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GOING FOR THE GREEN

How Utah Can Thrive
in the New Climate Economy

EXECUTIVE SUMMARY

JULY 2021

GOING FOR THE GREEN

HOW UTAH CAN THRIVE IN THE NEW CLIMATE ECONOMY

Thanks to Western Resource Advocates for supporting this project.



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Utah Foundation's mission is to produce objective, thorough and well-reasoned research and analysis that promotes the effective use of public resources, a thriving economy, a well-prepared workforce and a high quality of life for Utahns. Utah Foundation seeks to help decision-makers and citizens understand and address complex issues. Utah Foundation also offers constructive guidance to improve governmental policies, programs and structures.

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EXECUTIVE SUMMARY

INTRODUCTION

The “New Climate Economy” is an effort to tie economic strength to actions intended to reduce the impacts of climate change. Innovations and other measures from corporations, along with new policies and investments from the federal government, provide states with a range of opportunities to capitalize on the transition to an economy that prioritizes climate-focused strategies.

This report focuses on those opportunities. It analyzes job-creating opportunities by economic sector, explores opportunities from the federal government and corporations, and looks at ways Utah is seeking to bolster economic activity in rural parts of the state.

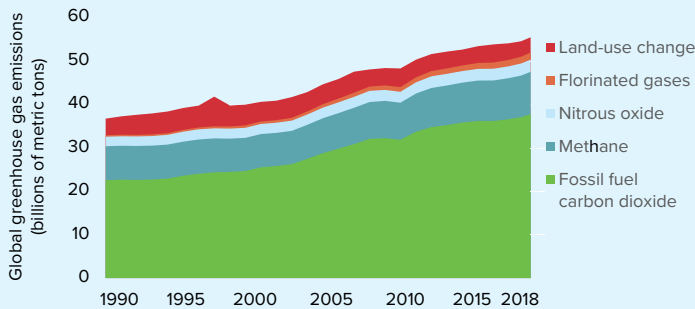


KEY FINDINGS OF THIS REPORT

- Utah’s per capita carbon dioxide emissions are 19th highest in the nation.
- Reaching the goal of cutting Utah’s annual carbon dioxide emissions by three quarters over 30 years would require major shifts in how Utah addresses electric power generation, transportation, industry, commerce and home energy usage.
- Utah could leverage federal funds toward large clean energy projects, such as the pump-storage project in the Navajo Nation, the green hydrogen project in Millard County and carbon capture at Utah’s coal-fueled power plants.
- Coal mining and coal-fueled electricity generation jobs represent about 5% of the direct employment in Utah’s seven more coal-dependent counties. The State of Utah may need to support these counties in any transition from coal-fueled electricity generation. Utah should consider ramping up rural broadband, telework opportunities, tourism infrastructure, monetary support and targeted educational opportunities.
- Were there a cost on carbon, utility-scale solar would likely be the cheapest electricity in every county in Utah. Wind projects would also be more competitive across a wider geography.
- Utah’s predominantly renewable-energy development through 2040 could create an estimated 39,000 construction jobs and 900 operations jobs, along with investment and tax revenue for local communities.
- Utah is already an innovator in renewable natural gas, geothermal energy, battery storage, and carbon capture and storage, which suggests that Utah is well-positioned to lead with those and other climate-focused strategies.
- Looking forward, there are multiple steps Utah can take toward becoming a leader in the new climate-focused economy, such as:
 - Creating a state commission and/or office dedicated to addressing climate challenges and climate-focused economic development, including the needs of rural areas and electricity transmission for Utah’s renewable energy power sources.
 - Developing a technological solutions laboratory.
 - Creating a fund to support entrepreneurs seeking to create marketable clean energy innovations.
 - Encouraging clean transportation options.
 - Exploring more stringent building efficiency codes.
 - At the federal level, determining whether it makes sense for Utah to support approaches such as an agricultural producer carbon sequestration credits program and a carbon pricing mechanism.

