

Earth Day 2020: Re-Imagine America in Harmony with Nature!

April 2020

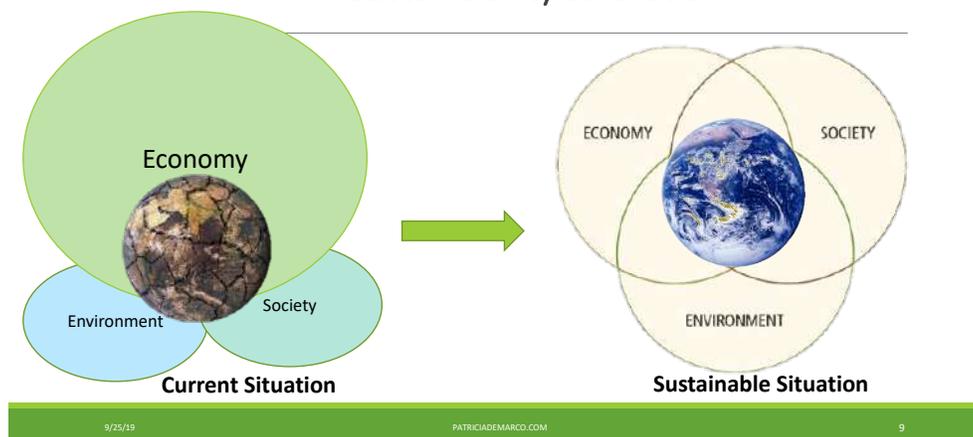
Patricia M. DeMarco

We are in a state of emergency. Not only from the COVID-19 pandemic but also the ongoing and escalating existential crises of global warming and global pollution, especially from plastics. Solving this trio of global crises will require collaboration, community and a sense of commitment to the future. Our country is deeply divided and out of balance in response to any single crisis, totally rudderless and struggling to address these overlapping issues. But sometimes, addressing a constellation of crises together brings solutions closer. This is especially true when the underlying causes overlap, and so do the solutions. The story of modern civilization since the Industrial Revolution has rested on subjugating nature through resource extraction, commercial agriculture exploiting the land, and piecemeal implementation of mitigation strategies. This moment in time offers an opportunity to re-set our trajectory. We can re-imagine America in a path that flows in harmony with Nature.

Because it is more comfortable to believe in pleasant things, most of us continue today to believe that in our country there will always be plenty. This is the comfortable dream of the average American. But it is a fallacious dream. It is a dangerous dream. Only so long as we are vigilant to cherish and safeguard our resources against waste, against over exploitation, and against destruction will our county continue strong and free.¹

Rachel Carson wrote these words in 1946, but her admonition rings truer today than ever. The emphasis on economic outcomes above all else as both a metric for progress and a guide for public policy has torn great holes in the social safety net and shredded basic environmental protections for clean air, fresh water, fertile ground and the biodiversity of species. These gifts of the living Earth, the ecosystem services, do not count in the Gross Domestic Product. These are our life support system that policies based heavily on economic profits to corporations are destroying. We need to change direction and restore the balance among economy, environment and society.

Sustainability as a Goal



Three important measures of the well-being of the nation illustrate the urgent need to change direction: the health of the people, the condition of the environment, and the distribution of wealth.

State of American health:

The COVID-19 pandemic has placed a sharp spotlight on the failings of our health care system. According to Cynthia Cox, Director of the Peterson-Kaiser Health System:

The U.S. performs worse than average among similarly large and wealthy countries across nearly all measures of preparedness for a pandemic. ... The coronavirus outbreak is already exposing inefficiencies and inequities in our health system. Compared to most similarly large and wealthy countries, the U.S. has fewer practicing physicians per capita but has a similar number of licensed nurses per capita. Looking specifically at the hospital setting, the U.S. has more hospital-based employees per capita than most other comparable countries, but nearly half of these hospital workers are non-clinical staff. Overall, the U.S. has fewer hospitals and hospital beds per capita compared to other similar countries.²

