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# TACKLING THE CLIMATE CRISIS IN WEST VIRGINIA

*“Never before have we had so little time in which to do so much.”*

– Franklin Roosevelt

We are feeling the effects of climate change in West Virginia right now – in deadly flooding and more severe storms, in changing weather patterns, and in impacts to agriculture and our home gardens. In fall of 2019, all of West Virginia was under a state of emergency for drought, just months after several counties were under a state of emergency for flooding. We watch as wildfires rage from California to Australia and as Florida, the Gulf Coast and Puerto Rico are devastated by hurricanes.

We know that this problem is only getting worse and that – as always – those who will be most impacted are those with the least resources to deal with it.

**HERE IN WEST VIRGINIA,  
OUR CHILDREN AND  
GRANDCHILDREN CAN  
EXPECT UP TO A 10 DEGREE  
INCREASE IN AVERAGE  
TEMPERATURE BY 2100,  
COMBINED WITH MORE  
FREQUENT DROUGHTS  
AND MORE EXTREME HEAT  
WAVES, FLOODING  
AND TORNADOES.**

With the 1.8 degrees F of global warming that have already occurred,<sup>1</sup> we are seeing deadly consequences all over the world as our climate becomes increasingly unstable and heat waves, fires, droughts, floods, hurricanes and sea level rise endanger millions of lives. Yet we are on track for more than another degree of warming by 2050 and close to 6 degrees of warming by 2100, more than three times what we have seen to date.<sup>2</sup> We know that this would result in millions of deaths around the world and a refugee crisis on a scale that we have never seen before. Here in West Virginia, our children and grandchildren can expect up to a 10 degree increase in average

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<sup>1</sup> IPCC, 2018: [Summary for Policymakers](#). In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. 2019, p. 4 (1 degree C = 1.8 degrees F)

<sup>2</sup> Ibid. p. 6 and p. 18

temperature by 2100, combined with more frequent droughts and more extreme heat waves, flooding and tornadoes.<sup>3</sup>

This future is unacceptable.

Scientists tell us, in no uncertain terms, that we must transition away from fossil fuels as quickly as possible if we are going to leave a livable, stable planet for our children, grandchildren and future generations<sup>4</sup>. Scientists warn that the level of effort needed to avoid the worst impacts of climate change requires “transformative, systemic change.”<sup>5</sup>

We have let this problem go unaddressed for so long because, for decades, fossil fuel executives funded misinformation and bought off politicians to keep raking in profits. It is past time to treat climate change like the emergency it is. Continuing to bury our heads in the sands will benefit only a wealthy few.

At this point, addressing climate change at the scale of the problem will require a national mobilization and large-scale federal investment. We have seen such massive efforts before, in the 1930s and 1940s when the U.S. mobilized to fight fascism and lift ourselves out of the Great Depression.

## **A NATIONAL COMMITMENT TO CLIMATE CHANGE MUST RECOGNIZE THE DEBT THAT THIS COUNTRY OWES TO APPALACHIA.**

We must make a national commitment to addressing climate change in a way that supports rural communities and others historically left out of our economy, like West Virginia. Addressing climate change doesn't mean just investing in wind and solar. It means making our houses and buildings more efficient, upgrading our infrastructure to withstand more severe storms, expanding public transportation, transforming agricultural practices and supporting small farmers, and more. We can put millions of people to work making our communities sustainable and resilient.

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<sup>3</sup> WVU, “[Hotter, Wetter, Drier: WVU research forecasts an uptick in extreme weather, temperatures in West Virginia.](#)” August 6, 2019.

<sup>4</sup> The only option for the continuing large-scale use of fossil fuels is the development of new, cost-effective technologies to remove carbon from the atmosphere and/or to capture and store carbon from fossil fuel use.

<sup>5</sup> de Coninck, H., A. Revi, M. Babiker, P. Bertoldi, M. Buckeridge, A. Cartwright, W. Dong, J. Ford, S. Fuss, J.-C. Hourcade, D. Ley, R. Mechler, P. Newman, A. Revokatova, S. Schultz, L. Steg, and T. Sugiyama, 2018: [Strengthening and Implementing the Global Response](#). In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [MassonDelmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)].

