the City of Charleston.

Each endorsement will be sent to the U.S. Senators and relevant Congressional Representatives from West Virginia, Pennsylvania, Ohio, and Kentucky.

More information is available at www.reimagineappalachia.org/local. We encourage you and your office to review the attached materials. Thank you for your consideration.

Sincerely,

Charleston Green Team
Ted Armbrecht, Member
Linda Frame, Member
Patti Hamilton, Member
Justin Marlowe, Member
Pam Nixon, Advisor
Emmett Pepper, Chair
Rod Watkins, Member
James Young, Member

CC: John Kennedy Bailey, Chair, Environment & Recycling Committee

Attachments:

(1) Sample draft resolution of support, to be edited
(2) Appalachia Climate Infrastructure Plan Summary
(3) West Virginia Jobs Impact Report

2021

The Honorable Sherrod Brown
United States Senate
Washington, DC 20002

The Honorable Robert P. Casey, Jr.
United States Senate
Washington, D.C. 20510

The Honorable Mitch McConnell
United States Senate
Washington, DC 20510

The Honorable Rob Portman
United States Senate
Washington, DC 20510

The Honorable Shelley Moore Capito
United States Senate
Washington DC 20510

The Honorable Joe Manchin, Jr.
United States Senate
Washington DC 20510

The Honorable Rand Paul
United States Senate
Washington DC, 20510

The Honorable Pat Toomey
United States Senate
Washington DC 20510

Re: Urgent Action Needed to Support Appalachia Climate Infrastructure Plan

Dear United States Senators of Kentucky, Ohio, Pennsylvania and West Virginia,

As elected executives representing hard-working communities across our great states, **we collectively endorse the ReImagine Appalachia coalition, and a federal Appalachia Climate Infrastructure Plan**. This is an unprecedented opportunity to create a 21st Century Economy that works for us all.

We urge you to join us to support this plan and **help us build a just and equitable economy** that celebrates our culture and heritage, values the contributions of coal miners and other fossil fuel industry workers, and can ensure that from this moment forward, every individual can have a good-paying job with good benefits and responsible employers who help protect the environment and health of the people.

ReImagine Appalachia is a diverse coalition of community, labor, and environmental leaders dedicated to creating shared prosperity in a 21st Century Appalachia. Through this endorsement, **we join the over 100 other organizations in the region** who have endorsed this Appalachia Climate Infrastructure Plan.

The COVID-19 pandemic and the resulting economic downturn have exacerbated already high levels of poverty in the region due to extractive industry practices of absentee corporations, while racism and mass incarceration create ongoing barriers to employment, opportunity and personal safety, and the consequences of changing climate are creating severe storms and flooding in the region. With this, **our state and nation have been thrust into crisis.**

But there is hope: by passing and enacting this federal Appalachian Climate Infrastructure Plan, we will expand opportunity through public investments, grow manufacturing jobs, restore our damaged land and waters through reclamation and remediation, modernize the electric grid, incorporate universal broadband, and revive the Civilian Conservation Corps. **The number of family sustaining jobs created in these emergent industries could top 243,000 in Pennsylvania, 235,000 Ohio, and 41,000 in West Virginia.**

We know a new deal for us supports union rights, second chance employment, better pay and benefits, and local ownership models that rebuild the middle class. That's why **we support Reimagine Appalachia efforts to build a 21st Century Economy that's good for workers, communities, and the environment**. Your action to support this plan is a crucial step to making meaningful progress in one of the most challenging moments in our region's history. We as mayors and executives are eager to work with you to meet this challenge.

Sincerely,

Mayor / Executive Here

CC: Relevant Congressional House Members

RESOLUTION TO REIMAGINE APPALACHIA AND SUPPORT A FEDERAL APPALACHIAN CLIMATE INFRASTRUCTURE PLAN – CHARLESTON, WEST VIRGINIA

WHEREAS, the COVID-19 pandemic and the resulting economic downturn have exacerbated already high levels of poverty in the region due to extractive industry practices of absentee corporations, while racism and mass incarceration create ongoing barriers to employment, opportunity and personal safety, and the consequences of changing climate are creating severe storms and flooding in the region.

WHEREAS, our state and nation has been thrust into crisis.

WHEREAS, the people of Appalachia have an opportunity to build a 21st Century Economy where everyone has a good-paying job with good benefits and responsible employers who help protect the environment and health of the people.

WHEREAS, enacting a federal Appalachian climate infrastructure plan could create a new deal that works for us by expanding opportunity through public investments, growing manufacturing jobs, restoring our damaged land and waters through reclamation and remediation, modernizing the electric grid and incorporating universal broadband, reviving the Civilian Conservation Corps; and promoting union rights, second chance employment, better pay and benefits, and local ownership models that rebuild the middle class.

WHEREAS, federal action on climate change requires that the people of Appalachia and the City of Charleston are at the table to ensure that working people and communities are put first and that their contributions are respected; and that Appalachia is a place where everyone can live, work, and raise a family.

WHEREAS, the City of Charleston is rich in assets, including its people, land, minerals, water, music, and heritage; and for more than a century, Appalachian communities such as Charleston have helped fuel America's industrial revolution.

WHEREAS, by expanding career opportunities in clean manufacturing; land remediation, grid modernization, and building a sustainable transportation system, the number of family sustaining jobs created in these emergent industries could top 41,000 in West Virginia.

[ASK REIMAGINE APPALACHIA IF WE HAVE COMPELLING STATISTICS FOR YOUR CITY]

WHEREAS, the economy should celebrate our culture and heritage; invest in communities; generate good, stable, and meaningful union jobs; be just and equitable; and value the contributions of coal miners and other fossil fuel industry workers.

WHEREAS, we can have a new Appalachia and a new Charleston – one that is a destination for people seeking opportunity and a better way of life, and where people no longer have to leave our state to pursue economic opportunities for their families.

THEREFORE, BE IT RESOLVED THAT the City of Charleston supports Reimagine Appalachia efforts to build a 21st Century Economy that's good for workers, communities, and the environment; and encourages members of West Virginia's Congressional delegation to support the framework of Reimagine Appalachia through federal action to enact the Appalachian Climate Infrastructure Plan.

As a coalition of local elected officials in West Virginia, we thank you for your efforts to date to address the impacts of the COVID-19 pandemic on workers and their families. As our state turns its focus to economic recovery, we ask you to reject proposals that fail to meet the magnitude of the crises we face, and leave millions of workers behind. Working people and their families need and want immediate and bold action.

The time to act is now. We urge you to seize this window of opportunity and pass bold legislation that builds on the American Jobs Plan and American Families Plan by investing at least $4 trillion throughout the economy, conditioned on high-road labor, equity, and environmental standards.

This level of investment would help workers and their families overcome the impacts of the pandemic while creating millions of high-quality jobs in clean manufacturing, clean energy, restoration and resilience, the care economy, and upgrading our infrastructure and buildings. Importantly, these investments must be prioritized for communities that need it the most.

We urge you to ensure that this investment is as bold and transformative as our current moment demands and reject short-sighted proposals that would delay or weaken economic recovery, and that may fracture the broad array of constituencies and organizations that are unified in support of more ambitious proposals, such as the American Jobs Plan and American Families Plan.

Congress must act now to:

- **Invest in our infrastructure**, including by modernizing our schools, hospitals, and transit systems; delivering broadband to rural communities; modernizing our grid and upgrading water systems; and protecting communities through natural infrastructure resiliency. These investments can provide a much-needed jolt to our economy while delivering good jobs and public health and climate benefits to communities.

