

Workers, Communities, and the Clean Energy Economy:

WORKING TOGETHER FOR A FUTURE THAT WORKS



PHOTO CREDIT: BLUEGREEN ALLIANCE, DAVID SOLIMINI



PHOTO CREDIT: GREEN4ALL

The Sierra Club and its 2.1 million members and supporters are proud to stand shoulder to shoulder with our allies in the labor movement in the fight for a fair and just transition to a clean, renewable energy economy in which all people have access to good jobs on a healthy planet.¹ To get there, we need to immediately engage workers and communities, especially those affected by fossil fuel transitions, in developing and implementing a bold vision and strategy that decisively addresses the causes of the exploitation and abuse of our planet and its people.

WHY WE MUST ACT NOW: CLIMATE DISRUPTION DESTROYS JOBS AND HARMS WORKERS

The scientists of the Intergovernmental Panel on Climate Change have amplified their warning that humans burning fossil fuels are pouring greenhouse gases into the atmosphere at a rate that is causing an unprecedented and potentially devastating threat to life on this planet.² Scientists agree that we must drastically reduce fossil fuel emissions and transition

to a clean, renewable energy economy immediately, in order to prevent the effects of climate disruption on the planet and human life from becoming irreversible, with crop failures, water shortages, sea-level rises, species extinctions and increased disease.³ If we fail to act boldly now, hundreds of millions of workers around the world will suffer permanent job losses as a result of damage to infrastructure for water, energy, transportation and public health, as well as important

economic sectors such as manufacturing, agriculture, and tourism. A landmark 2007 study on the economics of climate disruption, known as the Stern Review, concluded that global warming, if left unchecked, would lead to a massive economic downturn comparable to the combined effects of the two world wars and the Great Depression of the 20th century.⁴

While climate disruption is a long-term phenomenon, with short-term variations in temperature, in the United States, we have recently suffered through consecutive years of record heat, devastating hurricanes and forest fires, which scientists agree have been made much worse by the climate crisis. Among other workers who already may have been victimized by extreme weather exacerbated by human-caused climate disruption, nineteen firefighters lost their lives fighting a wildfire near Prescott, Arizona in the summer of 2013.⁵ When it comes to the future of the planet, we all have “skin in the game.”

As AFL-CIO President Richard Trumka recently said, “we have to act to cut those emissions, and act now.” Indeed, the world’s working people, acting through the International Trade Union Confederation, have unanimously adopted a resolution calling for a fair, ambitious and binding international climate change agreement and just transition policy aimed at reducing greenhouse gases and dependence on fossil fuels while improving people’s living standards. The ITUC expressed “strong support” for precisely the dramatic emissions reductions called for by the world’s scientists.⁶ The carbon pollution standards that President Obama’s EPA is proposing for new and existing power plants are an essential step in this direction.

WE MUST PROTECT WORKERS AND COMMUNITIES IN THE TRANSITION

However, as we respond to the profound opportunities and challenges presented by the clean energy transition, we must simultaneously protect miners, power plant workers and others who are already being affected by the transition, as well as the communities that depend on those industries. For example, federal data show that employment among U.S. coal miners fell by 19% in the first quarter of 2013 compared to the end of 2012, with job losses accelerating nationwide. Collective hesitation to act rapidly and decisively to ramp up the clean

energy economy means workers are hurting in the short run, especially in already economically distressed parts of the country such as Appalachia.

The Sierra Club embraces the conclusion of the Utility Workers Union of America that this hesitance to act is creating “stranded workers and communities” who could lose everything and recover little to nothing in the transition if we do not act promptly. Sadly, this is not the first time that changes in the market and technology have caused tragic upheavals for our country’s working families. For example, our economy has yet to recover from the blow of the large-scale deindustrialization and offshoring of our country’s unionized manufacturing sector that began in the late 1970s. On the other hand, it was also during the late 20th century that the federal government marshaled the will and resources to help tobacco farmers in the south and timber workers in the Northwest through transitions of their own. Surely we can take care of the workers and communities in Appalachia and elsewhere who have powered our country for the past century.