Global greenhouse gases are on the increase.

Figure 1: Global greenhouse gas emissions from all sources



Note: These are carbon dioxide-equivalent emissions.

Source: U.N. Environment Programme.

The purpose of this report is not to determine which public and private efforts most effectively address climate change. Rather, the report recognizes that various efforts are currently underway, and that they represent both economic opportunities and challenges for Utah.

Find the full report with all sources/citations at www.utahfoundation.org.

ECONOMICS OF CLIMATE CHANGE

This report focuses on the costs and benefits of slowing down climate changes (or mitigation), as well as the costs and benefits of making adjustments to decrease impacts and find beneficial economic opportunities (or adaption). These opportunities could come as investments from governments and businesses, and in the form of resources for communities negatively affected by a shift away from the use of fossil fuels.

The Possible Costs

To the extent that climate change increases the frequency and intensity of natural disasters, costs increase along with them. The question regarding climate change – and its associated costs – is not “Will it happen?” but “How significant will it be?” Along with the expenditures nationally, Utah will continue to have direct expenditures of its own.

Temperature. Every year since 1980 has been above the 20th century average. The Uintah Basin and the southeastern part of the state are seeing some of the most rapid increases. The Utah Climate Center at Utah State University suggests that Utah’s overall temperature has been rising at about twice the global average during the past 40 years.

Snowpack. Research from Utah State University has found that Utah’s annual snowpack has declined by 9% in the past half-century – in large part from rainfall replacing snow due to the shrinking number of below-freezing days (which has been reduced by six weeks). This of course would have cost ramifications on water supply, but it would also affect recreation and tourism linked to Utah’s snow, not to mention agriculture and energy production and development, which require significant amounts of water.

Drought. By some measures, the Colorado River Basin – covering half of Utah from the eastern part of the state through the south – has been in drought since 2000. The Department of the Interior states that the period from 2000 through 2015 was the driest 16-year period for the Basin in 100 years and one of the driest in 1,200 years.

Fires. The increase in Western fires is linked to increased temperatures and drought, as well as forest management deficiencies and insects. The Governor has projected that 2021 fire costs will be far higher than in previous years. Implementing more effective forest management to help prevent fires will come with significant costs as well.

Health. Utah experiences episodic high particulate matter levels from fire smoke, ozone resulting from fires and higher temperatures, and dust from drought.

Mitigation. In addition to climate change disaster damages, there are costs to help slow the increasing global temperatures. The costs might be in the form of regulation

upon businesses or from governmental expenditures. The 2020 *Utah Roadmap* set a goal of reducing carbon dioxide emissions to 15 million metric tons annual by 2050 – from about 60 million today. This would likely require adjustments to how Utah and Utahns address electric power generation, transportation, industry, commerce and home energy usage. There is a cost to all of these measures. The state and Utah companies could leverage federal funds for the required adjustments.

The Possible Benefits of Climate-Focused Investments

While the benefits of climate-focused investments could include the long-term slowing of climate change and its ramifications, this report focuses on the nearer-term economic benefits. The largest, near-term benefit to Utah from climate-focused economic strategies comes in the form of jobs. Utah trails only Vermont, Delaware, Wyoming, Rhode Island and Massachusetts in the percentage of energy efficiency, solar and wind jobs as a share of state employment – 2.5% of all jobs. Further, job growth in energy efficiency and power generation is expected to continue to far exceed U.S. growth, at least in the short-term.