- **Support and retool America's manufacturing sector** with a major reinvestment in fortifying and transforming heavy industry and retooling to reduce emissions and build more of the clean products, materials, and technologies of the future here—all while providing more pathways into good, family-supporting jobs. We cannot cede American manufacturing jobs to our global competitors because we failed to be forward-thinking about boosting the sector for the short and long term.

- **Rebuild the public sector and invest in social infrastructure and the care economy.** The crises we face have put a spotlight on the critical importance of investing in the workers on the front lines of fighting this virus and that keep our communities thriving, such as first responders, education workers, nurses, public health workers, social workers, safety net program workers, homecare, utility workers, and childcare workers. We need to rebuild the capacity of the public sector, the health care system, education, and community-based services to prepare for and respond to disasters like COVID-19 today or other crises like climate change.

- **Provide critical long term support and protections for workers.** Workers and communities cannot deal with crises alone—whether they are disastrous hurricanes, fires, or global pandemics. We must rebuild and expand the social safety net, including pensions, healthcare, and retirement security, and ensure and enforce worker and community health and safety. This should start with passing the PRO Act. These policies will help ensure that working families are better equipped to handle the next financial, health, or other crisis we face.

- **Prioritize equitable rebuilding and investments in those communities most in need,** including low-income communities, communities of color, and deindustrialized communities. This should include support for workers hardest hit by changes in the energy economy and disabled coal miners with black lung. The response to this crisis should deliver a healthier, cleaner, and more equitable future.

If we invest at the scale needed to truly build back better from the impacts of the pandemic, we can build a stronger, fairer, and cleaner economy that creates and sustains the high-quality jobs of the future and makes our communities and workers more resilient to crises.

Sincerely,

XXXXX

June 30, 2021

Mayor Amy Shuler Goodwin
501 Virginia Street East
Charleston, WV 25301

Re: Endorsement of the Appalachian Climate Infrastructure Plan

Dear Mayor Goodwin:

The Green Team writes to recommend signing on to the attached support letter related to the American Jobs Plan and American Families Plan legislation that will be very valuable to our city and future sustainability efforts.

These plans will help rebuild our critical infrastructure, promote and expand clean energy opportunities, jumpstart green manufacturing, help clean up our old industrial sites, and more.

It is our understanding that Senator Manchin and Senator Capito specifically will be key votes on this legislation, and hearing from our city – as the state's capital and largest city – will be influential and important.

We are supporting this sign-on letter proposal in order to maximize speed and efficiency, since this federal process is already moving and Charleston has a large council. A sign-on letter could be circulated quickly allowing you and those Council Members who want to sign-on to do so, and those that do not can refrain.

The sign-on letter will then be circulated to a few other municipalities and counties in West Virginia for additional sign-ons before being submitted by the Blue Green Alliance to our Delegation before or during the August recess.

Sincerely,

Charleston Green Team
Ted Armbrecht, Member
Linda Frame, Member
Patti Hamilton, Member
Justin Marlowe, Member
Pam Nixon, Advisor
Emmett Pepper, Chair
Rod Watkins, Member
James Young, Member

CC: City Council

June 30, 2021

Mayor Amy Shuler Goodwin
501 Virginia Street East
Charleston, WV 25301

Dear Mayor Goodwin:

We write to voice support for the people of Charleston and South Charleston who have likely been exposed to ethylene oxide. Recent coverage in the Gazette-Mail[1] laid out some key points about ethylene oxide:

- It is a flammable, colorless gas;
- In December of 2016, the EPA classified ethylene oxide as capable of causing cancer;
- 12,000 people live in the census tracts in Kanawha County that have some of the highest risk of cancer from ethylene oxide in the nation, including parts of the North Charleston portion of our city;
- Kanawha County's total cancer risk is the 10th highest in the nation; and
- 70% of people in Charleston live within three miles of a site that is required by federal law to develop a Risk Management Plan because it uses extremely hazardous substances.

Additionally, according to the National Cancer Institute (NCI), lymphoma and leukemia are the cancers most commonly associated with occupational ethylene oxide exposure.

Given this risk to our community members, which has hit some of our lowest-income neighborhoods, we are recommending that you send a letter to the EPA in support of stronger health protections around ethylene oxide. The attached draft letter addresses many of the concerns we see in our community.

Sincerely,

Charleston Green Team
Ted Armbrecht, Member
Linda Frame, Member
Patti Hamilton, Member
Justin Marlowe, Member
Pam Nixon, Advisor
Emmett Pepper, Chair
Rod Watkins, Member
James Young, Member

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[1] Mike Tony, "EPA, DEP reassessing high Kanawha cancer risks from air toxics after review of Union Carbide emissions." *Charleston Gazette-Mail*, 22 May 2021, https://www.wvgazettemail.com/news/energy_and_environment/epa-dep-reassessing-high-kanawha-cancer-risks-from-air-toxics-after-review-of-union-carbide/article_627b42b2-f8e4-53e3-ab34-f49f96c8b2bf.html.

Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Re: Recommendation on Risk Management Plan/Chemical Disaster Safety Rule

Dear Administrator

As Mayor of Charleston WV, I am concerned about the impacts of chemical pollution and chemical disasters on environmental justice communities in my city. I urge the Environmental Protection Agency to strengthen and expand the Chemical Disaster Rule, also known as the Risk Management Program Rule.

EPA found that this rule would protect the most vulnerable communities, workers and first-reponders from disastrous chemical releases, fires and explosions. Between 2014 and 2016, EPA accepted two rounds of public comment and coordinated with other agencies to evaluate regulatory improvements EPA should make to protect communities against chemical disasters.[1]

Our city borders two industrial facilities that manufactures, stores, and are permitted to release toxic and hazardous chemicals. EPA determined that improvements to the RMP rule would prevent and reduce toxic exposures, deaths, and other harm from these incidents.[2] In 2018, EPA posted the 2014 National Air Toxics Assessment on Ethylene Oxide map that included:

- cancer risks and respiratory hazard indexes;
- annual ambient concentrations;
- all emissions sources modeled in NATA; and
- air toxics monitoring sites with recent-year air toxics monitoring data

The North Charleston section of our city falls within tract 54039000100, the section with a 249 total risk value and a population of approximately 1,360 (according to the map). This is a low income community that includes a recreation center for seniors and youth. Ethylene oxide (EtO) has been shown to cause cancer in laboratory animals and has been associated with higher incidences of cancer in humans. Adverse reproductive effects and chromosome damage may also occur from EtO exposure.[3]

I urge EPA to protect vulnerable populations in our city and require facilities to install continuous fence line monitoring for EtO and other extremely hazardous and toxic pollutants, to substitute the highly

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[1] EPA, Final Amendments to the Risk Management Program (RMP) Rule, https://www.epa.gov/rmp/final-amendments-risk-management-program-rmp-rule; Chemical Disaster Rule Regulatory Impact Analysis at 125-27 (Dec. 16, 2016) https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0734.

[2] 82 Fed. Reg. 4597-99 (describing reductions in fatalities, injuries, property damage, people sheltering in place, evacuations, lost productivity, environmental impacts, and more), https://www.govinfo.gov/content/pkg/FR-2017-01-13/pdf/2016-31426.pdf ; Chemical Disaster Rule Regulatory Impact Analysis at 80 (Dec. 16, 2016), https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0734.

[3] OSHA, US Department of Labor. Substance safety data sheet for ethylene oxide (non-mandatory). Substance safety data sheet for ethylene oxide (non-mandatory) - 1910.1047 App A | Occupational Safety and Health Administration (osha.gov).

toxic /extremely hazardous compounds with less dangerous chemicals whenever possible, and to fulfill this administration's promises on scientific integrity, clean air, and environmental justice.

