

SYNOPSIS OF THE CLUSTER

Community-based, equity-focused Coalfield Development is leading the Appalachian Climate Technologies Coalition (ACT Now), transforming 21 southern West Virginia (WV) counties into the global hub of climate resilience, green innovation, and environmental clean-tech jobs. President Biden’s [Interagency Working Group on Coal Communities recognizes the ACT Now region as the most coal-impacted in America, suffering](#) severe poverty because of extraction and disinvestment.

WV is poised to emerge as a global energy leader again through economic diversification in renewable climate technologies. Initial signs of this new cluster have been emerging for years, but now a critical mass is gaining momentum. Smart investment, new technology, innovative networks, and a well-trained workforce are needed to realize the full potential of this initial momentum.

Now is the right time for such investments. Recently, our WV Speaker of the House said WV’s transition from coal to clean energy is [the only path to prosperity](#). Our Governor is making repeated announcements of [new green manufacturers](#). WV’s oldest company (a long-time stalwart of coal which owns 100,000 acres of former mines) has formed a renewables division and is joining ACT Now to reclaim our landscape and sequester historic amounts of carbon (see letter attached).

Our region has comparative advantages to grow this cluster: a unique geology and ecology making us one of the [top three most important ecosystems on the globe for climate change mitigation](#) and carbon capture, according to The Nature Conservancy. Appalachia has the energy workers with the industrial skills and the energy-exporting infrastructure (power lines) needed for this new economy. [Clean energy jobs in WV grew 10%](#) between 2018-2020 and are on track to double that growth. The ACT Now Coalition has used BBBRC Phase 1 funds to further confirm the market for additional job creation in these green markets. We commissioned [an employer job demand study](#) and found strong demand for green-collar jobs. 80% of employers surveyed said they plan to increase the number of workers they will hire in the next 3 years.

Energy markets are clearly shifting in ACT Now’s favor; our coalition empowers our region to move at the pace of these rapidly changing markets. WV’s own utility is increasing its renewable portfolio by 60% between now and 2035, which coincides with a [reduction in its coal portfolio](#) from the 72% it is today to only 15% in 2035. Other regions have even greater demand for renewable energy, and our grid infrastructure and carrying capacity as an energy exporter uniquely positions us to meet this economic need. Leading researcher [RMI](#) recently declared: “Appalachia Poised to Become Clean Energy Country...Solar-driven economic development could generate tens of billions of dollars for most regions of the country-and the benefits in Appalachia are the greatest of any US region.”

Over the past 100 years, a massive economic cluster has dominated WV, built for one fossil fuel: coal, which is now rapidly declining. ACT Now accelerates an economic transition, accounting for 10 converging “opportunity industries” which add up to a new comparative advantage for the next 100 years: **renewable energy, carbon sequestration/reforestation, energy efficiency, EV transportation, bio-based manufacturing, advanced green manufacturing, remediation/reclamation, regenerative agriculture, technology, and recycling**. Because our interventions are designed more equitably than coal-based programs of the past, we will measurably increase economic mobility and wellbeing for our historically excluded community (HEC). We are in a uniquely disruptive era of our history, creating conditions for distinctly innovative and groundbreaking work to emerge from the ground up. New opportunities for equity and justice are opening. We know this is a once-in-a-generation opportunity to redefine ourselves, and our coalition is championing the transformation.



To reach our **North Star goal** of a just transition away from coal that establishes WV as the global leader in climate resilience, **our coalition taps deep reservoirs of trust** built up over the past decade. This historic partnership is unequivocally united by **making a big bet on the climate technology cluster** which we define this way: the combination of technology, workforce, methods, processes, and businesses which reduce greenhouse gas (GHG) emissions, increase climate resilience, and improve environmental sustainability. A report from U.S. International Trade Administration (see attached) finds strong international competitiveness for this cluster. To date, this cluster has not had the focused leadership it needs to realize its huge potential. That is why **our coalition brings together an all-star green team of the state's two largest cities, its two largest universities, private sector innovators, and leading community organizations**. 19 of us are formally governed by a thorough MOU (see attached), ensuring transparent and equitable decision-making (including input from our 50+ other partners).