We must get it right this time, for the sake of all of our futures. It is no consolation to families and communities that have lost their sole means of livelihood to say we created some new jobs making solar panels in China, or even in the next state over. If we resign ourselves to structural economic changes running roughshod over people, we all will lose.



A VISION FOR CHANGE SCALED TO THE MAGNITUDE OF THE CRISIS

To prevent irreparable disruption to our climate and human civilization, we must make the transition to a clean energy economy, and we must do it quickly. This is a very tall order, but the transition is already well under way. Economic forces, activism and competition from clean energy are all nudging economies around the globe away from fossil fuels, including coal, oil and natural gas, and towards renewable sources of energy such as wind, solar and geothermal. Utilities, such as Xcel in Colorado, are ramping up solar and wind because it is cost-competitive not only with coal and oil but with natural gas.⁷ The U.S. will burn 943 million tons of coal this year, with levels declining to what was used in 1993. And China, which burns as much coal as the rest of the world combined, is taking steps to slow its coal consumption. Analysts call the shift in China “the beginning of the end of coal.”⁸ New higher efficiency light duty and soon to come heavy duty vehicle standards are reducing oil consumption.

Regardless of the causes of the transition, we can only do it fairly and justly if we make a profound change, beginning right now, from a global economy dominated by those who defy any consideration of the public good, towards a more sustainable economic future based upon fairer, more equitable, healthier societies.⁹ Clean energy is a great place to begin, as renewable energy and energy efficiency investments create far more jobs per dollar spent than fossil fuels, including natural gas. Specifically, a clean-energy investment agenda generates more than 3 times the number of jobs within the United States as does spending the same amount of money within the fossil fuel sectors.¹⁰

The clean energy sector is growing at a rate of 8.3 percent, nearly double the growth rate of the overall economy.¹¹ Solar thermal energy expanded by 18.4 percent annually from 2003 to 2010, and solar photovoltaic power grew by 10.7 percent over the same period. Meanwhile, the U.S. wind energy industry saw 35 percent average annual growth over the past five years, according to the 2010 U.S. Wind Industry Annual Market Report.¹²

A study performed by the Brookings Institution and Battelle found that as long ago as 2010, 2.7 million people were directly employed in the “clean economy,”

already more than the 2.4 million employed in the fossil fuel industry.¹³ These numbers will only increase as the clean energy economy grows.

Median wages are 13 percent higher in green energy careers than the economy average. Median salaries for green jobs are \$46,343, or about \$7,727 more than the median wages across the broader economy. As an added benefit, nearly half of these jobs employ workers with a less than a four-year college degree, which accounts for a full 70 percent of our workforce.¹⁴

Thus, if done properly, the clean energy retooling of our economy will lead to a massive expansion of good jobs, providing one of the biggest opportunities for growth of the labor movement over the next generation.¹⁵

AFFECTED COMMUNITIES SHOULD LEAD IN DEVELOPING SOLUTIONS

In the meantime, however, people in front line communities, including workers in fossil fuel industries, are hurting. We must seek and accept leadership from those communities in developing a transition to local clean energy economies that work for everybody.

Ultimately, to save people and the planet, we must build a global movement with the power to generate policies and funding for the millions of “climate jobs” that will help us make the transition to a low carbon economy. This provides a historic growth opportunity for the labor movement. New jobs in solar manufacturing and installation, offshore and onshore wind power, railroad and pipeline repair, public transit, bridge construction and repair, energy conservation and efficiency, upgrading the grid, and developing alternative fuels and energy sources, among others, will save the economy and help us mitigate climate disruption by reducing greenhouse gas emissions. But, in order for it to be fair and just, organized workers and so-called front line communities must both lead and benefit from this transition.