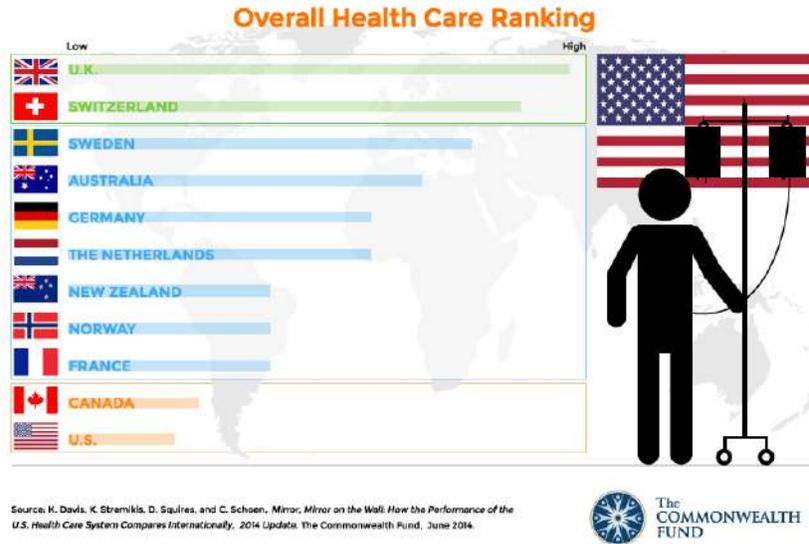
In a comprehensive study of US health parameters compared to other developed countries, Americans showed inferior health standards in nine categories including adverse birth outcomes, obesity and diabetes, chronic lung diseases, heart disease, and injuries and homicides.³ The causes for these poor health outcomes are varied. For example, the U.S. health system is highly fragmented, with limited public health and primary care resources and a large uninsured population. In 2018, 8.5 percent of people, or 27.5 million, did not have health insurance at any point during the year, an increase of 7.9% over 2017 levels.⁴ Compared with people in other countries, Americans are more likely to find care inaccessible or unaffordable and to report lapses in the quality and safety of care outside of hospitals.

The U.S. has an infant mortality rate of 5.8 per 1,000 live births whereas the average comparable developed country has an infant mortality rate of just 3.4 per 1,000 live births.⁵ The U.S. maternal mortality rate was 29.9 per 100,000 live births in contrast with just 6.1 per 100,000 in the average comparable developed country. According to the CDC, black women are three to four times more likely to die from a pregnancy-related complication than non-Hispanic white women.⁶ The overall U.S. rate of pregnancy-related mortality has been rising over two decades, while in the rest of the world it has been going down.

According to the National Research Council, many conditions that might explain the U.S. health disadvantage—from individual behaviors to systems of care—are also influenced by the physical and social environment in U.S. communities.⁷ For example, built environments that are designed for automobiles rather than pedestrians discourage physical activity. Patterns of food consumption are also shaped by environmental factors, such as actions by the agricultural and food industries, grocery store and restaurant offerings, and marketing. U.S. adolescents may use fewer contraceptives because they are less available than in other countries. Similarly, more Americans may die from violence because firearms, which are highly lethal, are more available in the United States than in peer countries. A stressful environment may promote substance abuse, physical illness, criminal behavior, and family violence. Asthma rates may be higher because of unhealthy housing and polluted air. In the absence of other transportation options,

greater reliance on automobiles in the United States may be causing higher traffic fatalities. And when motorists do take to the road, injuries and fatalities may be more common if drunk driving, speeding, and seatbelt laws are less rigorously enforced, or if roads and vehicles are more poorly designed and maintained.

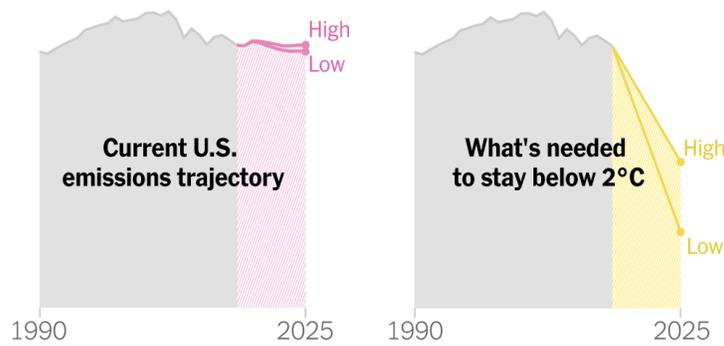
Tragically, the U.S. ranks last in overall health care among developed nations.⁸



State of the U.S. Environment:

This decade has seen the advance of global warming from the ends of the earth to the closest neighborhood. But even as the scientists who monitor climate change and document the destruction of oceans, wetlands, forests and grasslands escalate their alarms, the Trump Administration relentlessly attacks the policies and protections that could help to slow the pace and mitigate the worst of the harms. The U.S. is scheduled to withdraw formally from the Paris Climate Accord at the end of 2020 and the current U.S. emissions trajectory is totally inadequate to be on track for preserving the target of controlling emissions to no more than a two-degree Celsius rise above 2005 levels.⁹

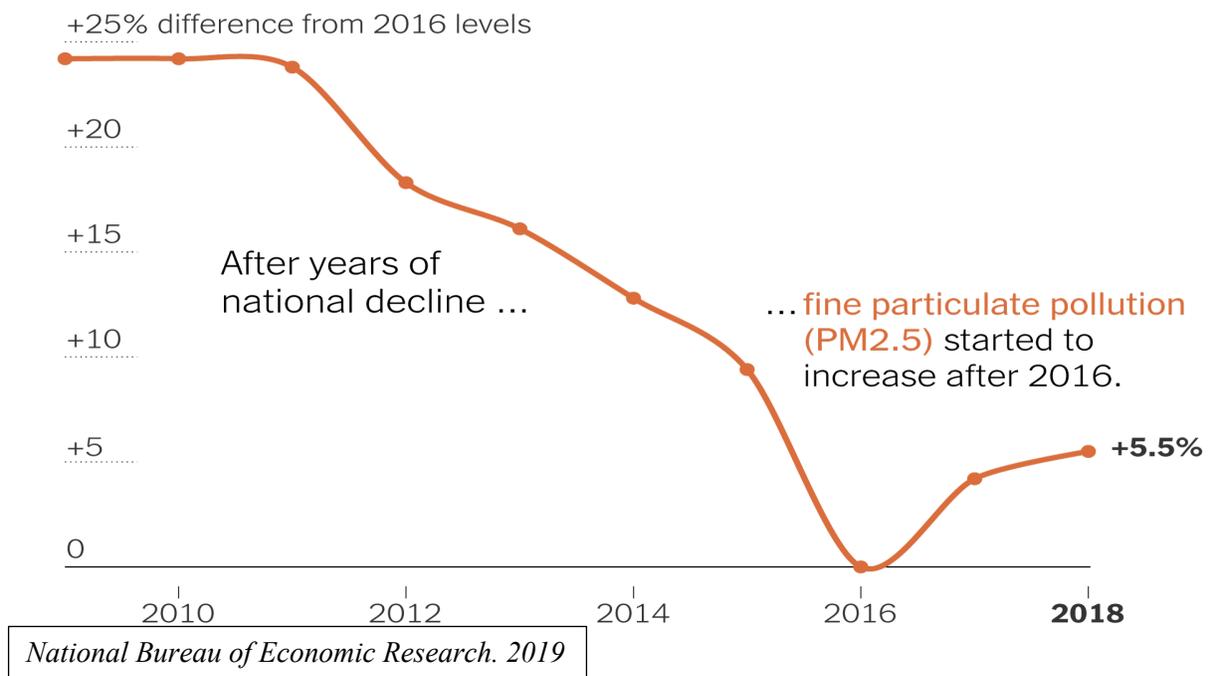
U.S. Emissions Trajectory Compared to Climate Goals:



New York Times. December 12, 2018

With 48 of his targeted 95 environmental protections rescinded, reversed or weakened as “burdensome” curtailments of business, the deliberate destruction of vast parts of the life support system of this country seems assured. Safe drinking water from rivers, streams and wetlands once protected by law now face unrestricted pollution from heedless corporate interests. With regulatory and administrative agencies headed by lobbyists and executives from coal, oil, natural gas, mining, logging and commercial agricultural interests, there is no advocate in the government to protect the public interest or to safeguard the future.¹⁰

U.S. Air Quality declines after decades of improvement.