Of course there are barriers to the success of this cluster, which is fairly new and has not been fully financed (yet). Integration of key partners and institutions developing and/or regulating sectors within the cluster is not fully coordinated. Technical assistance is scattered. Our workforce is well suited for energy jobs, but the green tech skills of the future are not as prevalent as needed. Research, information, and network gaps remain unfilled.

The greatest barriers threatening ACT Now's success, though, relate to human infrastructure. Our hardworking people are our greatest asset, yet we have been beaten down by generations of disinvestment. WV has the lowest labor force participation rate in the nation, the highest outmigration rate, and the highest opioid overdose rate. These human elements threaten the very foundations of our economy, which is why ACT Now weaves proven, holistic worker supports through all eight projects (see GROW Now). We suffer from inequitable extractive legacies, persistent poverty, and low local capacity. Past development efforts have been top-down and overly bureaucratic. Genuine multi-directional community engagement has too often been an afterthought. Therefore, real and deep community engagement and entrepreneur supports are equitably woven throughout each ACT Now component (see Community+Business Resilience). Combined, these initiatives address root causes of Appalachian poverty and rebuild the human infrastructure needed for the sector to flourish.

To overcome extreme inequities, direct job creation is an important aspect of ACT Now. We directly hire (with full benefits) women, racial minorities, people in recovery, justice involved, and rural citizens through our workforce components. While post-COVID unemployment rates continue falling, our labor force participation rate remains stubbornly low (and has for decades). We agree with Secretary Yellen's Davos speech on "modern supply-side economics" in which she identifies "declining labor force" as the main challenge to growing GDP. ACT Now confronts this challenge head-on and creatively. For over a decade, we have been refining **the 33-6-3 workforce development model**, making it a leading tool for just transition (and now part of a new curriculum at the World Bank for other coal communities around the world). Each week, this model entails 33 hours of well-paid work on-the-job, 6 hours of higher education, and 3 hours of personal development. Whether directly hired or not, thousands of workers and green employers will gain access to a strengthened **training, placing, and retaining** network which better supports workers and fills employer needs.

This coalition is building a regional system to fill gaps and **accelerate climate technology investments to achieve these metrics: \$1.5 billion in new green investment** driving a **3% reduction in poverty** and a **4% increase in labor participation** in our most distressed rural counties. In the process, we will reduce Greenhouse Gases(GHG)s by 3.5 million tons. ACT Now will use **\$33 million in private match** with \$75 million in BBBRC resources to conduct **eight (8) synergistic component projects (4 construction and 4 non)**. Our place-based coalition leadership is harmonized by eight strategic threads: climate change mitigation, environmental justice, community engagement and equity, resilience planning and infrastructure, green collar workforce development, green construction/preservation, entrepreneurship, and technology. These threads unify our eight projects into strategic coherence. Each market opportunity has real momentum as evidenced by multiple growing local firms within each, (see 50+ attached commitments). Hundreds of firms are





actively engaged with us in joint programming, coordinated strategies, and investments-leveraging.
Non-Construction Program Components (and how they contribute to overall success):

Project Lead	Cluster Barriers Addressed	Cluster Solution Introduced
 GROW Now Workforce Initiative	Low labor force participation; employer ability to source & train “green” or “tech” skilled workers	Comprehensive, equitable worker support system; on-the-job training; employer skill matches
Partners: Lead Applicant Generation WV ; Coalfield Development, Marshall University, WVU, High Rocks, Carpenters Union, Workforce WV (state agency), and multiple community colleges.		
 Community + Business Resilience Initiative	Inequitable extractive legacy; excluded communities; inadequate resilience planning; low startup rates	Equitable engagement; collaborative community planning; robust TA; direct entrepreneurial supports
Partners: Lead WV Community Development Hub ; Advantage Valley, New River Gorge Regional Development Authority, Brownfields Assistance Centers, and local municipalities.		
 RePower Appalachia Renewable Energy Market Development	Complex tax incentive and regulatory structures; access to capital; market knowledge gaps	De-risking green investments; expanding the green workforce; ongoing R and D
Partners: Lead Coalfield Development ; IBEW, Invest Appalachia, and Appalachian Voices, National Energy Technology Laboratory, WVU Geothermal, and Clearway Wind Energy.		
 Former Mine Lands to Sustainable Lands	Thousands of former mine lands not in productive use creating unfunded liabilities, ecological destruction, and social inequity	Site assessment; sustainable technology; regulatory sandbox; capital stacking; piloting new approaches; workforce dev.
Partners: Lead WVU ; The Nature Conservancy, Coalfield Development, WV DEP (state agency).		