ECONOMIC OPPORTUNITIES

Energy Production Sector

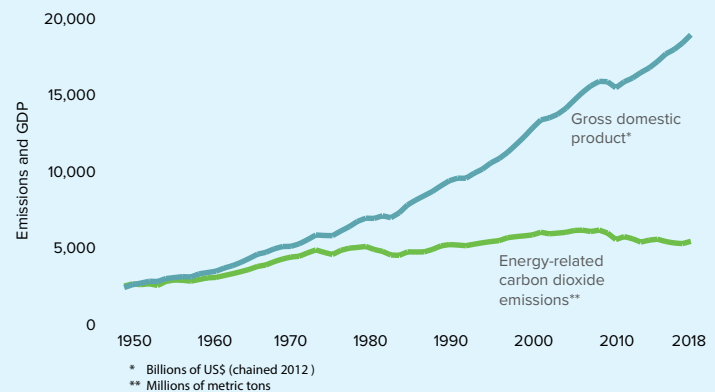
The energy production sector accounts for about one-quarter of all greenhouse gas emissions – and some suggest that this sector holds the key to the quickest reduction in emissions. Coal was once king for electricity generation in the U.S. and internationally, but it is being replaced with lower-emission alternatives.

Utility-Scale Solar, Wind and Batteries. In the U.S., perhaps three-quarters of U.S. coal-fueled power plants cost more to operate than building and operating new solar and wind energy – and the cost of these renewables continues to decline every year. Renewables are increasingly competitive across the U.S.

Most U.S. planned capacity for 2021 is renewable, with 39% solar, 31% wind and 11% batteries. This includes four solar projects in Utah. As an alternative to lithium-battery utility-scale storage, Utah’s Magnum Development’s salt formations in Millard County are coming on the scene. The company currently bores into the salt formations for fuel storage, but has explored developing a battery-like compressed air energy storage system to generate electricity during peak demand or during times of low solar or wind electricity generation. Another type of utility-scale “battery” is pump storage, whereby a project sends water uphill when excess renewable electricity is generated, to be released

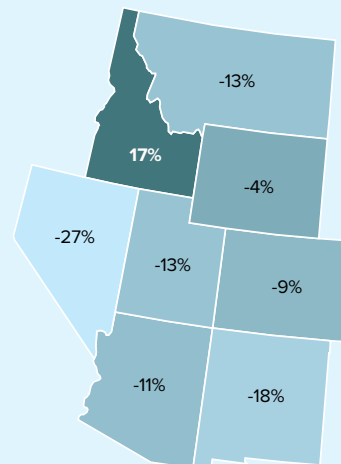
Economic growth leaves emissions in the dust.

Figure 2: U.S. GDP and Energy-Related Carbon Dioxide Emissions



In all of the Mountain States except Idaho, carbon dioxide emissions declined despite GDP growth.

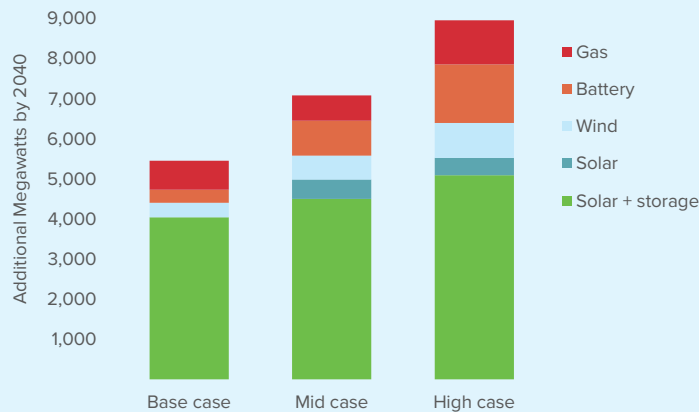
Figure 3: Mountain State Carbon Dioxide Emissions



Source (both figures): Saha and Jaeger.

The future of Utah's energy leans heavily on renewables.

Figure 4: Cumulative Additions in Utah (MW)



Source: Energy Strategies.

back down during peak demand, using gravity to generate electricity.

About 80% of Utah's new electricity development through 2040 is expected to be solar and/or battery, with the rest being natural gas or wind. (See Figure 4.) Utah's predominantly-renewable energy development through 2040 could create an estimated 39,000 construction jobs and 900 operations jobs, along with investment, tax revenue, increased spending and other jobs for local communities.