Sincerely,

Amy Shuler Goodwin
Mayor of Charleston, West Virginia

Charleston's Green Team

The Green Team was established by Mayor Amy Shuler Goodwin and Charleston City Council in late 2020, with the first Green Team named on February 16, 2021. It is an entirely volunteer body with members selected from City residents, with an eye to trying to reflect the diversity of our city. Other communities across the country have a Green Team, including Morgantown, West Virginia. The Green Team is a citizen advisory body that helps inform the public and suggests ideas to the City of Charleston to improve sustainability.

The mission of the Green Team is to provide information and recommendations to the Mayor's office as well as City Council and its committees on topics of energy efficiency, land use, greenspaces, water resources, transportation, litter and waste management, and recycling along with public education and communication on those and other sustainability topics and initiatives.

Green Team responsibilities are to:

- Periodically, or at the request of the Mayor or the Chair of the Environment & Recycling Committee, provide advice on the development of regulations or policies that benefit or pertain to sustainability;
- Investigate appropriate and cost-effective opportunities for implementing energy efficiency measures in all aspects of Charleston's public buildings, including benchmarking, operational changes and changes in maintenance or capital improvements;
- Facilitate Charleston residents reducing environmental impacts through recycling, energy use, and other appropriate measures;
- Research and facilitate the use of clean, renewable energy within the City;
- Identify appropriate federal and state incentive and grant programs that provide opportunities for sustainability; and
- Engage in community outreach and education on sustainability initiatives and events.

Members:

Emmett Pepper, Chair

Pam Nixon, Advisor

Ted Armbrecht

Linda Frame

Patti Hamilton

Justin Marlowe

James Young

Meetings: The Green Team currently meets on the third Tuesday of each month. Upcoming meetings:

July 20, 2021

August 17, 2021

September 21, 2021

October 19, 2021

November 16, 2021

December 21, 2021

Past minutes:

Past agendas and documents:

Contact info:

To reach the Green Team with a question or a media request, please visit our Facebook page and leave a message.

By-laws:

The Green Team was established with the passage of Resolution 386-20, which describes the bylaws for the Green Team. You can read that resolution here:

Resolution No. 386-20

MEMO

June 30, 2021

To: Mayor Amy Shuler Goodwin

From: Charleston Green Team

Subject: Event Recycling Opportunities

With venues reopening this summer, the Charleston Green Team would like to recommend the placement of recycling bins next to trash bins at both Live on the Levee and WV Power ballpark events. With recurring events at the Appalachian Power Park and Haddad Riverfront Park, reinstating recycling bins is a good way to promote the City's sustainability and recycling goals as well to reduce the amount of trash going to our landfill.

Both venues have had recycling bins in the past so hopefully this will not require a lot of legwork to restart and will provide a good return on the effort needed.

Thank you for your attention to and interest in expanding recycling in our city!

Sincerely,

Charleston Green Team
Ted Armbrecht, Member
Linda Frame, Member
Patti Hamilton, Member
Justin Marlowe, Member
Pam Nixon, Advisor
Emmett Pepper, Chair
Rod Watkins, Member
James Young, Member

Cc: Councilman John Bailey, Chair of Environmental and Recycling Committee

ReImagine Appalachia

A NEW DEAL THAT WORKS FOR US

Appalachians have a long history of hard work, resilience, and coming together to face enormous challenges. Our region is a place of ingenuity. A place where families and neighbors look out for one another.

Now is the time to put our ingenuity to use and imagine a 21st century economy that works for the people in the Ohio River Valley of Appalachia. An economy that is good for working people, communities, our health and the health of our neighbors. One that is grounded in the land and centered on creating wealth locally. One that relies on working people, already skilled in service, industry, trades and farming. One that offers hope to the next generation's workers—regardless of the color of their skin, ethnicity or gender. And one that does our region's part to meet the nation's climate challenge, just as we met the call to provide coal energy to fuel a growing nation a century ago.

Right now, our nation is in crisis. We face the COVID epidemic, a deep economic downturn, extreme inequality, racism, police brutality, and the consequences of a changing climate such as severe storms and flooding. These crises demand from us real, lasting and structural change. It is not a matter of if, but when. When the nation rises to the occasion, people in Appalachia need to be at the table and helping to lead the charge. Together, we can build a vision for the Appalachia we want to live in.

Federal economic stimulus and national climate change legislation present opportunities to bring much needed federal resources into the region. Appalachia deserves its fair share.

For more than two centuries, corporations have extracted enormous wealth from our region for the profit of owners and shareholders while the region is left with high rates of poverty, unemployment and low wages. In the past, the people of Appalachia organized and rose up together to demand shared prosperity and improve their lives by fighting to end 72-hour work weeks, dangerous working conditions and low wages.

Despite these successes, absentee corporations continue to drain wealth from Appalachia. They use their power and influence to get policymakers to rig the rules in their favor, enabling their bad behavior: paying too many people in our region too little, abandoning their reclamation responsibilities and worker pensions, polluting our air and water, and making their workers and our neighbors sick, particularly Black, Indigenous and other communities of color. Coal corporations have left their mark on Appalachia, but in many ways, the people who live here have never truly reaped the benefits from our immense natural resources.

The people of the region, with the right federal resources, can build a 21st century Appalachia, where everyone has a good-paying job with good benefits and responsible employers help protect the environment and the health of the people who live in it.

We are building a framework to ReImagine Appalachia. This blueprint incorporates voices from across the region. The effort was convened by Policy Matters Ohio, a state-focused economic and policy research institute, and its sister organizations in West Virginia, Pennsylvania and Kentucky (West Virginia Center on Budget and Policy, Keystone Research Center and Kentucky Center for Economic Policy). We built off the grassroots effort to ReImagine Beaver County. PennFuture, West Virginia Rivers Coalition, Ohio Interfaith Power and Light, Breathe Project and the National Wildlife Federation were also key partners. We captured the expertise of both grasstop and grassroot leaders to reimagine the region in a virtual two-day convening as well as listening sessions for union leaders, racial and community justice advocates, environmental groups and others. The framework has already been endorsed by over 50 organizations representing the voices of residents across the four states of the Ohio River Valley—Ohio, West Virginia, Pennsylvania and Kentucky.

The conversations continue: Please add your voice to the vision and help us make the vision a reality.

A NEW DEAL THAT WORKS FOR US WOULD:

1. Expand opportunity through public investments:

- Maximize good union jobs.
- Provide fossil fuel workers with genuine opportunities doing the work.
- Ensure access to union jobs for Black, Indigenous, women and low-wage workers.
- Ensure community benefits from federal investments via public input and community oversight.

2. Build a 21st Century sustainable Appalachia:

- Restore our damaged lands and waters.
- Modernize the electric grid: Decentralize generation, increase use of clean energy and expand broadband.
- Grow manufacturing by making it cleaner and more efficient while also making Appalachia a hub for electric vehicle production and alternatives to single-use plastic.
- Build a sustainable transportation system and create new jobs for transit workers.
- Revive the Civilian Conservation Corps: Reforest the region, restore wetlands, promote regenerative agriculture and eco-tourism while simultaneously absorbing greenhouse gases with natural landscapes.

3. Rebuild the middle class:

- Promote union rights, better pay, benefits and local ownership models for working people across all industries in the region.