Task Timeline	Begun	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Year 2	Year 3	Year 4
Equitable Engagement/ Recruitment	All Projects Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Union/Private Sector Collab.	All Projects	All Projects	All Projects	All Projects	All Projects	All Projects	All Projects	All Projects
Program Launches		All Projects			Adjust Designs		Adjust Designs	
\$ Leveraging - Sustainability						All Projects	All Projects	All Projects
ACT Now Convenings	Qtrly.	All Projects	All Projects	All Projects	All Projects	All Projects	All Projects	All Projects
Equity/Impact Audit					All Projects	All Projects	All Projects	All Projects
Impact Evaluation						All Projects	All Projects	All Projects

Construction Components (and how they contribute to overall success):

The new climate technology cluster here in Appalachia is defined by solutions for industry needs and often characterized by public private partnerships (more than a dozen successfully launched by ACT Now partners). Every single ACT Now construction project has at least four private sector partners committed as an employer, investor, or tenant (see 22 attached form 900bs). Our universities provide key supports (note our bounded geography is defined by a university led Alliance for Economic Development in Southern WV). Our coalition will be **anchored by four new physical assets in strategic locations** bringing private, public, and university assets together for maximum synergy. The four construction projects build on existing market momentum and tangible success stories to cement climate resilience as the defining economic cluster of our next 100 years. This is a watershed moment when the Appalachian economy permanently shifts; our physical assets tangibly represent the new paradigm. In bringing together bottom-up, equity-focused social innovators, industry entrepreneurs, university applied researchers, and governmental supports, these anchors tie our region’s emerging green cluster together. They ensure knowledge spill-overs, advanced R &D, and leveraged investment. Importantly, the non-construction projects above directly support these **four new physical assets made possible by ACT Now Phase 2 funding:**

Project Lead	Cluster Barriers Addressed	Cluster Solution Introduced
 Black Diamond Sustainable Development Logistics Hub	Inefficient, carbon-based supply chains; complex logistics; inadequate training opportunities; disconnected resources; brownfield	Synergized consolidation of technology, transportation, and training infrastructure; sustainable redevelopment of legacy site
Partners: Lead Coalfield Development ; Solar Holler, ReUse Corridor, Region 2 Planning Council, Service Pump and Supply, Savage Grant, and Mountain Mindful.		
 LIFT (Learning, Innovation, Food, and Tech) Center	Lack of EV tech and EV systems; inefficient battery storage; Heavily carbonized supply chains	New EV tech; R and D for battery storage; decarbonizing supply chains (especially ag)
Partners: Lead Charleston Area Alliance ; City of Charleston, WV Development Office, Marshall University Battery Institute, Beta Air, Yeager International Airport, Advantage Valley, Refresh Appalachia, Edelene Renewables, Parthian Recycled Batteries, and Dickinson Renewables		
 H-BIZ Green Manufacturing Hub	Out-dated manufacturing technology and processes; low startup rates	State of the art advanced manufacturing capabilities; new green entrepreneurial supports
Partners: Lead Huntington Municipal Development Authority ; City of Huntington, Robert C. Byrd Center for Advanced Manufacturing (RCBI), Marshall University, Mountain State Fiber, Paris Signs, and Advantage Valley		
 Just Transition CENTER	Opioid epidemic; low rates of higher education; digital divides; lack of tangible models for economic dev.	Tech-based facility hosting GROW Now, green collar skills training, remote worker support; placemaking
Partners: Lead Coalfield Development ; Generation WV, City of Logan, New River Gorge Redevelopment Authority, Just Transition Fund, Revitalize Appalachia, Mountain Mindful, ReUse Corridor, Central App, Solar Holler, Hatfield-McCoy Trail System, WVU Davis College.		

Construction project timelines: ACT Now partners have site control of all four sites; construction for each site is slated to be completed by the end of 2024.

In recent years, **important complementary initiatives** have made and will continue to make all 8 projects viable: the [Central Appalachian Network \(CAN\)](#) has been convening entrepreneurs and

grassroots leaders to drive new economic models in this fossil-fuel dominated region; the [Appalachian Funders Network](#) organized to funnel and focus philanthropy in a more strategic, cohesive direction towards green investment; and the [Just Transition Fund](#) has been established to serve as a national intermediary for coal communities struggling to equitably transition to renewable forms of energy. Each group directly supports and funds ACT Now.