Distributed Solar and Batteries. Rooftop solar plus batteries is an effective combination – capturing energy during peak generation for use at times of lower generation. There are pressures against the future of ubiquitous rooftop solar in Utah. Rocky Mountain Power is looking to decrease the “value” of solar on roofs.

During 2016-2017, Rocky Mountain Power went before the Public Service Commission to reduce the export credit rate (the value of adding electricity back to the system) and add other fees that could have made this solar non-economical. The power company again went before the Commission in 2019-2020 to reduce the credit from between 5.5 and 6.0 cents (based upon time of year) to between 3.2 and 3.5 cents per kilowatt-hour, which arguably could have effectively eliminated Utah's rooftop solar residential market. The Commission opted to reduce the rate to around 5.5 cents per kilowatt-hour.

Other Renewables. The natural gas industry initially saw itself as part of the solution to climate change, but is now looking to pivot to still cleaner technologies, such as with renewable natural gas and green hydrogen. Utah is leading out as one of the states involved in the development of renewable natural gas. The renewable gas is methane captured from farming and industrial practices. Green hydrogen development could be another boon to the state. As part of the Intermountain Power Plant gas-fueled power plant project, green hydrogen is expected to be an important fuel source in a mixture with natural gas. Magnum Development is looking to build green hydrogen infrastructure and storage near the power plant. If so, that would likely spur the development of additional wind and solar energy in Millard County to create the green hydrogen. Lastly, the U.S. produces more geothermal electricity than any other country. While it is just a fraction of the overall energy produced, the U.S. Department of Energy suggests that generation of this “untapped energy giant” could be prompted to increase to nearly one-tenth of all electricity generation by 2050. The University of Utah received a \$140 million grant to develop a geothermal energy lab in Beaver County, which includes drilling two 8,000-foot-deep wells. In terms of jobs, a benefit of geothermal is that it requires skills similar to those in the oil and gas sector.

Carbon Sequestration. Sequestering carbon dioxide emissions is another route being explored to reduce greenhouse gas emissions. Carbon capture and utilization is one such approach – capturing the carbon dioxide released when generating electricity and using that gas elsewhere. While carbon capture is not economically viable at this time, foundations and governments are funding projects and research in an effort to make it so. The Musk Foundation, for example, sponsored carbon capture projects with \$100

million in capital. The federal government provides tax credits for carbon capture equal to \$50 per metric ton of carbon dioxide, or credits of \$35 per ton when captured and then used for recovering oil underground. The Utah Legislature passed a bill for a high-cost infrastructure tax credit that can be used for carbon capture projects. And in 2020, the University of Utah and the Utah Geological Survey received federal funds under the Carbon Utilization and Storage Partnership for carbon capture research.

Nuclear. In terms of carbon dioxide emissions, many look toward nuclear as a viable alternative to fossil fuel electricity production. The Utah Associated Municipal Power Systems is looking to build 12 advanced small modular reactors at the federally-run Idaho National Laboratory. The U.S. Department of Energy is helping defer the project's financial risks, though the approach, if workable, would result in lower capital costs and overcome some of the other challenges with traditional nuclear power plants.

Energy Efficiency Sector

The benefits of energy efficiency cannot be overstated; it would take 300 large, coal-fired power plants to generate the electricity saved in efficiency gains since 1990. To put that into context, there are only about 250 power plants in the U.S. (over one-third of which are small). An expansion of energy efficiency with the electrification of building heating and appliances, industrial uses and transportation could cut energy use in half by 2050 and could cut greenhouse gas emissions even more. About one-third of that savings could come from buildings, one-fifth from industry, and about half from transportation. In Utah, energy efficiency employs far more people than every other sector of the energy industry – 38% of the 38,000 total jobs.

Some researchers suggest that countries worldwide need to focus on electrification – from transportation to heating – while also increasing solar, wind, nuclear and other forms of electricity generation. The upside is that electrification is efficient. A full electrification across the U.S. would cut in half the BTUs – or energy – used now. One challenge is that the current costs to consumers are significant. Yet electrification could create tens of millions of U.S. jobs in the short-term while phasing out a fraction of that number of fossil-fuel jobs.