ReImagine
Appalachia

Expand opportunity through public investments

Transforming Appalachia into a 21st century sustainable economy—one that is good for workers, communities and our health—will require significant federal resources. We can and should accept nothing less given the immense wealth extracted from Appalachia over the past centuries. The Ohio River Valley of the Appalachian region has fueled the prosperity of other regions while we have suffered. Many of our communities rank in the bottom 10 percent nationally for their high unemployment and poverty rates and low incomes. The public investments needed in our region must come with strings attached to make sure they maximize good union jobs, ensure coal workers have a secure future, and build career ladders for new entrants into the workforce.

> We can and should accept nothing less given the immense wealth extracted from Appalachia over the past centuries.

Maximize good union jobs. Federal policymakers should attach requirements to public funds to maximize creation of good union jobs and require greater diversity and inclusion in our future workforce. Publicly-funded construction projects must require project labor agreements, prevailing wages and apprentice-utilization requirements, with a large share of apprentices coming from low-income, underrepresented communities. Publicly-subsidized companies—in construction and more permanent work—must also be required to honor workers' freedom to unionize and provide diverse workers the opportunity to enter rewarding careers in the unionized trades.

Ensure genuine opportunities for fossil fuel workers. The region's workforce can pivot to meet the needs of our 21st century economy. We just need to recognize that workers in extractive industries—mine workers, union electricians, laborers and other trades—have foundational skills that remain critically important in the work going forward. Fossil fuel workers should be targeted for new opportunities created from public investments.

Create access to good union jobs for low-wage workers, regardless of race or gender. Jobs created from public investments should give priority in hiring and training to coal workers, women, and Black, Indigenous and brown workers shut out by past discrimination in hiring, education, or opportunity. To fully harness the region's potential, the future of the Appalachian workforce must reflect the diversity of the Appalachian community. As in the rest of America, the contribution of these communities hasn't been acknowledged or valued. This must change. The new Appalachian economy must be built on basic principles of justice. Other communities have made these values real through targeted community benefit agreements and policies. Any large projects funded with public dollars should require a percentage of union apprentices to come from low-income neighborhoods near project sites and set aside 2% of any project's resources for registered pre-apprenticeship programs managed via labor-community partnerships to build the pipeline of diverse workers into union work.

Require public input and oversight of these federal investments. To set priorities for publicly-funded construction projects, state and local governments should create regional Community Benefit Advisory Panels. Federal policy guidance is needed for these Advisory Panels. They must include union labor, contractor, environmental, and community representatives, in addition to relevant public officials. They should be charged with considering a proposal's emissions reduction benefits as well as health, racial, and social equity impacts. Any identified negative impact of a project must be mitigated. They should establish responsible contractor policies to ensure workers have rights on the job, and to develop hiring pipelines and registered pre-apprenticeship opportunities. Over time, the Advisory Panel can study best practices and implement new policies based on lessons learned.

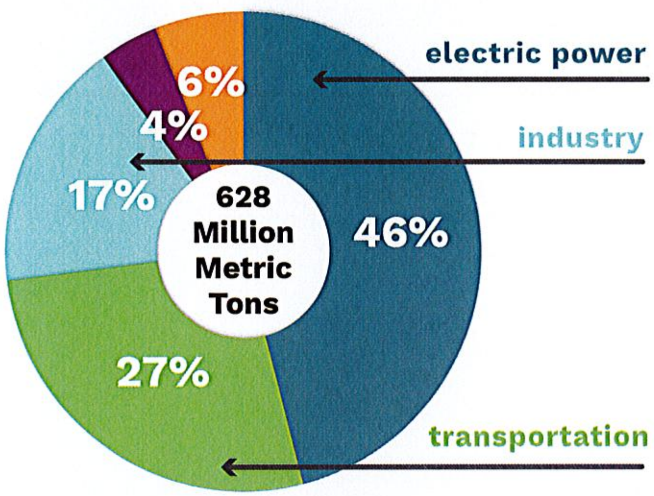
ReImagine
Appalachia

Build a 21st century sustainable economy

Appalachia can meet the climate challenge—achieving carbon neutrality by 2050—by first identifying where our emissions come from, how we use energy and where we spend our energy dollars.

1

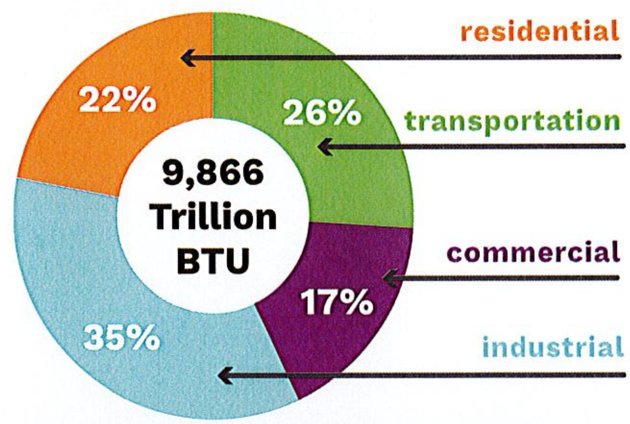
90%
OF THE REGION'S EMISSIONS COME FROM THREE SECTORS



The electric power industry in Appalachia's Ohio River Valley—Ohio, Pennsylvania, West Virginia, and Kentucky—accounts for 17% of all U.S. electric sector emissions.

2

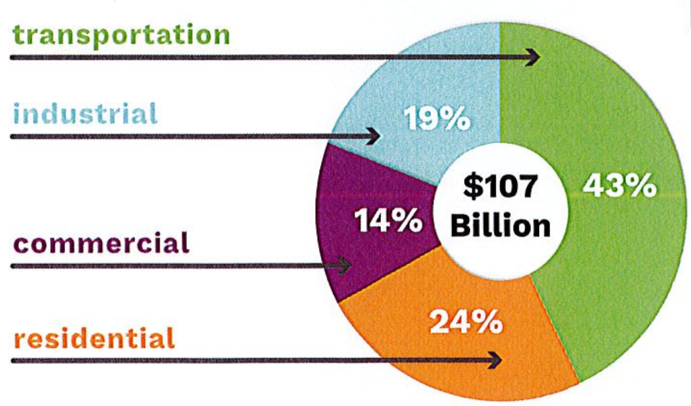
MANUFACTURING USES OVER
1/3
OF THE FOUR STATE REGION'S TOTAL ENERGY.



Factories run machines and tools by pulling in electricity from the grid. They also burn fossil fuels on-site to heat metals and chemicals.

3

NEARLY HALF (43%) OF THE $107 BILLION SPENT ON ENERGY IN 2017, ACROSS OUR FOUR-STATE REGION, GOES TO FUEL CARS AND TRUCKS.



Whether it's for industries to operate or for families to heat their homes, run errands or go to school and work, consuming energy is expensive. With the right investments in our energy systems, we can use our energy resources more wisely while saving money to pay our workers better or the rent. A 21st century sustainable, energy-wise economy in Appalachia requires aggressive upgrades to our electric grid, investments in the next generation of manufacturing, and a modern transportation system. We don't have to eliminate every single ton of greenhouse gas to achieve carbon neutrality by 2050. Appalachia's rich natural landscapes can absorb carbon via reforestation and wetland restoration while growing local farms and food networks.

Repair the damage done over the last century. We must demand our public officials take care of people who contracted black lung disease and other chronic health problems while working in extractive industries, and we must demand they hold the responsible corporations accountable. These workers must be able to retire with dignity, with the health care they need as well as the retirement pensions they deserve.

With federal funding, Appalachian communities can reclaim and remediate abandoned coal mines and coal ash ponds left behind at shuttered power plants, putting them back to good use while cleaning up the Ohio River and its watershed tributaries. Orphaned oil and gas wells must also be capped.