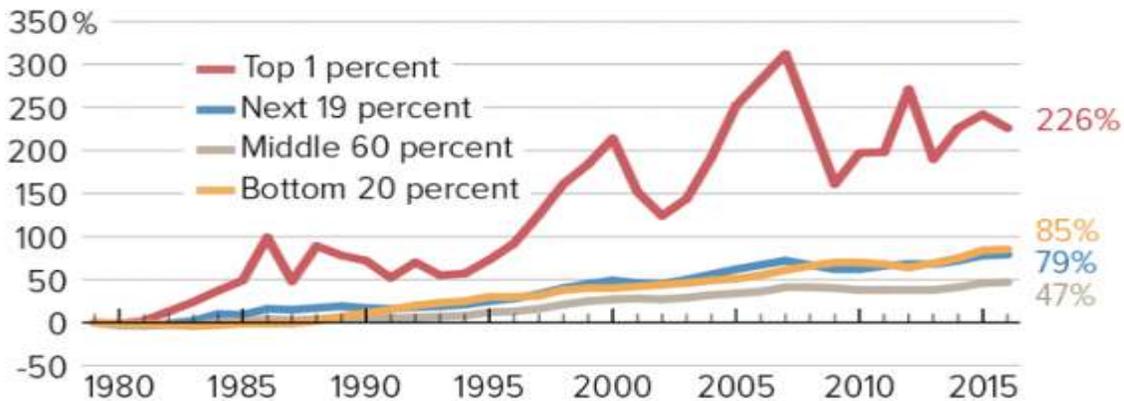
Now in the face of the COVID-19 pandemic, the EPA is stopping enforcement of environmental regulations and accelerating permits for oil, gas and coal projects. The wealth of the land is being stripped away and imperiled forever at the behest of special corporate interests whose next quarter profits drive relentlessly to destruction. After decades of decline in air pollution nationwide, increases of 5.5% in small particulate pollution has occurred since 2018.¹¹ The uptick in emissions comes from rollback in environmental protections, increased wildfires, and a rise in driving and natural gas use, obliterating the curtailed emissions from declining coal.¹²

State of American Prosperity:

The income equity gap in the U.S. is wider than ever and has been accelerating. While Americans enjoyed a shared growth in prosperity from the end of World War II into the 1970s, the gap between the most wealthy and least wealthy has been growing, with fewer and fewer Americans at the high wealth end of the scale. Since 1970, average income after transfers and taxes quadrupled for the top one percent of the distribution; The increases were much smaller for the middle 60 percent and bottom 20 percent of the distribution.¹³

Income Gains at the Top Dwarf Those of Low- and Middle-Income Households

Percent change in income after transfers and taxes since 1979



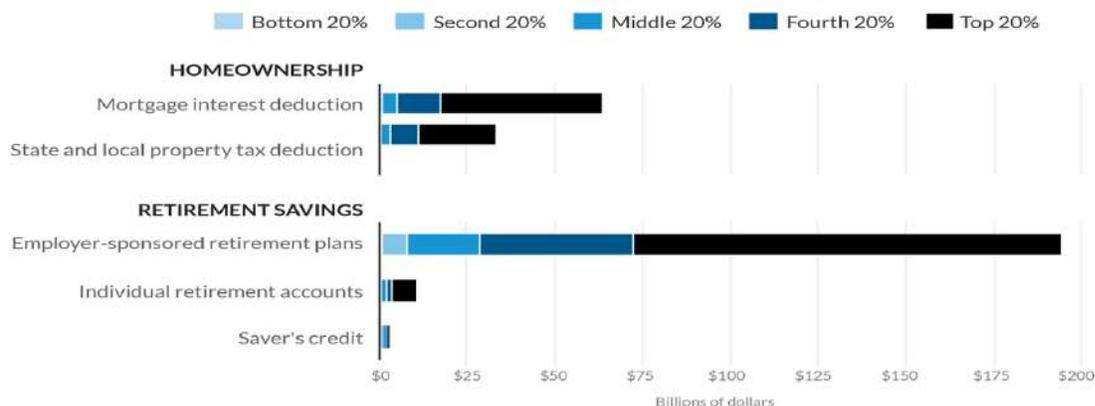
Source: Congressional Budget Office

CENTER ON BUDGET AND POLICY PRIORITIES | CBPP.ORG

The federal government spends over \$400 billion to support asset development, but those subsidies primarily benefited higher-income families and racial wealth disparities. About two-thirds of homeownership tax subsidies and retirement subsidies go to the top 20 percent of taxpayers, as measured by income. The bottom 20 percent, meanwhile, receive less than 1 percent of these subsidies. Blacks and Hispanics, who have lower average incomes, receive much less of these subsidies than whites, both in total amount and as a share of their incomes.¹⁴

Low-income families benefit from safety net programs, such as food and cash assistance, but most of these programs focus on income—keeping families afloat today—and do not encourage wealth-building and economic mobility in the long run. What’s more, many programs discourage saving: for instance, when families won’t qualify for benefits if they have a few thousand dollars in assets or when they have to give up rent subsidies to own a home; and tax subsidies highly favor investments over savings.¹⁵

Size and Distribution of Select Asset-Building Tax Subsidies, 2017



Source: Updated estimates from Steuierle et al. (2014).