Transportation Sector

The transportation sector has the most emissions of any sector – about 29%. Zero and low-emissions vehicles offer a path toward decreasing those emissions, even with more drivers on the road and regardless of whether the electricity comes from renewables.

Electric Vehicles. Since 2016, nearly every yearly forecast for electric vehicle growth has increased dramatically as costs for electric vehicles have dropped and consumer demand has increased commensurately. There were just one million electric vehicles on U.S. roads in 2015, but by June 2021 there were 12 million. In Utah, 2020 sales surpassed the U.S. average, despite the state's decision to drop its electric vehicle tax credit in 2016. Electric vehicles are already cheaper to operate and maintain than internal combustion vehicles, and analysts expect that electric vehicles will reach showroom-floor price parity with internal combustion vehicles during the mid- to late-2020s. Bloomberg New Energy Finance projects that half of all cars sold in the U.S. by the early 2030s will be electric.

Electrification of buses and even long-haul trucks is becoming more common. As the Utah Foundation discussed in the recent report, *Driving Toward a Cleaner Future* (November 2019), large fleet vehicles account for one-third to one-half of Utah's vehicle emissions, even though they account for only 3% of the vehicle miles traveled.

EV Charging Infrastructure. To support Americans' demand for electric cars now and into the future, there are roughly 42,000 charging stations across the country with about 102,000 individual charging outlets – more than triple the number in 2015. Utah has about 1,700 public charging outlets and counting. And the state is looking to further ramp up electric vehicle charging infrastructure, particularly in rural areas.

Road Usage Charges. A road usage charge (RUC) is imposed on drivers based on miles driven, often using GPS technology. While road usage charge programs are primarily meant to address the deficiencies of the motor vehicle fuel tax as a revenue generator, they can be crafted to address other policy objectives as well. In Austria, Germany and Switzerland, a primary goal of RUCs on trucks is to encourage lower greenhouse gas emissions and air pollution. Therefore, the rates are higher for trucks with older, less efficient engines. For a full discussion of RUCs and their potential application, see the recent Utah Foundation report, *Measuring the Miles: Road Usage Charges in Utah* (March 2021).

Other. ASPIRE, an engineering research center at Utah State University, is studying roadway electrification. This is useful for buses or shuttles that drive continuously and have a set route, but it may also have potential for the future of electric vehicle charging so that drivers can charge while on the road, greatly extending driving distance. Also, while hydrogen fuel cell technology is not yet widespread, significant uptake is possible.

Industrial Sector

A bipartisan amendment to a 2021 U.S. appropriations bill agreed to a goal of cutting hydrofluorocarbons to 15% of the 2011-2013 average emissions by 2036. The EPA has already approved a list of substitute refrigerants and is preparing a plan to reduce hydrofluorocarbons, effectively creating a cap-and-trade-type system. One study has estimated that phasing down hydrofluorocarbons and accelerating production of alternatives would create an additional 33,000 direct manufacturing jobs in the U.S. and an additional \$12.5 billion in output per year beyond normal industry growth. Counting indirect and induced effects, it could create 150,000 additional jobs and \$39 billion in additional output. There may be opportunities for Utah manufacturers to capture a portion of this economic activity.

Natural Resources Sector

Methane is a major concern for greenhouse gas emissions due to its far higher global warming potential than carbon dioxide. While methane is released into the atmosphere from numerous sources, an important proportion comes from the natural resources sector. Utah and several other states have adopted regulations that require oil and gas companies to check for methane leaks on a regular basis and quickly fix them. The reclamation of abandoned mines can be an important part of the transition for workers in affected communities. Notably, coal miners already have the required skills to perform such tasks and the work often lasts for several years at each location. Further, some are looking into using abandoned oil and gas wells for geothermal energy generation.