THE NEED FOR BOLD, DECISIVE VISION AND ACTION TO PROTECT THE CLIMATE AND WORKING PEOPLE

We need bold vision and action that really addresses the huge economic woes of regions like Appalachia. In some cases, jobs in mining and coal-fired power plant operations are virtually the only revenue source for entire counties. The challenge of implementing this ambitious and vital vision is made more profound by

UNIONS AND SHARED PROSPERITY



SOURCE: ECONOMIC POLICY INSTITUTE



WORKERS' RIGHTS HAVE BEEN ERODED, MANUFACTURING HAS BEEN MOVED OFFSHORE, U.S. UNION DENSITY IS AT AN HISTORIC LOW, THE MIDDLE CLASS IS SHRINKING, AND THE GAP BETWEEN THE WEALTHIEST AND THE REST OF US CONTINUES TO WIDEN.

the destructive tactics of an anti-union, climate science denying faction, well-funded by the fossil fuel industry. Workers' rights have been eroded, manufacturing has been moved offshore, U.S. union density is at an historic low, the middle class is shrinking, and the gap between the wealthiest and the rest of us continues to widen.¹⁶ However, these interconnected challenges are precisely what call us to press for bold action.¹⁷ We must lengthen our vision and ramp up our expectations, not only because decisive action is needed to end climate

disruption and build a clean energy economy with good jobs for all, but because it is often darkest before the dawn.

To take just two examples, the greatest policy achievements of the 20th century, the Great Society and the New Deal, which transformed our society in the direction of racial and economic equality respectively, arose from great social crises in which the proponents of change faced fierce and often violent resistance from intransigent proponents of the institutionalized status



PHOTO CREDIT: GREEN4ALL

quo. The Flint sit-down strikers and the marchers across the Edmund Pettis Bridge did not turn away in the face of the magnitude of the challenge. Who are we to ignore the sacrifices of those who came before us? Who are we to fail our children and grandchildren because we are challenged by the tactics of today's well-funded, anti-union climate science deniers? Yes, this is a big lift, but as a country, we've become stronger by solving seemingly insurmountable crises when we faced them unflinchingly and acted boldly and wisely.

OUR SHARED RESPONSIBILITY TO DEVELOP SOLUTIONS

The impacts of the transition are the products of policy choices. The people affected by transitions are in the best position to identify solutions that work. Thus, the *process* of involving affected workers and community members in developing solutions is key—policies that have been developed without the active participation of those affected are simply not likely to work.

To be honest, we in the Sierra Club have at times pursued our goals without adequately consulting or considering how working people are affected by our achievement of those goals. At other times, we have built powerful alliances that have accomplished fantastic results for working people and the environment. Understandably, we tend to focus on the success stories.¹⁸ However, we acknowledge that we have not always been successful and have sometimes failed in our attempts at collaboration with local communities and working people.

Similarly, many unions, even those with members in the fossil fuel industries, have courageously joined the fight to save humanity from irreversible climate disruption, reflecting the highest and best traditions of trade union solidarity. Others, however, have rebuffed our outreach efforts, joining in the denial of climate science, or advocating projects that are destructive to the climate and the survival of civilization despite being aware of the validity of the science.

Ultimately, the problem of how to make a fair and just transition to a clean energy economy that works for working people is one we all share. We all have a core responsibility for both mitigating climate disruption and creating healthy communities without causing needless suffering and hardship.

The scale and complexity of the challenge means there is no single simple silver bullet solution. Carbon and other greenhouse gases have astronomic social and economic costs, in the trillions of dollars, but these costs are far outweighed by the benefits of climate mitigation.¹⁹ Mitigating the cost of climate disruption must include providing for the continued economic health of workers and communities formerly engaged in the production of energy via fossil fuels. The questions of who pays and who benefits and how are difficult, to say the least, but the reality of climate science tells us the days of denial and delay are over. We must answer these questions now.

In short, we need a wide-ranging and diverse policy menu: We need bold federal action. We need state and local governments to step up. We need global cooperation and community organizing. We need corporations to treat their workers and the environment with greater respect. We need coordinated strategic action across the broad majority represented by the

labor, environmental, consumer, racial and gender justice movements. And we need financing mechanisms.