Climate change is already causing damage in the Ohio River Valley. Severe storms have damaged our infrastructure and flooded our homes, communities, and farms, and made people sick. Heat waves exacerbate asthma, cause heat exhaustion and dehydration, impacting seniors, infants, children and pregnant women in particular. Longer and more intense allergy seasons while flooding contaminates our drinking water, increases rates of Lyme disease and mosquito-borne illnesses, affects farm crop yields and access to healthy foods.

The public investments we make today to stem climate change will pay off in the long run by protecting our health and the health of future generations. In the short run, we must demand our leaders address the climate impacts we face today. For example, making our electric grid less susceptible to outages and storm damage can create good union jobs by putting people to work. Repairing dams to control flooding and investing in building natural infrastructure to absorb water overflows will require a workforce with a variety of skills. Solving the climate crisis is a reemployment plan for the Ohio River Valley and an investment in the region's future.

Modernize the electric grid. The Rural Electrification Program, a New Deal innovation, brought electricity to rural areas in Appalachia and the South, where there was no market or financial incentive for private capital to invest. This publicly funded venture transformed the region and built many of the electric co-ops that still serve Appalachian communities today. It also left many behind. Co-op boards and utility coverage frequently excluded Black residents as well as white residents from more remote parts of the region, deepening race and class inequality.

It is time for an upgrade: the Rural Grid Modernization Program. Policymakers must invest in a modern rural grid that brings efficient and affordable energy to industries and families. Like the Rural Electrification Program, this program will create tens of thousands of construction, maintenance and utility jobs. Unlike the Rural Electrification Program, this time policymakers must make sure the investment benefits all of us, no matter what we look like or where we live.

Appalachia helps power the nation, but the electric grid in our region needs a serious upgrade. Three lumps of coal generate only one lump worth of electric power. We waste the others in generation and transmission, increasing costs and unnecessarily polluting the air we breathe. It makes us broke and sick. We need a smarter grid, with more efficient and decentralized generation built by union labor, including utility-scale solar farms on remediated brownfields. We also need investments in energy storage for renewable resources.

High quality, affordable broadband is foundational for a prosperous 21st century Appalachia. Children and families—and the local businesses, schools and health care institutions that serve them—require broadband to ensure their well-being. All Appalachians, regardless of their income or race, must be able to access the internet. Universal broadband is also necessary for a smart grid.

Residential and small business energy efficiency programs create a win-win-win by reducing energy usage and emissions, lowering energy bills and creating jobs. The federal Weatherization Assistance

Program is an example of how public policies can solve problems for both people and the environment. The program improves homes of people with low incomes, helping them make ends meet by saving on energy costs. We can also enlist folks in low-income communities to help do the work at prevailing wages. This program should be significantly expanded.

Invest in cleaner and more efficient manufacturing. Our vision expands manufacturing in Appalachia. Shuttered coal plants can be repurposed into eco-industrial parks that use circular manufacturing methods to turn one company's waste into another's raw material. Coal plant boilers and turbines at existing sites can be repurposed for combined heat and power purposes, providing a more efficient way to meet the heat and power needs of manufacturers, by capturing waste heat generated during the production of electricity. Industrial assessment centers and manufacturing energy partnerships can provide low-cost industrial energy audits and energy-efficiency training for the workforce. To help manufacturers modernize, the federal government should also promote labor-management partnerships and manufacturing apprenticeships.

With public funding to retool existing facilities, Appalachia could be a hub for creating the responsible products of the future, such as alternatives to single-use plastic, green building materials, or the electric vehicle supply chain. As the world demands more socially and environmentally conscious products, we are well-positioned to rise to the occasion. Plastic alternatives can even be made from farm-grown resources in the region, such as industrial hemp.

Unfair trade practices and policies encourage corporations to hold down workers' wages and cut corners on protecting our health and the environment. Federal policymakers should enact a border tax on countries that have lower wage, safety and environmental standards than the U.S. It's time to take the high road with our trade policies rather than taking part in a race to the bottom.

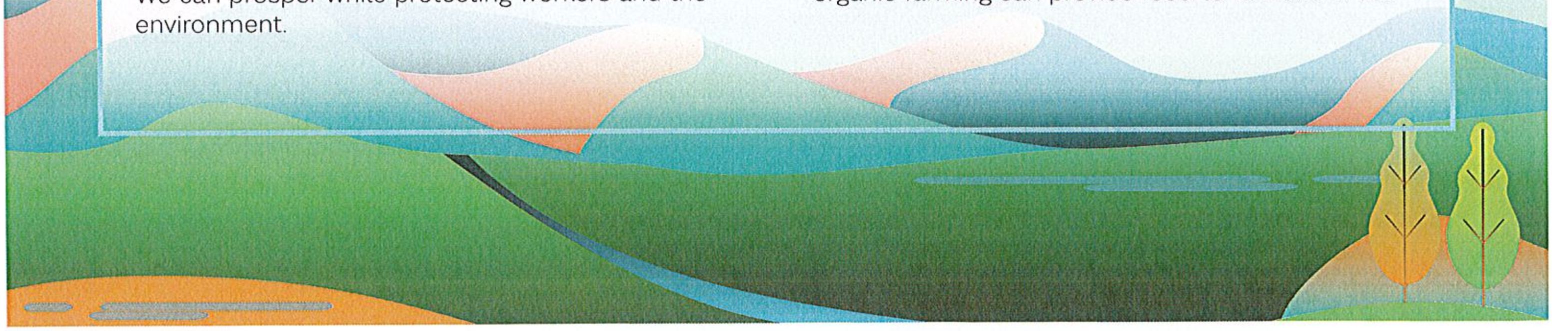
Appalachia has all the tools to be an economic powerhouse—from repurposing the infrastructure of the past, to building the products of the future. We can prosper while protecting workers and the environment.

Build a sustainable transportation system. In 2017, nearly half of the $107 billion spent on energy across our region went toward transportation—about $47 billion. Most of it pays for fuel imported from elsewhere. Federal policymakers can help us build local wealth and put tens of thousands of people to work upgrading existing rail and laying new lines for an Appalachian corridor, expanding public transportation and building electric vehicle infrastructure such as charging stations. These are investments policymakers should start making now. The shift to electric vehicles also needs to include consumer subsidies (e.g. "cash for clunkers") so that rural farmers, public transit systems, construction trades, and other workers with long commutes can afford these more efficient electric vehicles and stop sinking considerable shares of the family budget into the high cost of gas. An Appalachian rail corridor, connecting rural areas to the urban core, can provide a less expensive form of transportation for longer-distance travel, while reducing the energy dollars we spend on petroleum products imported from outside the region.

Absorb carbon with natural landscapes, revive the Civilian Conservation Corp. With its abundance of trees, wetlands, farmland and plants, Appalachia is rich in carbon-absorbing natural resources. Investments in our natural infrastructure to support "carbon farming" would move us toward carbon neutrality by absorbing more greenhouse gases. Public spending on natural infrastructure could also create cheaper, better ways to protect and purify our water supply, support nature-based recreation and tourism and grow the local economy. Prior generations made similar investments.

During the Great Depression, the New Deal's Civilian Conservation Corps put 3 million unemployed people (including 85,000 Native Americans) to work planting over 3 billion trees, restoring 80 million acres of farmland and about 4,000 historic structures, and much, much, more. We must resurrect this federal job creation program.