Note: "Income" refers to the Tax Policy Center's "expanded cash income" measure, which is described in Rosenberg (2013).

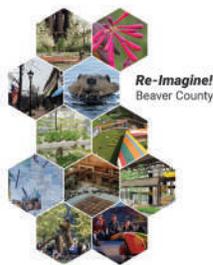
URBAN INSTITUTE

We can be better than this!

Unaware of what we have done or its order of magnitude, we have thought our achievements to be of enormous benefit for the human process, but we now find that by disturbing the biosystems of the planet at the most basic level of their functioning we have endangered all that makes the planet Earth a suitable place for the integral development of human life itself. Thomas Berry¹⁶.

The COVID-19 pandemic experience gives us an opportunity to re-think what we are doing. We have a chance as we are forced to pause in the headlong pursuit of daily endeavors to sharpen focus on what truly matters. The stark reality of the inequities in our economy, our social network and our environment cannot stand if we are to build a more resilient, a more equitable and just, and a more environmentally healthy society.

The Re-Imagine movement has been working through Pennsylvania communities, facilitated by the League of Women Voters, bringing ideas from the ground up for a new way forward. We can take lessons from the Re-Imagine movement to date and build a vision for the future that will



bring a more equitable, healthy and prosperous time for our country. Many of the sessions in PA begin with the thought exercise: “Imagine what you would do for economic development in your community if you had the \$1.6 Billion in incentives given to the Shell Appalachia Petrochemical plant?” The answers to this question from Beaver County to Erie, Lehigh Valley, Johnstown, Wheeling WV and the Re-Imagine Appalachia effort covering PA, Ohio, West Virginia and Kentucky reveal enormous creativity and aspiration for a better way forward. On this 50th anniversary of Earth Day, I am moved to imagine what America could be like if we

break the bond of our economy to the extractive fossil industries that are killing our planet and making us sick. As we plan for life after COVID-19, we have the opportunity to re-set our way of life to a new, better way forward that addresses the trio of crises all at once.

Principles and Values

This period of a global pandemic requires isolation and separation from public gatherings. Parents keep distance from their children and grandchildren; Neighbors wave instead of sitting together; merchants seek desperately for ways to keep connection with clients and customers. Many fall into despair as isolation shrinks our world. The need for distancing sharpens our sense of interconnectedness and interdependence. It is important to reflect on priorities and assess what really matters in our life. I share here the vision of Donella Meadows who wrote in *The Limits to Growth* a scenario where we avoid collapse of our civilization:

People don't need enormous cars; they need respect. They don't need a closet full of clothes; they need to feel attractive and they need excitement, variety and beauty. People need identity, community, challenge, acknowledgment, love, joy. To try to fill these needs with material things is to set up an unquenchable appetite for false solutions to real and never-satisfied problems. ... A society that can admit and articulate its nonmaterial needs and find nonmaterial ways to satisfy them would require much lower material and energy resources and would provide much higher levels of human fulfillment.¹⁷

I have great confidence in the basic common sense of people when they have a chance to choose a better way forward. We can advance a better path, one that re-directs the destructive impetus of the past and opens a new epoch of human endeavor where we align our economy and our society to exist in harmony with the natural systems of the living Earth that are our life support system. If we shift from exploitation to nurture as the operating premise of our relationship to the earth's ecosystems, we will build a better future, one that offers hope and joy to our children instead of escalating despair.

Recognize the Universal Rights of Mother Earth.

The earth is a living system of which humans are but one part; not human property to be owned or destroyed for profit. The laws of nature co-evolved over millions of years – chemistry, physics, biological and physiological responses to conditions in the environment -define complex inter-relationships among all living things and connect the living earth elements with the mineral and inert elements. These functions are inherent in living systems, priceless attributes of the living earth that are not reflected in the drivers of the economy. To achieve meaningful and lasting solutions to the existential crises of global warming and global pollution, the laws of nature must be incorporated into the practices of civil society. The Laws of Nature are NOT negotiable!