We are keenly aware of **major policy shifts** re-shaping our hills and hollows. The Obama Administration's [POWER Initiative](#) established new economic models and creative collaborations to build a greener Appalachian economy. The Abandoned Mine Land (AML) program has new regulatory flexibility, making mine land redevelopment possible at larger scale. Federal tax credits are fueling rapid growth in renewable sectors. State level improvements on public purchasing agreements and net-metering reinforce those gains. Ongoing climate regulations and market decarbonization will only accelerate these trends. All of these dynamics (strong local leadership, genuine market momentum, new tangible models for a better way, policy changes) come together now in a unique economic moment. ACT Now seizes the moment.

ACT Now = critical to regional CEDS: ACT Now straddles Regional Planning and Development Councils (PDC) covering WV's southernmost counties: Regions 1, 2, 3 and 4. Region 1 acknowledges a badly faltering coal sector, calling for a comprehensive energy development plan and diversification from the coal industry; Region 1 notes partnerships with the WV Hub, Marshall's RCBI, and other ACT Now leaders. **Region 2 CEDS specifically cites the ACT Now Coalition as crucial to economic diversification and identifies Coalfield's 33-6-3 model as its top workforce development priority.** Region 3 CEDS' theme is greater "resilience." It features Yeager Airport (a key ACT Now partner) as a top regional asset, and it draws on the efforts of ACT Now partner initiatives at WV Hub and Advantage Valley. Region 4 CEDS emphasizes entrepreneurship and manufacturing, identifying New River Gorge Regional Development Authority as leading on those objectives.

ACT NOW GEOGRAPHIC LOCATION AND REGION SERVED

The ACT Now region is composed of 21 coal-impacted counties (combined 2022 population 782,478). Anchored by the capital City of Charleston (population 44,628) and the transportation powerhouse, City of Huntington (population 43,166), and extending to deep coal country in the southern tip of the state, this region's bounded geography is southern WV. 12 of our 21 counties are identified by the Biden Administration as [persistently impoverished](#) and/or historically disadvantaged. This region is recognized by the US Intergovernmental Council on Coal Communities as the most coal-impacted area in the country. The Appalachian Regional Commission finds our region to be the [epicenter of coal-impacted communities](#), with all 21 counties in worst class levels for coal dependence and coal-vulnerability risks. There are [more abandoned coal mines](#) in West Virginia than anywhere in the country.

Equity and justice define our North Star goal, which is why **our primary target participants are almost entirely people from Historically Excluded Communities (HECs), especially women, minorities, people in recovery, and people from persistent poverty coal counties.** Our most rural counties have median household income about \$6,000 below our more populated counties. As a state, our average income is more than [\\$20,000 below the national average](#). WV's BIPOC communities are doubly marginalized having average incomes \$8,000 below WV's majority-white census tracts -a full \$30,000 below national averages. Such inequity is a severe barrier to our cluster's success, which is why equity is a strategic thread woven throughout all 8 projects, including measurement not just of job creation but tracking how well those pay. That is also why we fund minority-led organizations to be at our decision-making table, support diverse recruitment, and hold ourselves accountable to equitably sharing ACT Now's benefits across all 21 counties- especially the most marginalized.

Our region has five categories of **key regional assets critical to our cluster's success** (and corresponding **engaged stakeholders**):