A national commitment to climate change must recognize the debt that this country owes to Appalachia. For decades, our coal and natural gas powered the country, bringing great wealth to a few but never lasting prosperity for the people of West Virginia. West Virginia is perpetually among the poorest states in the country. Climate change is one argument among many for the need to move away from the boom and bust, extractive economy that has always dominated our state.

Our “Creating Economic Security for the 21<sup>st</sup> Century” paper provide more details on how to transition away from this boom and bust cycle in our state. We have the opportunity, in the context of a national conversation about climate change, to have a seat at the table and demand the resources to ensure that this transformation results in a stronger economy for West Virginia. Cathy will support a Green New Deal that recognizes the debt that the rest of the country owes to West Virginia and invests in our people and revitalizing our economy.

Additionally, as described below, Cathy will fight to bring the benefits of a clean energy economy to West Virginia and to ensure that we have the resources we need to cope with the worsening impacts of climate change.

## BRINGING CLEAN ENERGY TO WEST VIRGINIA

Thanks in large part to the coal industry lobby, West Virginia has never had strong policies in place to promote the growth of energy efficiency and renewable energy. As a result, our state lags far behind all of our neighboring states:

- West Virginia has less than half as much solar installed per person than any other surrounding state.
- We are consistently ranked at or near the bottom of all 50 states in terms of energy efficiency, and we are ranked 48<sup>th</sup> in per capita jobs in this sector.<sup>6</sup> West Virginia is missing out on the potential to lower electricity costs, make utility bills more affordable and create jobs in weatherization, energy efficient manufacturing and more. We are ranked 48<sup>th</sup> in per capita jobs in energy efficiency.
- The Mountain State has great untapped potential in geothermal energy; we are home to the largest geothermal hotspot in the eastern U.S.<sup>7</sup> So far, there has been limited effort to develop this resource, but West Virginia could become a leader in geothermal.

In Congress, Cathy will support:

- **A federal commitment to incentivize clean energy and energy efficiency investments in areas hardest hit by the decline of the fossil fuel industry.** This must include a requirement that any clean energy project receiving federal support pay prevailing wages and implement a project labor agreement.

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<sup>6</sup> Building Performance Association and American Council for an Energy Efficient Economy, [Comments in West Virginia Public Service Commission Case No. 19-0396-E-P](#), August 20, 2019.

<sup>7</sup> D. Tyson, [“Geothermal Energy, W.Va’s Next Big Energy Sector?”](#), The Register-Herald, February 28, 2016.

- **Greater funding for the Weatherization Assistance Program and modernization of our state's energy laws to allow for community solar and power purchase agreements.** This would make the benefits of energy efficiency and rooftop solar more accessible to all.
- **Requiring that any energy projects receiving federal dollars or loan guarantees pay prevailing wage.**
- **An end to federal subsidies to the fossil fuel industry.**

## **ECONOMIC REVITALIZATION FOR ALL**

**WE MUST DEMAND THE  
FEDERAL RESOURCES  
NECESSARY TO REVITALIZE  
OUR ECONOMY, CREATE  
JOBS IN NEW SECTORS AND  
ENSURE THAT WORKERS IN  
THE FOSSIL FUEL INDUSTRIES  
ARE NOT LEFT BEHIND.**

The transition from fossil fuels to renewable energy is already well underway and has not been managed at all in West Virginia. Our state must demand better. In addition to growing the new energy sectors of our economy, we must demand the federal resources necessary to revitalize our economy, create jobs in new sectors and ensure that workers in the fossil fuel industries are not left behind.

Economic revitalization must include:

- Significant federal infrastructure investment, to create jobs and to lay the foundation for growth in other sectors, including tourism, agriculture, healthcare and tele-medicine, and more;
- Community-led economic development initiatives, including redeveloping the many abandoned former industrial and government sites throughout the district and state
- Enforcement of anti-trust and anti-monopoly laws, as well as requiring corporations to pay their fair share in taxes, so that small businesses are able to compete on a more even footing with giant corporations;
- Guarantees of basic economic rights that will raise working conditions for all workers, including healthcare for all, quality public education and labor rights.

Additionally, we must ensure that no worker is made worse off by the transition to a clean energy economy. This will require guaranteeing healthcare and pension benefits that have been promised to workers, even if employers go bankrupt; fully funded education and job training or early retirement benefits for displaced workers; and priority hiring in federal infrastructure projects. All of this can be paid for by ending federal fossil fuel subsidies.