Indigenous Peoples all around the world have long recognized the necessity of living within the laws of nature and do so by respecting the rights of the living earth. A gathering of Indigenous Peoples in the People's Climate Conference at Cochabamba, Bolivia on Earth Day 2010 adopted a Universal Declaration of the Rights of Mother Earth that was introduced at the COP-15 meeting in Paris in 2015 arguing for a 1.5°C increase above pre-industrial ceiling for global warming. The goal of a 1.5°C ceiling was incorporated into the Paris Climate Accord of 2015 signed by 195 nations due to their efforts. The justification for this action states in part:

We the Peoples and Nations of Earth are all part of Mother Earth, an indivisible, living community of interrelated and interdependent beings with a common destiny; and...Recognizing that capitalism and all forms of depredation, exploitation, abuse and contamination have caused great destruction, degradation and disruption of Mother Earth, **putting life as we know it today at risk** through phenomena such as climate change establish this Universal Declaration of the Rights of Mother Earth.¹⁸

Re-Imagine America in harmony with Nature!

There are no technological barriers to making rapid and meaningful changes toward sustainable climate solutions. All of the technologies necessary to address the major sources of global warming and global pollution are in hand and will only improve in effectiveness as they become more widely adopted. Only the political will to act stands in the way of transforming our economy. Over 73% of Americans want action on climate change but are deeply divided on partisan lines (67% of Democrats and 21% of Republicans)¹⁹ The U. S. Constitution vests the power of government in The People. We **have** the power to act to save our world.

We stand at a crossroad now. In one direction, we can continue toward a future based on petrochemical industries- build out the infrastructure that will bind our economy to natural gas and plastics for another fifty years. Or we can recognize the ultimate futility of this pursuit and

turn our investments, our education tools, our might and political will toward building a sustainable future. The tools for doing this are at hand:

- Renewable energy systems;
- Regenerative agriculture that captures carbon and restores the fertility of the land;
- Non-fossil -based materials in a circular supply chain; and
- Preserving the Biodiversity of the earth in living ecosystems that provide fresh water, clean air and fertile ground.²⁰

When communities gather together to examine how to re-shape future growth, people focus on



Re-Imagine Turtle Creek Watershed and Airshed

renewable energy systems whether to reclaim blown off mountain tops or to enhance the productivity of farmlands with solar arrays and wind systems. People want to grow hemp, flax, and bamboo with local manufacturing to convert plant materials to goods that replace plastic. Organic farming in both urban and traditional agricultural areas gains popularity. Local manufacturing and re-

manufacturing surfaces frequently as an important way to renew communities. All of these initiatives focus also on preserving and enhancing the features that contribute unique character to communities, that preserve the specialness of place and identity.²¹ If the government infrastructure can be aligned to support and empower community plans, the innovation and resilience that can emerge will become a platform for a new America, an America where communities come together as part of the land.

Recognize that we are facing an emergency: Climate, Pollution and Pandemic

On this 50th Anniversary of Earth Day, we must recognize the true existential crises we face from human activities that destroy the natural systems of the living earth. We must make a U-turn in our policies. This requires a level of commitment equivalent to the mobilization of World War II. The tools are at hand. For 2020 these priorities can drive progress:

1. **Stop subsidizing fossil fuels** research, exploration, production, processing and use. Taxpayer dollars in the U.S. alone exceed \$649 Billion annually in direct subsidies. Replace this with a bottom-line tax deduction for all property owners for energy efficiency, renewable energy installations, carbon sequestration in trees and organic farming, and replacements of fossil resources with non-fossil materials such as bamboo, hemp and algae.
2. **Reverse the primacy of mineral rights over surface rights.** Ecosystem services such as wetlands, grasslands, forests depend on intact surface conditions. Disruptions for mining, drilling, excavation and erosion destroy the ecosystems that provide our life support.
3. **Re-invest in communities.** Give communities the resources to plan for a diverse and stable future based on renewable resources and affirming community values. Invest in people, rather than multi-national corporations with no allegiance to sustainability.
4. **Protect and care for the people who are victims of social and humanitarian disruptions** associated with the response to climate change. For the workers of the oil, gas and coal industries, transition to productive jobs in the new economy, protecting pensions and health benefits, and maintaining the dignity of their worth are essential. Millions of people are thrust

into forced migration from climate effects around the world, and even within the US. Criminalizing people who face extended drought and social collapse is inhumane and demeans our humanity.