Reviving the New Deal's Civilian Conservation Corps could put people to work restoring wetlands, planting millions of diverse, native plants and trees (especially hardwoods and food trees), reforesting the region and removing the most invasive trees and shrubs. A modern CCC could protect the climate, create decent work, restore the land and improve public health by promoting healthier diets. Local organic farming can provide food to families in the



food-insecure areas of Appalachia. We need to enhance the availability, affordability and familiarity of locally grown and plant-based foods.

Instead of giving away subsidies to big ag corporations that degrade the land, federal policymakers can foster regenerative farming practices and support local farmers and food networks. Regenerative agriculture—e.g. planting cover crops, reducing pesticides, capturing animal-produced methane, and other organic methods that increase biodiversity—can yield more income and lower expenses for farmers, while also absorbing carbon in our soil.

Sustainable practices are a natural fit for the region's farmers, who do not want to harm the land they pass to future generations.

The value of the Civilian Conservation Corps program could be increased by targeted hiring of returning citizens caught up in the ill-considered "war on drugs" and opioid crisis, incarcerated for being sick with addiction rather than getting the treatment they needed. Public investments can protect the environment, restore our health, and rebuild lives.

ReImagine **Appalachia**

Rebuild the middle class: Union rights, better pay, local ownership

Even in a sustainable, 21st century Appalachia, most jobs, and a large share of low-wage jobs, will continue to be in service and other local industries tied to our communities where their customers and workers live. These industries include many businesses employing essential workers—such as health care, grocery and retail stores, restaurants, distribution and package delivery, and early childhood education. These industries also employ a large share of women, many of whom are Black, Indigenous and other people of color. We cannot restore shared prosperity or achieve racial and gender justice without improving the pay and benefits of these jobs. We must demand our policymakers substantially raise the minimum wage and give workers in all industries the freedom to collectively bargain to raise their wages and improve their benefits. Our workforce also needs access to universal health and child care.

The only way to rebuild the middle class is by building from the bottom-up. Policy should also support multiple forms of local ownership, including cooperatives, worker ownership, and networks. And going forward, these workplaces must be located in areas more accessible by public transit and connected to safe routes for people who bike and walk, like rural town centers.

THE CAMPAIGN: A NEW DEAL THAT WORKS FOR APPALACHIA

The campaign to Reimagine Appalachia is building a better future for our region. For decades, we have been denied this future by policies crafted by and for distant corporations and the wealthiest 1%. Some of these corporations may pose as blue-collar workers' friends, but finance anti-worker, anti-union, anti-environment policies designed to keep us struggling and divided while lining their pockets. Even before the coronavirus, if you asked most working people in our region "Is this economy working for you?" they would answer: "No."

Appalachia can do better—and should—but not by believing extractive corporations that failed us for a century will finally share prosperity in the 2020s. Never have. Never will.

Appalachia has all the right ingredients to lead the United States toward economic recovery. Our region can build a strong and lasting economy based on investments in a clean economic future that puts workers first, respects our communities, takes care of the land, and grows local wealth.

Bottom line

The work of Reimagine Appalachia is time sensitive. Federal policymakers are already designing stimulus and infrastructure packages to lift us out of the COVID depression, work that is likely to intensify after the presidential election. In addition, long-overdue debates about climate legislation and racial justice are intensifying.

The United States will rebuild and retool—it is already starting —and it is vital that the people of Appalachia have a say in how that happens. Appalachia needs to be at the table or we will be on the menu.

It's time. Let's create a New Deal that WORKS for us.

Join with us to help reimagine Appalachia into the world we want to live in and leave to our future generations. Visit ReImagineAppalachia.org to learn how.

List of current endorsers

Appalachian Citizens' Law Center (ACLC)
Appalachian Voices
Appalshop
Art of Pieces
Ashtabula County Young Democrats
Athens County's Future Action Network
BCMAC-Beaver County Marcellus Awareness Community
Black Women Rising
Breathe Project
Center for Energy & Sustainable Development, WVU College of Law
Children's Defense Fund-Ohio
Climate Reality Pittsburgh
Communities First Sewickley
Concerned Ohio River Residents
Congress on Faith and Justice
Earthworks
Foundation for PA Watersheds
FracTracker
Freshwater Accountability Project
Institute for Sustainable Power
Izaak Walton League of America-Allegheny County
Kentucky Center for Economic Policy
Kentucky Resources Council, Inc.
Kentucky Waterways Alliance
Keystone Research Center
Mid-Ohio Valley Climate Action
Mountain State Justice
National Association of Social Workers West Virginia Chapter
National Wildlife Federation
New Morning Energy, LLC
Ohio Environmental Council
Ohio Interfaith Power & Light
Ohio Valley Environmental Coalition
PASA Sustainable Agriculture
PennFuture
Pennsylvania Budget and Policy Center
Pennsylvania Council of Churches
Planned Parenthood South Atlantic
Plant-Based Pittsburgh
Policy Matters Ohio
Powhatan Point Church of the Nazarene
Protect PT (Penn-Trafford)
ReImagine Beaver County
ReImagine Butler County
Revolt Energy
RiverWise
Slippery Rock University Sustainable Enterprise Accelerator
Solar United Neighbors
SWPA Environmental Health Project
The Battle of Homestead Foundation
Thrive At Life: Working Solutions
West Liberty University
West Virginia Center on Budget & Policy
West Virginia Environmental Council
West Virginia Headwaters Waterkeeper
West Virginia Interfaith Power and Light
West Virginia National Organization of Women
West Virginia Rivers Coalition
WV Citizen Action

WEST VIRGINIA JOB IMPACT BRIEF
FEBRUARY 2021

ReImagine
Appalachia

Sustainable Development

ReImagine Appalachia blueprint creates 41,000 jobs in West Virginia

Summary of results from PERI economic recovery program analysis

Introduction

Appalachians have never been afraid to roll up their sleeves and put in hard work. But for too long, certain politicians and their corporate backers have rigged the rules in their favor. They've exploited workers, scarred the land, and made our neighbors sick. Now is the time to come together to reimagine a 21st century economy for the Ohio Valley that is good for workers, communities, the environment and our health.

Earlier this year, the ReImagine Appalachia Coalition unveiled its policy blueprint. The plan shows how federal resources can support high quality jobs in sustainable manufacturing, a modern Civilian Conservation Corps and by building out the region's broadband infrastructure. Now a new study from the Political Economy Research Institute at the University of Massachusetts-Amherst shows that the blueprint could provide good jobs for over 41,100 West Virginians every year for the next 10 years. This paper summarizes the report's findings.

Whether it's one year, or five years from now: National climate change legislation will happen. The worse the economy gets, the more likely there will be a federal economic stimulus package. When that happens—when our federal leaders rise to the occasion—Appalachians need to be at the table.

By enacting the blueprint, federal leaders could create 41,000 West Virginia jobs.

A federal investment package with annual average allocations of $1.6 billion to West Virginia, from 2021 to 2030, along with an additional $3.6 billion in private investments, would generate approximately 41,100 jobs in West Virginia — enough to bring West Virginia's high unemployment rate down to 3 percent.

These federal investments would not only represent a counterforce to the economic collapse associated with COVID-19, they would also build the foundation for a more sustainable and vibrant Appalachia going forward. One that builds local wealth. The average household would also spend 30-40% less on energy.

The investment amounts, job numbers and compensation figures outlined in this brief is entirely based on the work of Robert Pollin, Jeannette Wicks-Lim, Shouvik Chakraborty, and Gregor Semieniuk in the Department of Economics and Political Economy Research Institute at University of Massachusetts-Amherst (October 2020), entitled Impacts of the ReImagine Appalachia & Clean Energy Transition Programs for West Virginia: Job Creation, Economic Recovery, and Long-Term Sustainability.