Asset Type	Stakeholders Engaged	Key Assets in Region
Natural Environment	8 one-on-one's with biologists, 13 environmental organizations, The Nature Conservancy, 50+ peer reviewed articles	We are the 3rd most forested state in the country, the lungs of North America. When we reclaim our abandoned mine lands, we will be a leading carbon sink for the world.
Industry	ACT Now input sessions with 200+ workers, 30+ entrepreneurs, 13 investors, four banks, and three Chambers of Commerce; 200+ employer network-employer survey	Energy export expertise, Major powerline infrastructure for selling energy into the national grid, heavy industry-trained workforce, RCBI (the state's only U.S. EDA "University Center")
Knowledge	50+ non-traditional students, 30+ traditional students, 40+ faculty; ACT Now partners are participating in five different applied research projects	Alliance for the Economic Development of Southern WV (led by Marshall U.) which includes the state's leading HBCU, and each of its community colleges
Transportation/Logistics	Meeting with Appalachian Transportation Institute, deep engagement with Yeager Airport, and access to WVU transportation data	Largest inland port east of the MS, three national airports, three interstate highways, river/barge transport, two major rail lines, brand new intermodal facility
Equitable Community Development	25+ public meetings, 50+ one-on-one's, Central Appalachian Network, Just Transition Fund, Appalachian Funders Network, and full coalition MOU signed by 19 organizations	Coalfield Development's WRAPS partners (grassroots groups replicating the 33-6-3 model), and the WV Community Development Hub's network of 50+ community engagement teams

ACT Now has a dense network of **participating private sector entities** punching well above our traditional small-state weight. We have attached ACT Now commitments from more than 50 companies, and have additional networks representing over 200 companies committed to directly hiring 6,405 workers through this project. Related to our construction projects, we have 22 900b's committing to 2,623 positions getting added at new physical assets being developed by ACT Now. Each of our eight projects has at least four private sector partners directly involved in design, implementation, and capital stacking. Companies up and down supply chains are genuinely involved: production companies, services, contractors, raw materials, and distributors. Uniquely, as small towns, our businesses have direct access to local official (see mayors and state officials signed to MOU)

Each of these **200+ private sector partners** are valued, but a few stand out. **Solar Holler, Edelene Renewables, Revolt, and Dickinson Renewables** represent 4 of the 5 largest solar companies in the entire region. Solar Holler is the first to go union. Edelen is the first to convert a mine land to utility scale solar. **Savage Grant**, led by a military veteran and chair of the Marshall University board, is a leading investment innovator in our region and is a major player in unlocking the potential of abandoned mine lands. **Beta Air** is making WV the launchpad for the eVTOL zero-emissions airplane sector in partnership with the UPS. WVU-incubated **Parthian Batteries** will recycle the EV batteries used in this technology. **Mountain Fiber** is leading private sector efforts to close the digital divide. And make note of commitments from our state's largest Chambers of Commerce. Many of these relationships have been facilitated by Marshall University President **Brad Smith, former CEO of Intuit**. Smith's network has been an invaluable private sector asset to ACT Now. See letters for each attached.

ACT Now is **motivating philanthropic foundations** to step up for this region more than ever. Traditionally, philanthropy has been very limited in our region. The boom-and-bust nature of extractive industries does not leave much "legacy" wealth behind in communities (the wealth was

realized elsewhere). Despite these structural barriers, our coalition has managed to secure **over \$13 million in private philanthropic commitments**, which is one of the largest concerted philanthropic efforts in WV history. **Bloomberg Philanthropies** is matching ACT Now with \$8 million (compared to previous grants of \$1 million). Benedum Foundation, the largest foundation serving WV, has provided \$2 million (compared to average grants of \$200,000). Much of our effort is bankable or investable as evidenced by involvement from seven private investing entities.

REGIONAL GROWTH CLUSTER SUSTAINABILITY

This initiative is **anchored by WV's most enduring institutions**; it is managed by high-capacity organizations who have proven track records and realistic plans for sustainability by blending and braiding federal, state, philanthropic, and private resources; many ACT Now projects are founded on the social enterprise principle that is based on solid revenue generation models; and our work is targeted toward market sectors with strong economic momentum in financially viable markets.

Lead members of ACT Now are stable, successful organizations with **demonstrated track records** of effective fundraising and effective grants management. We procure third party accountants/project managers when appropriate and will do so for BBBRC, given the size of the grants. The makeup of our coalition itself strengthens our sustainability: our state's two largest entitlement cities, largest universities, and strongest community organizations (each of which are intimately familiar with federal audit standards and undergo rigorous annual auditing). Collectively, over the past decade, our coalition raised \$300 million+ from more than 20 competitive federal sources and 200+ private funders (not including non-competitive university/municipal funding).