The transformation to a society living in harmony with nature will place priority on protecting biodiversity in all areas of the world, as an excellent indicator for the health of the complex ecosystems that comprise Earth's life support system. We are facing a critical time in which we will choose the fate of our living Earth for hundreds of years into the future. In making the critical choices about energy and all resource management, we must place greater value on the living things, rather than on the short-term profits to corporations as the dominant driver. The plan for a just transition must address the needs of people caught in the transition- the oil, gas, and coal workers especially, who will need to transition to new ways of working in new fields. Just and equitable solutions will need to include protecting pensions, health benefits and re-training for existing workers.

A companion to a policy of re-investing in communities can empower people to re-structure our society with a more diverse and locally responsive economy.

Re-Imagine Beaver County

VISION

We envision a greener local economy as a result of making diversified, equitable and sustainable economic development decisions to create a resilient, healthy, and thriving Beaver County.

We need a new system of governance that relies on a doctrine of public trust for natural resource management. In such a system, common resources are managed for the long-term benefit of the whole of society collectively, rather than to be owned and divided to profit individuals or corporate owners. A particular major change in this approach would place the ecosystem services, mostly on the surface of the earth, as priority for protection above the rights for extracting mineral deposits from deep underground. Such an approach recognizes the priceless value of the services the living earth delivers to all living things for free, as conditions of mutual support. We can transform our society to align with the natural cycles of resource use, recovery and re-use, rather than

changing raw material to trash as rapidly as possible.

The best way to move forward is to remember that we are more alike in our common humanity than different in political stance, race, gender, religion or culture. If we protect the rights of the living Earth and connect our own fate to the fate of the natural world, we will find the courage to make the necessary changes. The result will be a better future and the legacy of a renewed sense of wonder in the miracle of creation. Each person can act. Each person matters in the great interconnected web of life. Here is Rachel Carson's conservation pledge:

I pledge myself to preserve and protect
America's fertile soils, her mighty forests,
and rivers, her wildlife and minerals,
for on these her greatness was established
and her strength depends. Rachel Carson²²

Make your own pledge to Re-Imagine America in harmony with Nature!

References and Resources

- ¹ Rachel Carson. July 19, 1946 (Linda J. Lear. Rachel Carson- *Witness for Nature*. Henry Holt & Co., New York. 1997. Page 137.)
- ² Rabah Kamal, Nisha Kurani, Daniel McDermott, and Cynthia Cox. “How prepared is the U.S. to respond to COVID-19 relative to other countries?” Petersen-Kaiser Foundation. Health System Tracker. March 27, 2020. https://www.healthsystemtracker.org/?sfid=4356&_sft_category=access-affordability,health-well-being,spending,quality-of-care Accessed April 12, 2020.
- ³ National Research Council (US); Institute of Medicine (US); Woolf SH, Aron L, editors. *U.S. Health in International Perspective: Shorter Lives, Poorer Health*. Washington (DC): National Academies Press (US); 2013. Summary. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK154469/>
- ⁴ Edward R. Berchick, Jessica C. Barnett, and Rachel D. Upton. “Health Insurance Coverage in the United States: 2018” United States Census Bureau. Report Number P60-267 (RV). November 8, 2019. <https://www.census.gov/library/publications/2019/demo/p60-267.html> Accessed April 12, 2020
- ⁵ <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm>
- ⁶ Alex Graff. “Women of Color Far More Likely to Die in US from Pregnancy-Related Causes” The Globe Post, National Newsletter. November 21, 2019. <https://theglobepost.com/2019/11/21/us-maternity-infant-mortality/> Accessed 7.Feb. 2020
- ⁷ National Research Council (US); Institute of Medicine (US); Woolf SH, Aron L, editors. *U.S. Health in International Perspective: Shorter Lives, Poorer Health*. Washington (DC): National Academies Press (US); 2013. Summary. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK154469/>
- ⁸ Karen Davis, Kristof Stremikis, David Squires, and Cathy Schoen. “How the U.S. Health Care System Compares Internationally.” The Commonwealth Fund. June 16, 2014. <https://www.commonwealthfund.org/publications/fund-reports/2014/jun/mirror-mirror-wall-2014-update-how-us-health-care-system> Accessed April 12, 2020.
- ⁹ Brad Plummer and Nadja Popovich. “The World Still Isn’t Meeting Its Climate Goals.” The New York Times. December 7, 2018. <https://www.nytimes.com/interactive/2018/12/07/climate/world-emissions-paris-goals-not-on-track.html> Accessed April 3, 2020.
- ¹⁰ Christopher Ingraham. “Air Pollution is getting worse and data show more people are dying.” Washington Post. October 29, 2019. <https://www.washingtonpost.com/business/2019/10/23/air-pollution-is-getting-worse-data-show-more-people-are-dying/> Accessed April 3, 2020.
- ¹¹ Karen Clay, Nicholas Z. Miller. “Recent Increases in Air Pollution: Evidence and Implications for Mortality.” National Bureau of Economic Research, Working Paper No. 26381. October 2019. <https://www.nber.org/papers/w26381> Accessed April 13, 2020.
- ¹² Karen Clay and Nicholas Z. Miller. “Recent Increases in Air Pollution: Evidence and Implications for Mortality.” The National Bureau of Economic Research. October 2019. NBER Working Paper No 26381. Quoted in <https://www.washingtonpost.com/business/2019/10/23/air-pollution-is-getting-worse-data-show-more-people-are-dying/> Accessed April 3, 2020.
- ¹³ Congressional Budget Office, “Projected Changes in the Distribution of Household Income, 2016-2021,” December 2019, Figure 4, p. 15, <https://www.cbo.gov/publication/55941>. Accessed April 12, 2020.