Land Sector

Agriculture is responsible for the equivalent of one-fifth of global greenhouse gas emissions. This provides a great opportunity for targeted methane emission elimination. For instance, adding red algae to cow feed has been shown to nearly eliminate enteric fermentation methane. Some farms are trying complementary approaches. Agrivoltaics is the practice of putting solar panels on farmland. This creates electricity, but can also provide the shade that helps some crops thrive while reducing water use.

In addition to agriculture, there is another land-use consideration: community development. Planning for growth is a high priority in Utah, particularly in relation to the impacts of transportation choices, land use decisions, and open space and emissions-related policies.

The Utah Foundation released an extensive report in 2019 on land use decision making, fiscal sustainability and quality of life in Utah, focused on leveraging the state's robust growth to exploit opportunities for improvements. Many of the strategies discussed in that report can have positive impacts on emissions, even while providing economic development, improving quality of life and boosting the tax base. For instance, efficient land use patterns, transit-oriented development, active transportation and improved street connectivity can all help to alleviate traffic congestion, reducing emissions.

OTHER ECONOMIC OPPORTUNITIES

Federal Government Regulation and Investment

Increased federal regulation and investment are coming. Regulations poses challenges, but Utah also will have opportunities to capitalize on it and new investment. Federal legislation has been introduced as of this writing, with the aim of both incentivizing clean energy generally and supporting coal communities specifically.

Private Sector Investment

While various corporations have become more outspoken about the need for government intervention in encouraging a greener economy, some are also increasingly looking inward to ensure better environmental stewardship. The financial sector also appears to be steering away from carbon-intensive industries and toward the technical approaches that will help control climate change.

Investments in clean energy are quickly increasing. Clean energy investments in the U.S. passed \$78 billion in 2019, an increase of 20% over the previous year. And investment is rising faster than expected; estimates in 2015 for wind and solar projects by 2020 were one-half and one-third, respectively, of actual development.

MEETING ECONOMIC CHALLENGES IN RURAL UTAH

Some of Utah's rural communities are falling behind the state's economic prosperity due to changes in fossil fuel production and consumption. Rural communities tend to be most affected by the closure of coal-fueled power plants and by the efficiencies in coal mining. There are ways to support rural communities through these changes. In its 2017 series on Utah's Coal Counties, the Utah Foundation explored various opportunities for economic development, with a focus on diversification. It found the need for diversification for the uses of coal, diversification of electricity generation in relevant communities, and diversification of local economies.

Among the strategies that require ongoing effort are: supporting the expansion of broadband access and quality in rural communities; promoting telework opportunities; boosting tourism marketing and infrastructure in rural areas; bolstering economic development supports to assist communities in transition; and reaching out to rural populations with educational opportunities, leveraging online and distance learning.

WHAT MORE CAN UTAH DO

Looking forward, there are multiple steps Utah can take toward becoming a national

leader in the new climate-focused economy. The actions might include creating governmental structures and policies, supporting green infrastructure, and investing in innovation.

Create a State Commission/Office Focused on Climate Change Challenges

Utah should consider creating a climate commission and/or office. Activities could include developing a state climate change plan that prioritizes solutions that maximize economic and emissions benefits rather than simply following political popularity. It could also address emerging challenges such as the impacts of droughts.

One consideration for a commission/office would be to determine whether Utah should impose a clean energy standard, with an eye toward economic costs and benefits, including the impacts of new technology investments. Utah is one of 20 states that lacks a clean energy mandate (though seven states without mandates have utilities with 100% decarbonization goals covering some portion of those states).¹⁸¹ (See Figure 5.)

A Community Opportunity Program. Within or in addition to a climate change commission/office, the state should consider creating a Utah community opportunity program to provide a clear link among federal funding, state investments and private investments in a climate-focused economy. A community opportunity program could seek to smooth the economic shift away from fossil fuel dependency through funding, re-training, economic development planning and other supports.