It was during rollout of the Obama Administration's POWER Initiative when many of the foundational partnerships of ACT Now were cemented, partnerships ongoing today. In 2015, EDA and Appalachian Regional Commission jointly launched the POWER Initiative to support transitioning coal communities (note **attached commitment from ARC Co-Chair Gayle Manchin**). During POWER-funded projects, we exhibited **our ability to leverage federal seed funds, prove new concepts, then sustainably scale those concepts**. Through POWER, Coalfield used EDA funds to expand its 33-6-3 model, serve more counties, and create more jobs. Once the grant successfully closed, none of those new positions had to be discontinued.

ACT Now initiatives are positioned in fast growing markets. The private sector can take over much of this work after grant closeout. Several ACT Now projects feature public-private partnerships or social enterprises with triple bottom lines: people, planet, profit. **Our entities maintain diversified revenue streams**, balanced with earned income, private grants, and federal grants. The GROW Now job placement programs, which are built upon employer engagement, will leverage employer contributions toward earn-and-learn models. The Community + Business Resilience Initiative will unleash local community resources, and link with established, revolving seed capital funds managed by Advantage Valley and WV Hive to spur sustainable entrepreneurial growth.

Likewise, the RePower Appalachia component is built upon a comprehensive 2020 market [analysis led by the Central Appalachia Network](#), which found major investment opportunities for renewable energy on mine lands in WV. A recent project on a former mine land by Edeline Energy alone (see attached letter) garnered \$230 million in private investment.

Beyond finances, our region has natural advantages assisting long-term viability in climate tech sectors. As a global organization, The Nature Conservancy has identified **three key global eco-systems as most crucial for climate change mitigation, with Central Appalachia one of these three**. As [carbon-credit trading expands globally](#), our ecology becomes more and more valuable. Our formerly mined surfaces make ideal locations for large-scale renewable energy systems, and our state's power lines are designed for major energy exportation to the national grid, which creates significant opportunities for renewable power generation and access the same as it did for fossil fuels. Last month, Workforce WV reported the industry with the most available full-time job openings in WV was the wind energy industry. Our geology is particularly well suited for geo-thermal and hydro power generation.

ENGAGING COMMUNITY-BASED ORGANIZATIONS AND LABOR UNIONS

This is a truly bottom-up project. We are **one of only a handful of BBBRC finalists led by a community-based non-profit organization**. Coalfield began in 2010 as a totally volunteer grassroots effort. Through social innovation, effective non-profit management, and pure persistence, Coalfield has now become a backbone anchor organization for the Appalachian region. The organization's CEO and founder, Brandon Dennison, serves as ACT Now's Regional Economic Competitiveness Officer (RECO) and has strong credentials: Master of Public Affairs from Indiana University, Ashoka Fellow, and winner of multiple national awards including the [Heinz Award for Economic Development](#). Likewise, key ACT Now groups WV Hub, Generation WV and others are community-based and led by award-winning, diverse, inclusive representatives of our HECs. Also note: Coalfield directly funds a growing network of organizations in majority-minority communities through its capacity building initiatives.

Coalfield Development has been **partnered with unions for many years**. The Carpenters Union, Electrical Union, Mine Workers Union, and Utility Workers Union have each offered strong commitments to this application as evidenced by enclosed letters and the established MOU between Coalfield Development and the Carpenters Union. In fact, Coalfield is a voluntary union shop, and all in-the-field workers are Union members. Through union partnerships and apprenticeships, graduates of Coalfield's workforce development programs are on career pathways not just for jobs, but for good union jobs that pay well, have full benefits, and offer the dignity and joy of meaningful, family-sustaining work. Every single WRAPS trainee funded through this grant will have access to Union pre-apprenticeships; every 33-6-3 Crew Member will have access to full union apprenticeships; and a majority of supervisor staff positions funded through this project are union positions. Note that our leading private solar company (Solar Holler) is WV's first solar installer to voluntarily unionize.

As a pro-union organization, Coalfield ensures **strict adherence to strong labor standards**. All construction projects are planned and budgeted to adhere to Davis-Bacon prevailing wages and we are committing to **negotiating community benefit and local hire provisions** with all ACT Now funds. Note, in the attached commitments from each union partner, there is included a specific requirement to incorporate racial equity in recruitment and hiring (a long-time weakness for many local unions).