We understand, however, that those solutions can only be developed through a process in which union-represented workers, through their unions, as well as members of affected communities, are genuine participants. This process stalled after the failure of comprehensive climate legislation in 2009. Since then, the IPCC has amplified the imminent nature of the climate crisis, structural changes away from a fossil fuel driven energy economy have gained momentum, and the Administration is pursuing an ambitious climate mitigation agenda. It is therefore time to begin again. We in the Sierra Club commit ourselves to restarting this process, informed by our years of participation in these conversations, and the experiences of our members and supporters who work and live in affected communities.



PHOTO CREDIT: GREEN4ALL



PHOTO CREDIT: GREEN4ALL

APPENDIX

FAIR AND JUST TRANSITION: WORKING TOGETHER, GETTING IT RIGHT

The Sierra Club knows from experience that coal plant retirements can be structured in ways that take care of affected workers and the local economy.²⁰

For example, in Washington state, environmentalists worked with unions and communities to ensure that a multi-million dollar transition plan for the workers was included in the plans to retire the Centralia coal plant.²¹ The Club also worked with the Moapa Band of Paiutes in Nevada to build the largest tribal solar plant in the nation, with union allies for the city of Los Angeles to buy power from that plant,²² and with both allies supported a bill that would close the Reid Gardner coal plant and build at least 350 MW of new renewable energy. Through the Los Angeles Alliance for a New Economy (LAANE), we joined forces with local community members and the IBEW to build RePower LA, a program in which low income residents lower their neighbors' utility bills and receive a living wage as they make businesses and homes buildings more energy efficient, train for jobs with the local utility, and get on a path to union membership.²³ We know what it looks like when workers and communities are part of the plan.

A "fair and just transition"²⁴ means that the affected workers, their unions, and the communities they support are equal partners in a managed transition, not pawns in a corporate profit-making scheme they learn about after the fact. It means that impacted workers receive job security and livelihood guarantees as part of the transition. It means that every level of government and business is directly engaged in an all-out effort to maximize investments in economic development, provide workforce training, and create lasting, good jobs that strengthen the economy and sustain working

families. A just transition means the corporations responsible for harmful pollution are accountable for cleaning it up so that communities are left with usable land and clean water. It means environmental groups and unions don't let ourselves be divided by our common opponents, and continue to work together through national partnerships like the Blue Green Alliance and local and regional partnerships like the Los Angeles Alliance for a New Economy and the Blue Green Waterfront Coalition of Whatcom County (Washington).

Ultimately, in order for our movements to transform the global economy in the direction of genuine democracy and sustainability, we must articulate and carry out a bold shared vision and strategy for a future that works for all.