Utah Transmission Authority. Some areas of the state are ripe for additional renewable energy development –

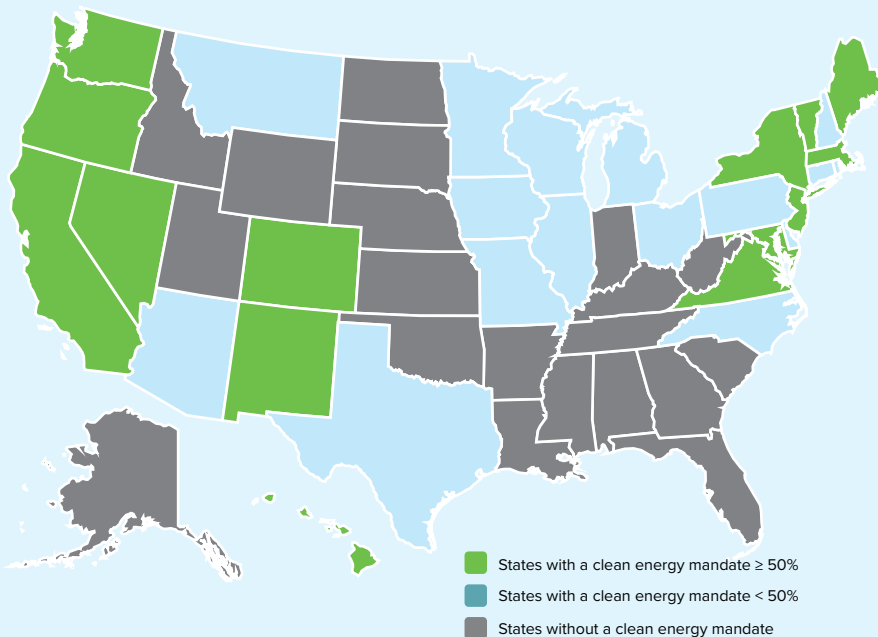
such as the areas near existing or defunct power plants. A state-funded transmission authority in Utah could use private investment to unlock wind and solar power beyond these areas and across the state, reaching communities that are currently without transmission resources. Another approach is one that the Texas legislature took in 2005. It fostered transmission development through renewable energy zones, leading to the development of major wind infrastructure and employment.

Develop a Technological Solutions Laboratory and Invest in Innovation

Various experts argue that, in the long run, innovation will play a greater role in reducing emissions than will poli-

Utah is one of 20 states without a clean energy mandate.

Figure 5: U.S. States with Clean Energy Mandates, 2019



Source: Saha and Jaeger.

cy interventions, pointing to market-based technological innovations and their impacts on emissions. In line with the Utah Foundation's recent suggestion to "super-charge innovation" in other arenas, the state could invest in similar approaches around climate-change solutions. A solutions laboratory could work toward the technical changes necessary to make "green" items cheaper, benefiting the economy in terms of increasing employment in clean-energy jobs. But unleashing market forces on the challenge could yield still greater economic achievements.

A key driver of Utah's success during the past 20 years has been the development of devices and products by entrepreneurs that flowered into major enterprises. In many cases, university research and technology transfer have played roles; a relatively small upfront investment, along with university collaboration, can open the way for creating a major employer in Utah with well-paid jobs and economic ripple effects. The state can play a key role in promoting innovation by supporting collaborative innovation between its own higher education institutions and private enterprises – in a way that learns from and improves upon past efforts.

Encouraging Clean Transportation Options

The high-profile concern around air quality allows for commensurate reductions in greenhouse gas emissions. This is especially true for vehicles as they are the largest overall emitter of greenhouse gases and are regular investments for consumers. While the state is participating in these projects, it could speed up progress and expand its world-class public transportation systems.

As the Utah Foundation found in a 2019 report, market forces will in the long run propel consumer uptake of electric passenger vehicles. In terms of tax credits, Utah may get a more substantial air quality return on any such investment by continuing to focus incentives on heavy-duty fleet vehicles. And due to the urgency of cleaning up Utah's air, replacing older diesel trucks with so-called "clean diesel" offers a potential target for more modest tax incentives. However, alternative fuel heavy-duty vehicle incentives would have a commensurate benefit in terms of greenhouse gas reductions.