ENGAGING EQUITABLY

The community-groundedness and equity focus of this coalition contribute meaningfully to our long-term sustainability. Too often, development in Appalachia has been done to us and not with us. This has resulted in short-term headlines, but not long-term change. ACT Now brings together **strong networks which can outlive shifting politics and changing administrations**. ACT Now's governance is nimble and adaptive in ways large bureaucracies cannot be. Our bottom-up approach values genuine engagement over box-checking "outreach," and is led by people with relevant lived experience in those communities. Our engagement is multi-directional. We teach and train, but we also learn in partnership with our target participants. Through group reflections, one-on-one debriefs, and journaling exercises we account for trauma and mental health. We don't just include HEC populations in meetings; we are governed by them. For example, Coalfield Development hosts monthly Council Days during which all workers have an opportunity to network, raise concerns and influence decision-making (this recently led to across-the-board pay raises). This is also a monthly opportunity to build community and connection – outcomes too often dismissed as less than.

Southern West Virginia has been systemically and systematically denied a full opportunity to participate in American prosperity. As we became a mono-extractive economy, our people became vulnerable as evidenced by the opioid epidemic which predated the COVID-19 pandemic. As the coal market crashed in 2014, our region saw unemployment literally near Great Depression levels. Nearly all the region we call home is rural. Given this, ACT Now benefits remote jurisdictions in some of the most disinvested, low-wealth areas in the nation. Further, ACT NOW directly serves, collaborates with, and invests in the state's two largest minority census tracts ("Fairfield" in Huntington; "West Side" in Charleston). Our workforce development model prioritizes direct job creation for people facing significant barriers to employment, including racism and addiction recovery. Most importantly, our governance structure ensures direct involvement and actual power in decision-making processes for people in disinvested areas. **Half of voting coalition members are from these "Persistent Poverty**

Counties,” marginalized communities, and communities of color (see attached MOU).

The Community + Business Resilience Initiative (CBRI) component of ACT Now, led by the WV Hub, expands equitable community engagement models already in place. The Hub and its project partners undertake intentional outreach and engagement in rural communities that have high representations of communities of color. CBRI is committing to having at least 50% of participating communities being large minority communities. Further, the entrepreneurial development efforts of CBRI build on established minority and women-focused entrepreneurial development approaches, including accessing government and corporate procurement contracts. Several ACT Now partners make direct operating grants to minority-led organizations.

EXPECTED OUTCOMES

Our eight component projects will together generate 6,405 new well-paying jobs (many being union jobs) and create or expand 380 businesses. We’ll leverage \$813 million in private investment in the four year grant cycle, with an expected \$600 million to follow. These investments enable us to off-set 94,470 GHGs and sequester 3,469,500 pounds of carbon. Equity is baked into our program assessment plan, which includes third party program evaluation and annual equity audits. Evidence of ACT Now’s success will be gathered both quantitatively and qualitatively based on Coalfield Development’s monthly evaluation process, as stored in the Apricot software system. Each coalition member has committed in the attached MOU to report evidence and data to Coalfield monthly.

Projects	Outputs	Outcomes
GROW Now Workforce Initiative	Worker recruitment (75% HEC): 4,000 People trained in green tech: 2,090 Employers engaged: 200 OJT partnerships expanded: 40	Job placements/created: 2,223 % of new jobs for HEC members: 75% Number of workers retained: 2,295 Private investment: \$30,000,000 % of graduates earning raise in first year: 75%
Community + Business Resilience Initiative	People trained: 1,390 Green building projects: 10 Community outreach: 1,000 people engaged Analyses and community resilience plans: 382	Jobs created: 500 % trained HEC members hired/trained: 75% New businesses/start-ups expanded: 120 Private investment: \$10,000,000
RePower Appalachia Renewable Energy Market Development	Workers recruited: 750 People trained: 650 Actionable market studies: 15 Engage new clean tech customers: 500 New license/trademark applications: 65 Improve tech readiness for firms by: 40%	Jobs created: 330 % of new jobs for HEC members: 75% Clean MW installed: 900 Private investment: \$300 million New licenses/trademarks: 45 GHG tons off-set: 78,719
Former Mine Lands to Sustainable Lands	Sites analyzed: 3,187 Workers recruited: 900 People trained: 200 New technologies introduced: 35 Sites piloted: 5 New agency policy recommendations: 10	Jobs created: 392 % of new jobs for HEC members: 75% New technologies commercialized: 20 Businesses/start-ups expanded: 120 Private investment: \$52,000,000 Tons of carbon sequestered: 3,469,500 Acres sustainably reclaimed: 5,000
Black Diamond Sustainable Development Logistics Hub	Sq.ft. redeveloped: 39,000 GROW Now trainees trained on site: 450 New logistics contracts held: 1,000 Entrepreneurs supported: 70 Materials diverted from waste: 1,200	Jobs created: 600 % of new jobs for HEC members: 75% Supply-chain bottleneck reductions: 25% Businesses/start-ups expanded: 30 Private investment: \$381,360,000 GHG tons off-set: 8,400