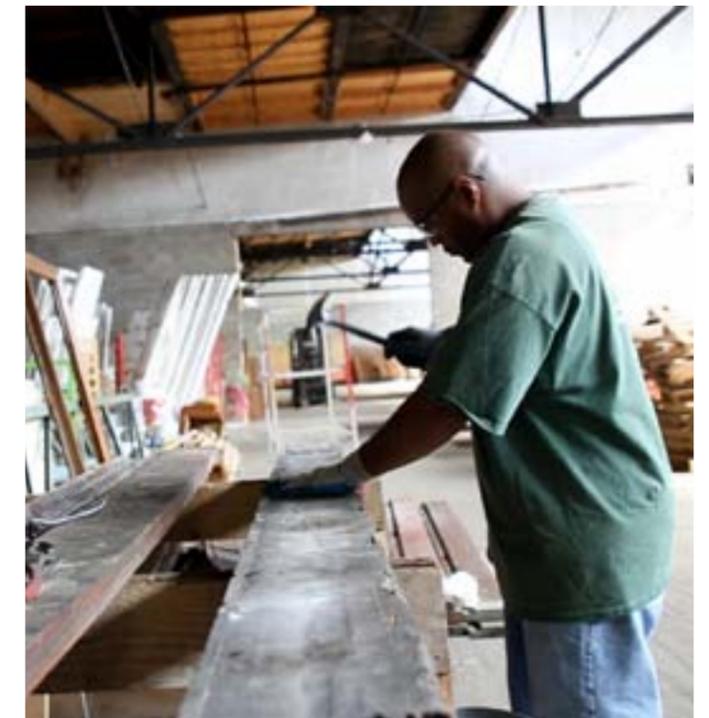
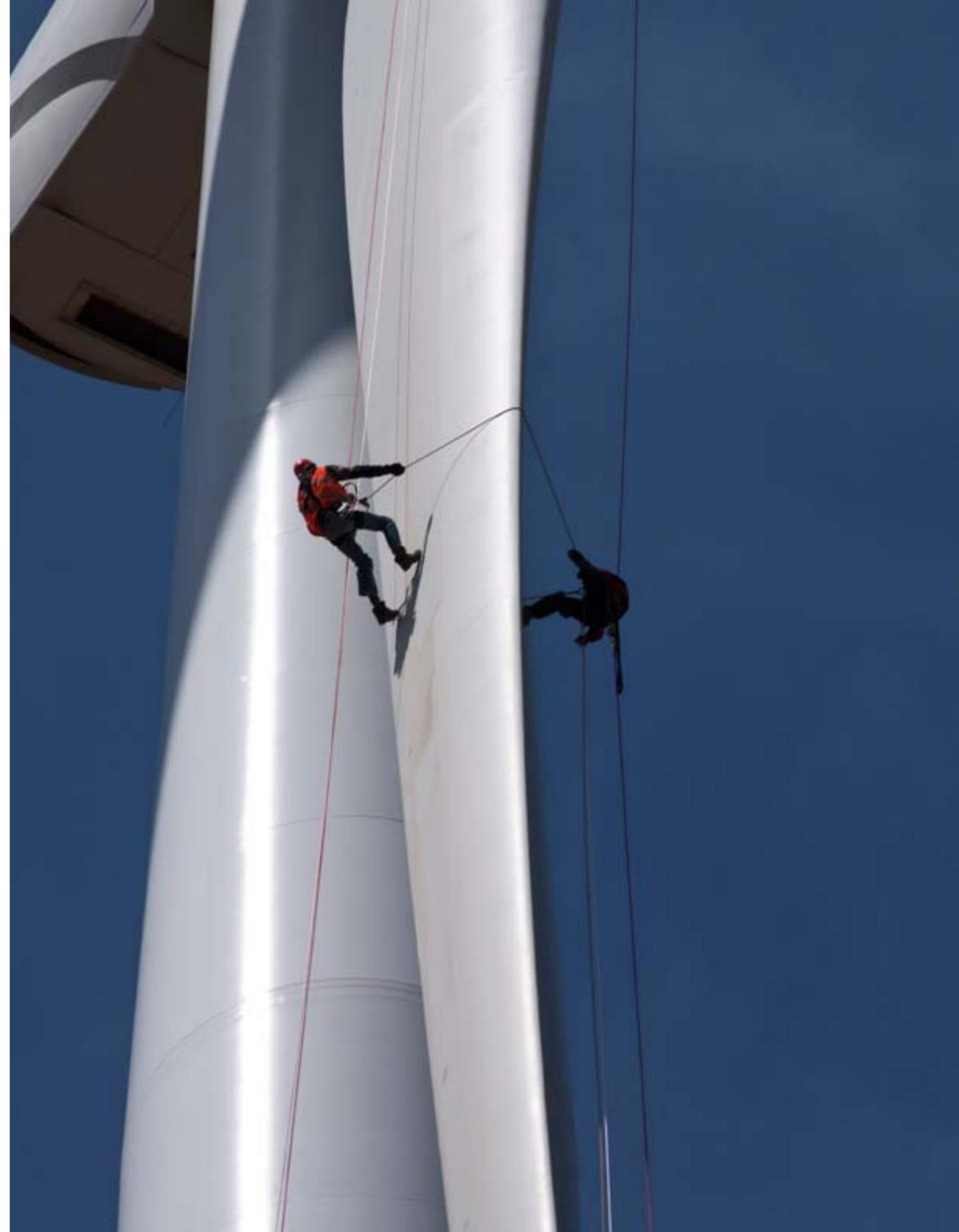