The Utah Foundation report also suggested that the state could encourage the market's embrace of alternative fuel vehicles by encouraging private actors to deploy alternative fuel infrastructure for customers, tenants, employees and visitors. Furthermore, public and private sector stakeholders could mount public information campaigns to explain the growing availability of alternative fuel infrastructure and address any misplaced consumer fears.

Exploring More Stringent Building Energy Efficiency Codes

Utah saw the fastest population growth in the nation between 2010 and 2020. There is little sign of that slowing down. With this population increase, Utah will need additional dwellings. This provides a good opportunity to build energy efficiency into the future – as opposed to relying on challenging retrofits down the road.

As noted in a previous Utah Foundation report, most of the thermodynamic standards in Utah's residential building code fall short of the latest standards in energy-efficient building as included in the International Energy Conservation Code. Updating all requirements to the 2021 code would make new homes more energy-efficient. While housing costs are an issue, Utah Foundation analysis found that efficiency improvements would cost less than 1% of the cost of a new home, while residents would enjoy utility savings over time to counter costs.

Examining the Actions Utah Should Support at the Federal Level

Utah's congressional delegation helps to shape federal policies. These elected officials will be responsible for determining whether Utah should support climate-focused policy approaches such as large increases in federal funding for green infrastructure. Beyond those unprecedented proposed investments, there are a couple of programs that hit close to home: the agricultural producer carbon sequestration credits program, which seeks to encourage farmers to incorporate climate-friendly, carbon-reducing agriculture practices and techniques by opening up access to existing carbon credit markets; and the Baker-Shultz Carbon Dividends Plan, which calls for an economy-wide fee of \$40 per ton on carbon dioxide emissions, with the proceeds provided back to households at an estimated annual \$2,000 for a family of four during the first year, increasing each year thereafter.

CONCLUSION

A “New Climate Economy” is rolling out quickly, and with it are innovations, investments and opportunities that prioritize climate-focused strategies. Utah is already taking part in this new economy, but it lags behind the nation in terms of its per capita carbon dioxide emissions – even as the U.S. lags behind other industrialized nations and the world.

For 15 years, Utah has been looking toward climate change solutions, and the effort seems to have been re-prioritized with the *Utah Roadmap*'s goal of cutting emission in by about three-fourths over the next 30 years.

At the federal level, large new investments in Utah could play a part. For instance, Utah could leverage federal funds toward large clean energy projects, such as the pump-storage project in the Navajo Nation, the green hydrogen project in Millard County and carbon capture at Utah's coal-fueled power plants. The benefits of such investments are significant, as renewable-energy development alone is expected to create tens of thousands of Utah jobs in rural communities, spinning off new investment and tax revenue. To further bolster rural communities, Utah could consider ramping up rural broadband, telework opportunities, tourism infrastructure, monetary support and targeted educational opportunities.

Utah is already taking numerous steps toward a climate-focused economy, but there are additional approaches the state might consider. These include a commission/office dedicated to address climate challenges and climate-focused economic development across the state. Utah could look to speed up its clean transportation options and ensure that new homes are energy-efficient. Utah could consider the development of a technological solutions laboratory and the creation of a fund that supports innovation in the state. The state could also consider supporting federal policies, such as an agricultural producer carbon sequestration credits program and a carbon pricing mechanism.

For Utah, the economic implications of climate-focused policy and investments are monumental. By building on existing efforts, leveraging new federal funding, spurring entrepreneurship, planning for a cleaner future and taking advantage of emerging investment opportunities, the Beehive State can reasonably position itself to be a global leader in the new climate economy. Along the way, we will realize environmental benefits, such as cleaner air, and a wider distribution of prosperity among our rural communities.

Find the full report with all sources/citations at www.utahfoundation.org.



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