<p>LIFT (Learning, Innovation, Food, and Tech) Center</p>	<p>Sq.ft. revitalized: 155,000 Battery Institute R&D projects: 50 Entrepreneurs supported: 160 New EV technologies introduced: 30 Increased local ag products: 30%</p>	<p>Jobs created: 1,090 % of new jobs for HEC members: 75% Businesses/start-ups expanded: 60 Private investment: \$25,000,000 GHG tons off-set: 6,256</p>
<p>H-BIZ Green Manufacturing Hub</p>	<p>People trained by RCBI: 650 Sq.ft. of new industrial space: 500,000 Entrepreneurs supported: 100 Green Manufacturing TA clients: 150</p>	<p>Jobs created: 870 % of new jobs for HEC members: 75% Businesses/start-ups expanded: 25 Private investment: \$34,000,000 GHG tons off-set: 895</p>
<p>Just Transition CENTER</p>	<p>Sq.ft. redeveloped: 25,000 GROW Now trainees: 550 New reuse supply chains initiated: 30 Households utilizing new broadband resources on site: 500 New construction developments initiated: 50 Entrepreneurs supported: 100</p>	<p>Jobs created: 400 % of new jobs for HEC members: 75% Materials diverted from waste stream: 2,250 lbs. Local people connected to remote-worker opportunities: 50 Businesses/start-ups expanded: 25 Private investment: \$15,250,000 GHG tons off-set: 200</p>

OVERVIEW OF ACT NOW'S PHASE 1 WORK/CHANGES TO PHASE 1 PROPOSAL

Phase 1 has been a remarkable process of shoring up the vision which was built on a decade of collaboration and progress, but which was reframed and expanded to meet BBBRC criteria this past Fall. Nineteen (19) ACT Now project leads, co-applicants, subrecipients, major partners, labor organizations, and community-based representatives have created **a robust and effective Memorandum of Understanding** (attached) which establishes a governing structure to ensure ongoing synergies and sustainability. This emerged from a robust communications approach that will be continued. ACT Now held a [nationally-covered press conference on February 7](#) during which the mayors of our state's two largest cities, the presidents of our two largest universities, and the head of our state's Economic Development Office united in loud public support of the emerging climate technology cluster in southern West Virginia. Historic and transformational are not over-statements of the importance of this coalition (even before Phase 2 decisions get made).

Phase 1 money has been allocated to fund deeper research, analysis, and program design, including a market and employer demand study for green sector jobs in our sectors (see attached) and financial/market analyses for each construction project (see attached to component 6 pagers). The overall vision, structure, and focus of the coalition has continued to crystalize and has not shifted materially. The same eight component projects listed in the Phase 1 proposal remain in Phase 2.

No partners have left the ACT Now Coalition since Phase 1; **several high-level partners have joined**: the WV Department of Economic Development has become involved, providing low-cost \$2,300,000 financing to enable the Charleston Area Alliance to become owner of the LIFT Center (which has an improved name since Phase 1). Yeager Airport will no longer be the buyer/owner of the Charleston LIFT Center but will remain a close partner. Marshall's College of Engineering will also anchor the Charleston LIFT Center with the Marshall Green Battery Institute. RCBI (an EDA University Center) joined to be an anchor of H-BIZ. The New River Gorge Regional Development Authority and its WV Hive, crafted a solid but not-selected BBBRC Phase 1 proposal centered on entrepreneurship, has now brought that endeavor to become a major part of ACT Now's Community + Business Resilience component project. Finally, the financing piece of RePower Appalachia is no longer a proposed EDA-funded RLF, but instead will create an Appalachian Solar Predevelopment Fund to support CDFIs and nonprofits to expand the solar installation market with pre-development technical assistance and a risk-mitigation strategy to rapidly accelerate this already growing industry.