Our Strategy for Job Creation

Expand Opportunity through Public Investments: By urging our federal leaders to drive federal resources into Appalachia for needed infrastructure improvements, and attaching requirements for strong wages, benefits, diversity requirements and union rights, we can create good union jobs. Federal policy can also give people moving out of extractive industries priority for jobs created, while building pathways into union jobs and family-sustaining careers for women, Black people, indigenous people, and other people of color.

Build a 21st Century Sustainable Appalachia:

National climate change legislation and federal economic stimulus packages are opportunities to bring much-needed resources into our region. The information below represents the number of jobs that can be created, in West Virginia, if policy and policymakers sent a fair share of future climate change stimulus package to the region and ensured it is designed to meet the needs of the people living in Appalachia, not just the needs of corporations.

Repair Damage Done over the Last Century:

Clean up abandoned properties and put them back to good use. And provide health care and secure pensions for coal workers, especially those with black lung disease.

Table 1

Repairing the Damage Job Creation through Annual Spending of $520 million

$520 million in federal investment creates more than 3,320 West Virginia jobs annually

	Spending amounts	Direct jobs	Indirect jobs	Direct + indirect jobs	Induced jobs	Direct, indirect + induced jobs	Average total compensation
Plugging orphaned oil and gas wells	$200 million	380	320	700	280	980	$101,100
Gas distribution pipe-lines—repairing leaks	$160 million	224	272	496	224	720	$128,400
Dams/levees	$160 million	1,056	208	1,264	416	1,680	$66,200
TOTALS	**$520 million**	**1,660**	**800**	**2,460**	**920**	**3,380**	

Source: *PERI: Impacts of the ReImagine Appalachia & Clean Energy Transition Programs for West Virginia*

Modernizing the Grid

FEDERAL INVESTMENT REQUIRED

$272.5 million

LEVERAGED PRIVATE INVESTMENT

$2.45 billion

TOTAL INVESTMENT

$2.73 billion

JOBS CREATED

15,740

Modernize the Electric Grid: By upgrading our antiquated electric system, decentralizing generation, expanding broadband, and making our homes and businesses more energy efficient, the state can cut emissions, save money and create new jobs.

Table 2

Modernizing the Grid Job Creation through Total Annual Spending of $2.7 billion

$273 million federal investment creates nearly 15,740 West Virginia jobs annually

	Spending amounts	Direct jobs	Indirect jobs	Direct + indirect jobs	Induced jobs	Direct, indirect + induced jobs	Average total compensation
Electrical grid upgrades	$345 million	1,001	173	1,173	414	1,587	$74,300
Building retrofits	$920 million	3,680	1,748	5,428	1,656	7,084	$66,400
Solar	$390 million	585	195	780	273	1,053	$76,700
Onshore wind	$195 million	234	59	293	117	410	$77,000
Low-emissions bioenergy	$195 million	585	78	663	215	878	$63,000
Geothermal	$260 million	1,222	312	1,534	494	2,028	$68,200
Small-scale hydro	$260 million	1,430	234	1,664	572	2,236	$68,900
Broadband	$160 million	224	128	352	112	464	$80,300
TOTALS	**$2.73 billion**	**8,961**	**2,927**	**11,887**	**3,853**	**15,740**	

Source: *PERI: Impacts of the ReImagine Appalachia & Clean Energy Transition Programs for West Virginia*

Expand Manufacturing by Making it More Energy Efficient and Clean: Federal investments can repurpose shuttered coal plants, turning them into eco-industrial parks. Together, we can spur more energy efficient manufacturing and reduce operating costs in a way that doesn't involve lowering wages.

Energy Efficient Clean Manufacturing

FEDERAL INVESTMENT REQUIRED

$195 million

LEVERAGED PRIVATE INVESTMENT

$311 million

TOTAL INVESTMENT

$505 million

JOBS CREATED

1,930

Table 3

Growing Clean and Efficient Manufacturing

$195 million in federal investment creates over 1,930 West Virginia jobs annually							
	Spending amounts	Direct jobs	Indirect jobs	Direct + indirect jobs	Induced jobs	Direct, indirect + induced jobs	Average total compensation
Industrial efficiency, including combined heat and power	$345 million	690	173	863	380	1,242	$91,500
Manufacturing R&D	$160 million	320	192	512	176	688	$71,700
TOTALS	**$505 million**	**1,010**	**365**	**1,375**	**556**	**1,930**	

Source: *PERI: Impacts of the ReImagine Appalachia & Clean Energy Transition Programs for West Virginia*

Build a More Sustainable Transportation System: By laying rail and expanding infrastructure for electric vehicles fueled by renewables, policy and investment can create good jobs while putting half of our region's energy dollars to better use and create new jobs for transit workers and laborers.

Sustainable Transportation

FEDERAL INVESTMENT REQUIRED

$69 million

LEVERAGED PRIVATE INVESTMENT

$621 million

JOBS CREATED

8,280

Table 4

Sustainable Transportation Job Creation through Total Annual Spending of $690 million

$69 million federal investment creates 8,280 West Virginia jobs annually							
	Spending amounts	Direct jobs	Indirect jobs	Direct + indirect jobs	Induced jobs	Direct, indirect + induced jobs	Average total compensation
Public transportation expansion/upgrades, including rail	$460 million	6,670	552	7,222	1,058	8,280	$26,500
Expanding high efficiency automobile fleet	$230 million	0	0	0	0	0	
TOTALS	**$690 million**	**6,670**	**552**	**7,222**	**1,058**	**8,280**	

Source: *PERI: Impacts of the ReImagine Appalachia & Clean Energy Transition Programs for West Virginia*

Civilian Conservation Corp

FEDERAL INVESTMENT REQUIRED

$760 million

JOBS CREATED

11,612

Relaunch the Civilian Conservation Corps (CCC): The absorption of carbon, when done via carbon farming, can put people to work expanding our forests, wetlands and sustainable farms. This work can help heal our society by creating hiring priorities for returning citizens caught up in the "war on drugs" and the opioid epidemic. Reviving the CCC can create pathways to family sustaining jobs for those facing labor market discrimination.

Table 5

Carbon Farming Job Creation through Total Annual Spending of $760 million

$760 million federal investment creates 11,612 West Virginia jobs annually

	Spending amounts	Direct jobs	Indirect jobs	Direct + Indirect jobs	Induced jobs	Direct, Indirect + Induced jobs	Average total compensation
Water/wastewater/ Inland waterways	$160 million	784	208	992	320	1,312	$65,600
Land restoration	$200 million	1,200	280	1,480	480	1,960	$66,400
Regenerative agriculture	$200 million	6,360	400	6,760	80	6,840	$1,100
Farmland conservation	$200 million	980	180	1,160	340	1,500	$60,100
TOTALS	**$760 million**	**9,324**	**1,068**	**10,392**	**1,220**	**11,612**	

Source: *PERI: Impacts of the ReImagine Appalachia & Clean Energy Transition Programs for West Virginia*

Table 6

Definitions: Direct, Indirect, and Induced Job Creation
Reprinted from page 41 of PERI: A Program for Economic Recovery

[W]e need to briefly describe the three channels through which jobs will be generated through clean energy investments. In fact, these three sources of job creation will be associated with any expansion of spending in any area of the economy, including clean energy investments. They are: direct, indirect, and induced employment effects. For purposes of illustration, consider these categories in terms of investments in home retrofitting or installing solar panels:

1. Direct effects—the jobs created, for example, by retrofitting buildings to make them more energy efficient or installing solar panels;
2. Indirect effects—the jobs associated with industries that supply intermediate goods for the building retrofits or solar panels, such as glass, steel, and transportation. In other words, indirect effects measure job creation along the clean energy investment supply chain;
3. Induced effects—the expansion of employment that results when people who are paid in the construction or steel industries spend the money they have earned on other products in the economy. These are the multiplier effects within a standard macroeconomic model.