For more details, see our “Infrastructure: Investing in Our State, Putting Our People to Work”, “Fighting for Working Families”, “Standing up for Small Businesses that Keep Wealth in West Virginia” and “Creating Economic Security for the 21<sup>st</sup> Century” policy papers.

## **BUILDING COMMUNITY RESILIENCY**

Even as we take urgent action to reduce climate pollution, we must deal with the impacts of climate change that are already here and that are continuing to get worse as a result of pollution that has already been emitted. These include: more severe storms, changing weather patterns, more intense droughts and more intense floods.

### **A. ENERGY**

We need to build resiliency into our basic energy infrastructure. When Superstorm Sandy hit New York in 2012, the lights only stayed on in communities like Coop City that had their own local microgrid systems. We have the technology to decentralize electricity production, to build microgrids, community solar systems, and rooftop systems with battery back-up that can continue to provide power when the centralized grid goes down.

In Germany, a world leader in renewable energy, about half of all installed solar is owned by private individuals and farmers, not power companies,<sup>8</sup> meaning that the benefits of renewable energy stay in the communities.

But monopoly electric utilities have held back the development of decentralized power in this country. We need federal and state policies that will put people first, that will make sure that our transition to renewable energy is done a way that prioritizes community-owned and rooftop systems that create greater resiliency and generate local wealth.

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EXAMPLES FROM OTHER  
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There are many examples from other states of communities coming together to build their own energy solutions, outside of the control of monopoly electric utilities. These include the Energy District model in Iowa, modeled on the New Deal’s Soil Conservation Districts, to create and implement local clean energy plans in rural areas<sup>9</sup>; Boulder, Colorado’s attempt to create a municipal electric company in order to invest more in renewables than its current corporate owner wants to do; and a greater investment in microgrids in New York after Hurricane Sandy. In West Virginia,

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<sup>8</sup> J. Wettengel, [“Citizens’ Participation in the Energiewende.”](#) Clean Energy Wire, October 25, 2018.

<sup>9</sup> See, for example, [Winneshiek Energy District](#).

there have been numerous solar purchasing cooperatives that help neighborhoods go solar, but community and municipal ownership models continue to be illegal.

In Congress, Cathy will fight for:

- **Financial incentives to encourage states like West Virginia to modernize electricity laws** to allow power purchase agreements and virtual net metering, policies that would enable widespread deployment of rooftop solar, community solar and microgrids
- **A requirement that at least 5% of U.S. electricity come from rooftop solar by 2030.**
- **Federal funding for installation of renewable energy at fire stations and other community emergency centers.** Specifically, Federal Emergency Management Agency (FEMA) preparedness grants should be made available to fund solar systems and microgrids for emergency response shelters and other critical facilities.
- **The development of large-scale solar projects on former mine sites.** West Virginia has 219 square miles of degraded land that is viable for large-scale solar production.<sup>10</sup>

## **B. FEDERAL DISASTER RELIEF**

When disasters strike, we need to make sure that federal disaster relief works in the way it is supposed to. After the 2016 floods in West Virginia, state mismanagement of HUD funds, combined with misguided eligibility requirements, meant that many who lost their homes have yet to receive promised federal assistance for rebuilding.<sup>11</sup>

In Congress, Cathy will fight to ensure that West Virginia receives whatever federal disaster assistance may be needed in the future – and that the aid actually gets to the people who need it.

## **CONCLUSION**

It is past time to take urgent action on the climate crisis. A national transition to renewable energy will create new opportunities in some sectors of our economy. It will also require a federal commitment to revitalizing economies in Appalachia and other parts of our country where, for generations, the dominant model of economic development has been extraction of our natural resources and wealth. We must demand a repayment of this debt – in the

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<sup>10</sup> J. James and E. Hansen, [“Prospects for Large-scale Solar on Degraded Land in West Virginia.”](#) Downstream Strategies, 2017.

<sup>11</sup> B. McElhinny, [“Hoyer on Flood Relief: Another 2 years on construction, 6 years to spend federal dollars.”](#) WV Metro News, April 30, 2019.

form of federal infrastructure investment, new economic development initiatives and commitment to labor rights.

We must also recognize that climate change is happening and the impacts will continue to accelerate. We need to build up leadership at all levels to make our communities, food and energy systems, and government agencies more responsive and resilient.