PHOTO CREDIT: GREEN4ALL

ENDNOTES

- 1 Sierra Club My Generation, "Success Stories." (2013) Available online at <http://content.sierraclub.org/coal/my-generation/success-stories>.
- 2 IPCC, Working Group I Contribution to the IPCC Fifth Assessment Report, "Climate Change 2013: The Physical Science Basis," Summary for Policy Makers (September 27, 2013). Available online at <http://www.climatechange2013.org>.
- 3 See, e.g. Romm, An Illustrated Guide to the Science of Global Warming Impacts: How We Know Inaction is the Gravest Threat Humanity Faces. Available online at <http://thinkprogress.org/climate/2012/10/14/1009121/science-of-global-warming-impacts-guide/>
- 4 Nicholas Stern, "Stern Review on The Economics of Climate Change." HM Treasury, London. (2007). Available online at <http://www.webcitation.org/5nCeyEYJr>.
- 5 Sierra Club, "Climate, Wildfires and Firefighters: Our Nation's Heroes at Risk." (2013)
- 6 "Congress therefore expresses strong support for the IPCC scenario for reducing global GHG emissions to 85% by the year 2050 and emphasises the need for interim targets for this to be achieved, including a corresponding reduction of at least 25%-40% by developed countries by 2020, compared to 1990 emissions." International Trade Union Confederation, "Resolution on Combating Climate Change through Sustainable Development and Just Transition" (2010). Available online at http://www.ituc-csi.org/IMG/pdf/2CO_10_Sustainable_development_and_Climate_Change_03-10-2.pdf.
- 7 Jeff Stanfield, "Xcel Energy asks Colo. PUC to approve solar as cost-competitive with gas plants," SNL (Sept 10, 2013).
- 8 Jonathan Farley, "Coal's Future Darkens Around the World," Associated Press (September 18, 2013). Available online at <http://www.businessweek.com/ap/2013-09-18/coal-future-darkens-around-the-world>.
- 9 Trade Unions for Energy Democracy, Resist, Reclaim, Restructure: Unions and the Struggle for Energy Democracy (2012). Available online at <http://energydemocracyinitiative.org/wp-content/uploads/2012/10/Resist-Reclaim-Restructure1.pdf>.
- 10 See, e.g., Robert Pollin, James Heintz, and Heidi Garrett-Peltier, "Clean Energy Investments for the U.S. Economy," discussion paper for 3/22/10 Surdna Foundation Conference, Table 2, "Total Employment Creation through Alternative Energy Sources: Direct, Indirect, and Induced Effects for \$1 Million in Spending." Available online at http://www.peri.umass.edu/fileadmin/pdf/conference_papers/Surdna/Pollin-Heintz-Garrett-Peltier_paper_for_Surdna_Conf--3-16-10.pdf
- 11 Muro, Rothwell and Saha, Sizing the Clean Economy: A National and Regional Green Jobs Assessment, Brookings Institution (2011). Available online at <http://www.brookings.edu/research/reports/2011/07/13-clean-economy>.
- 12 Adam James, Fact Sheet: 6 Things You Should Know About the Value of Renewable Energy, Climate Progress (2012). Available online at <http://thinkprogress.org/climate/2012/03/28/453122/fact-sheet-6-things-you-should-know-about-the-value-of-renewable-energy/>.
- 13 Environmental and Energy Study Institute, Fact Sheet: Jobs in Renewable Energy and Energy Efficiency (2013). <http://www.nacubo.org/Documents/BusinessPolicyAreas/FactSheetGreenJobs061113.pdf>.
- 14 James, n. 2 above.