Other priorities: Combatting negative impacts on fossil fuel industry workers: There are roughly 42,200 West Virginians working in fossil-fuel based industries, including in oil and gas extraction, coal mining and refineries. The PERI analysis, driven by emissions reductions that come in part from reduced energy consumption of high-emission fuels, determined that by the year 2030, there would be 20,100 fewer fossil-fuel industry workers—half of whom would retire, but half of whom would require re-employment.

Each year, for the next 10 years, roughly 1,400 workers will deserve priority status for re-employment in jobs created via national climate change legislation. In addition, it is important to recognize the average annual compensation for workers in the fossil fuel industry, about $77,000, is higher than the compensation found in most jobs listed above. The PERI analysis recommends, among other things, income support from supplemental wage insurance for any difference in pay levels that result from moving into cleaner energy industries. Some additional training for new work may also be necessary. For this purpose, federal funding should be allocated towards union apprenticeship programs providing continued learning opportunities.

Conclusion

Our work is time sensitive. We are experiencing one of the most divisive and difficult times in our nation's history. But there is also opportunity. We can use this moment to Reimagine Appalachia. Federal policymakers will be passing major legislation that will shape the future of our nation. Our blueprint creates a vision for a 21st century sustainable Appalachia, and identifies the federal resources needed to get from where we are to where to we need to go. The findings of this study underscore what we already know - a better future is within reach, if we are willing to work for it. We're working to ensure the people of Appalachia have a say in how our region rebuilds. Join us in defining our future.

Efficient Power, Good Jobs: Table 7 describes jobs associated with investments to modernize the grid, promote cleaner and more efficient manufacturing, and upgrade our transportation system to make it more sustainable.

Table 7

Modernizing grid, industry and transportation creates jobs

Modernizing the Grid: Increasing efficiency in electric generation, and getting power from local renewable energy sources	Upgrading the grid, reducing waste heat	Energy engineers, electricians, electrical power-line installers and repairers, boilermakers, power distributors and dispatchers, stationary engineers and boiler operators, pipe fitters and steamfitters, power plant operators, service unit operators, service unit operators, storage and distribution managers
	Wind and solar power	Environmental, mechanical, and electrical engineers and technicians, electricians, installation technicians, helpers, managers, laborers, construction operators and managers, iron and steel workers, millwrights, sheet metal workers, metal fabricators, welders, machinists, electric equipment assemblers, construction equipment operators, industrial production managers, first-line production supervisors, industrial truck drivers, solar assessors
	Methane Digesters, Geothermal, Fuel Cells, Water power	Methane/landfill gas collection and capturing, generation system engineers, installers. project fuel managers and operators, production managers and technicians, engineers and technicians, hydrologists, hydroelectric production managers, and plant technicians
Clean & Efficient Manufacturing	Eco-Industrial Parks	Energy Managers/Sustainability officers, Green Marketers, Refuse and Recyclable Material Collectors, Hazardous Materials Removal Workers, Brownfield Redevelopment Specialists and Site Managers, Commercial and Industrial Designers, Industrial engineers, architectural drafters, Landscape Architects, Soil and Plant Scientists, water and soil conservationists, Marketing Managers, supply chain manager, Electrical and Electronics Repairers, Commercial and Industrial Equipment, Industrial Production Managers, Industrial Ecologists, and sustainable design specialists, Water Resource Specialists, and water/wastewater engineers, Industrial Machinery Mechanics, and Repair Workers, Helpers--Installation, Maintenance, and Repair Workers, Transportation Managers, Logistics Analysts, engineers, and managers, Production, Planning, and Expediting Clerks, Shipping, Receiving, and Traffic Clerks, Transportation Vehicle, Equipment and Systems Inspectors, Maintenance
Sustainable Transportation	Freight rail	Civil engineers, rail track layers, electricians, welders, metal fabricators, first-line transportation supervisors, dispatchers, railroad conductors and yardmasters, laborers and freight, stock, and material movers, engine assemblers, production helpers
	Energy-efficient automobiles	Computer software engineers, electrical engineers and technicians, welders, transportation equipment painters, metal fabricators, computer-controlled machine operators, engine assemblers, production helpers, operations managers

Sources: Pollins & Wicks-Lim, Political Economy Research Institute (PERI), UMass, Job Opportunities in the Green Economy (2008); Bureau of Labor Statistics at http://www.bls.gov/green/greencareers.htm#greendata

ReImagine Appalachia

2021

The Honorable Sherrod Brown
United States Senate
Washington, DC 20002

The Honorable Shelley Moore Capito
United States Senate
Washington DC 20510

The Honorable Robert P. Casey, Jr.
United States Senate
Washington, D.C. 20510

The Honorable Joe Manchin, Jr.
United States Senate
Washington DC 20510

The Honorable Mitch McConnell
United States Senate
Washington, DC 20510

The Honorable Rand Paul
United States Senate
Washington DC, 20510

The Honorable Rob Portman
United States Senate
Washington, DC 20510

The Honorable Pat Toomey
United States Senate
Washington DC 20510

Re: Urgent Action Needed to Support Appalachia Climate Infrastructure Plan

Dear United States Senators of Kentucky, Ohio, Pennsylvania and West Virginia,

As elected executives representing hard-working communities across our great states, **we collectively endorse the ReImagine Appalachia coalition, and a federal Appalachia Climate Infrastructure Plan**. This is an unprecedented opportunity to create a 21st Century Economy that works for us all.

We urge you to join us to support this plan and **help us build a just and equitable economy** that celebrates our culture and heritage, values the contributions of coal miners and other fossil fuel industry workers, and can ensure that from this moment forward, every individual can have a good-paying job with good benefits and responsible employers who help protect the environment and health of the people.

ReImagine Appalachia is a diverse coalition of community, labor, and environmental leaders dedicated to creating shared prosperity in a 21st Century Appalachia. Through this endorsement, **we join the over 100 other organizations in the region** who have endorsed this Appalachia Climate Infrastructure Plan.

The COVID-19 pandemic and the resulting economic downturn have exacerbated already high levels of poverty in the region due to extractive industry practices of absentee corporations, while racism and mass incarceration create ongoing barriers to employment, opportunity and personal safety, and the consequences of changing climate are creating severe storms and flooding in the region. With this, **our state and nation have been thrust into crisis.**

But there is hope: by passing and enacting this federal Appalachian Climate Infrastructure Plan, we will expand opportunity through public investments, grow manufacturing jobs, restore our damaged land and waters through reclamation and remediation, modernize the electric grid, incorporate universal broadband, and revive the Civilian Conservation Corps. **The number of family sustaining jobs created in these emergent industries could top 243,000 in Pennsylvania, 235,000 Ohio, and 41,000 in West Virginia.**

We know a new deal for us supports union rights, second chance employment, better pay and benefits, and local ownership models that rebuild the middle class. That's why **we support Reimagine Appalachia efforts to build a 21st Century Economy that's good for workers, communities, and the environmen**t. Your action to support this plan is a crucial step to making meaningful progress in one of the most challenging moments in our region's history. We as mayors and executives are eager to work with you to meet this challenge.

Sincerely,

Mayor / Executive Here

CC: Relevant Congressional House Members