¹⁴ Chad Stone, Danilo Trisi, Arloc Sherman and Jennifer Beltran. A Guide to Statistics on Historical Trends in Income Inequality. Center on Budget and Policy Priorities. January 13, 2020. <https://www.cbpp.org/research/poverty-and-inequality/a-guide-to-statistics-on-historical-trends-in-income-inequality> Accessed April 12, 2020.

¹⁵ Urban Institute calculations from Survey of Financial Characteristics of Consumers 1962 (December 31), Survey of Changes in Family Finances 1963, and Survey of Consumer Finances 1983–2016. Notes: 2016 dollars. No comparable data are available between 1963 and 1983. <http://apps.urban.org/features/wealth-inequality-charts/>

¹⁶ Thomas Berry. “The Ecozoic Era.” Eleventh Annual E.F. Schumacher lecture. Schumacher Center for a New Economics. October 19, 1991. <https://centerforneweconomics.org/publications/the-ecozoic-era/> Accessed April 12, 2020.

¹⁷ L. Hunter Lovins et.al. *A Finer Future – Creating an Economy in Service to Life*. New Society Publishers. B.C. Canada. 2018. Page 27

¹⁸ Universal Declaration of Rights of Mother Earth. World People’s Conference on Climate Change and the Rights of Mother Earth. Cochabamba, Bolivia. April 22, 2010. <https://therightsofnature.org/universal-declaration/>

¹⁹ Gustafson, A., Goldberg, M. H., Kotcher, J. E., Rosenthal, S. A., Maibach, E. W., Ballew, M. T., & Leiserowitz, A. (2020). Republicans and Democrats differ in why they support renewable energy. *Energy Policy*, 141. DOI: 10.1016/j.enpol.2020.111448 <https://climatecommunication.yale.edu/publications/republicans-and-democrats-differ-in-their-primary-reasons-for-supporting-renewable-energy/> Accessed April 13, 2020.

²⁰ For detailed discussions of implementation for these pathways see: Patricia DeMarco. *Pathways to Our Sustainable Future -A Global Perspective from Pittsburgh*. University of Pittsburgh Press. Pittsburgh 2018.

²¹ Mark Dixon, Andre Goes, Heather Haar, Joanne Martin, Connor Mulvaney, Sophie Riedel. Re-Imagine Beaver County. League of Women Voters of Pennsylvania. Spring 2019. <https://www.shalepalwv.org/wp-content/uploads/2019/05/2019-Re-Imagine-Beaver-County-Book.pdf> Accessed April 9, 2020.

²² Linda J. Lear. *Rachel Carson – Witness for Nature*. Henry Holt & Company. New York. 1997. Page 137.

Resources and Further Readings:

Patricia M. DeMarco. “The Gifts of the Living Earth.” Presentation to Integrity of Nature Symposium, Duquesne University, September 2019. Posted on <https://patriciademarco.com/2019/12/10/gifts-of-the-living-earth/>

Patricia M. DeMarco. A New Decade- A New Reckoning. January 2020. <https://patriciademarco.com/2020/01/07/a-new-decade-a-new-reckoning/>