- 15 See, e.g., Blue Green Alliance, Jobs 21! Good Jobs for the 21st Century, available online at <http://www.bluegreenalliance.org/news/publications/image/Platform-vFINAL.pdf>; Campaign Against Climate Change Trade Union Group, One Million Climate Jobs: Solutions to the Economic and Environmental Crises (2010), available online at http://www.climate-change-jobs.org/sites/default/files/1MillionClimateJobs_2010.PDF; Sheeran, Enlow, Brecher and Smith, The Keystone Pipeline Debate: An Alternative Job Creation Strategy, Labor Network for Sustainability (2013), available online at <http://www.labor4sustainability.org/reports/new-Ins-report-the-keystone-pipeline-debate/>; Cornell Global Labor Institute, Labor's Route to a New Transportation System: How Federal Transportation Policy Can Create Good Jobs, First-Rate Mobility, and Environmentally Sustainable Communities (2011), available online at <http://www.ilc.cornell.edu/joballaborinstitute/research/upload/Cornell-GLI-s-Labor-s-Route-to-a-New-Transportation-System-Jobs-Mobility-Climate-LowRes.pdf>.
- 16 See, e.g., Robert Reich, Beyond Outrage: What has Gone Wrong with Our Economy and our Democracy and How to Fix it, Vintage (2012); Jody Heymann and Alison Earle, Raising the Global Floor: Dismantling the Myth That We Can't Afford Good Working Conditions for Everyone, Stanford University Press (2010); Dave Jamieson, "Union Membership for U.S. Workers Tumbles to New Low," Huffington Post, January 23, 2013. http://www.huffingtonpost.com/2013/01/23/union-membership-rate_n_2535063.html.
- 17 See, e.g., Dean Hubbard, "Trade Unions, the Occupy Wall Street Movement, and the Redistribution of Wealth and Social Power" (2012). <http://www.deanhubbard.org/?p=504>.
- 18 See Appendix B
- 19 See, e.g., Environmental Protection Agency, "The Social Cost of Carbon." Available online at <http://www.epa.gov/climatechange/EPAactivities/economics/scc.html>. The EPA estimates the projected net present value of carbon dioxide mitigation benefits over the next forty years from three vehicle rulemakings alone, drops in the bucket given the range of possible mitigation projects, to range from \$78 billion to \$1.2 trillion (\$2010).
- 20 Jeremy Brecher, Jobs Beyond Coal: A Manual for Communities, Workers and Environmentalists, Labor Network for Sustainability (2012). Available online at <http://report.labor4sustainability.org/>.
- 21 Scott Martelle, "Kick Coal, Save Jobs Right Now: In Washington state, a blue-green alliance helps phase out dirty energy." Sierra (Jan./Feb. 2012). Available online at <http://www.sierraclub.org/sierra/201201/kick-coal-save-jobs.aspx>.
- 22 Refugio Mata, "LA Approves Plan to Buy Solar Power from Moapa River Indian Reservation." Compass (Nov. 26, 2012). Available online at <http://sierraclub.typepad.com/compass/2012/11/la-approves-plan-to-buy-solar-power-from-moapa-river-indian-reservation.html>.
- 23 Judith Lewis Mernit, "Repower LA." Sierra (Nov./Dec. 2013). Available online at <http://www.sierraclub.org/sierra/201311/los-angeles-energy-efficiency-green-jobs.aspx>.
- 24 See, e.g.: United Nations Environment Programme, Green Jobs: Towards Decent Work in a Sustainable, Low Carbon World (2008), pp. 277-293. Available online at http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=OCDEQFjAA&url=http%3A%2F%2Fwww.ilo.org%2Fwcm5p5%2Fgroups%2Fpublic%2F%40ed_emp%2F%40emp_ent%2Fdocu%2Fpublication%2Fwcm5_158727.pdf&ei=FL1UUquDGuyQyQGx7YGIDw&usg=AFQjCNFCHDs-FVfpX-3C-ErXzdzqWO6vR9g&sig2=aMQIRj3o7-22MQsY7V281g&bvm=bv.53760139,d.aWc



**GREEN
JOBS**

K. Dean Hubbard, Jr.
Director, Sierra Club Labor Program
203-216-2262

www.sierraclub.org
facebook.com/sierraclub
twitter.com/sierraclub

