

# **Global, National and State Supporting Documentation and Data for Connecticut Climate Emergency Legislation**

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## **GLOBAL SUPPORT and DOCUMENTATION**

**WHEREAS** human activities based on the extraction and use of fossil fuels have warmed the Earth sufficiently to end the 12,000-year climate cycle that allowed human civilization and agriculture to develop and flourish; and

**WHEREAS** the years from 2010 to 2019 were the hottest decade on record, which was warmer than the previous warmest record decade of 2000 to 2009, and 2020 was the second warmest year on record, with 2021 also being one of the warmest years on record according to NASA and NOAA; and

**WHEREAS** the United Nations Intergovernmental Panel on Climate Change (IPCC), the world's most respected organization for the study of climate change, noted in its 2014 Fifth Assessment Report, "Continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive, and irreversible impacts for people and ecosystems" [[IPCC-2018](#)]; and

**WHEREAS** the burning of fossil fuels has increased atmospheric CO<sub>2</sub> concentrations to over 419 parts per million (ppm) – well in excess of the 350 ppm scientists had proposed as a safe upper boundary [[NASA 2008](#)], and substantially higher than the global 800,000-year maximum of 280 ppm, [[NOAA Rpt](#)] – causing increasingly numerous, intense, and destructive wildfires, floods, storms and droughts, as well as sea-level rise and extreme coastal high water, and the spread of novel diseases; and

**WHEREAS** climate science and observations of climate change impacts, including ocean warming, ocean acidification, floods, droughts, wildfires, and extreme weather, demonstrate that a global rise in temperature to the current 1.2 degrees Celsius above preindustrial levels is already having dangerous impacts on human populations and the environment; and

**WHEREAS** in April 2016, world leaders from 175 countries, including the United States, recognized the threat of climate change and the urgent need to combat it by signing the Paris Agreement COP21 held in 2015 [[Paris 2016](#)], pledging to do their best to keep warming "well below 2°C above pre-industrial levels" and to "pursue more strenuous efforts to limit the temperature increase to 1.5°C"; and

**WHEREAS** the United Nations World Meteorological Organization has reported 17.2 million internal displacements worldwide in 2018 followed by 22 million in 2019 [[WMO Climate](#)]; and

**WHEREAS** in October 2018, an IPCC special report projected that limiting warming to the 1.5°C target this century will require an unprecedented transformation of every sector of the global economy over the next 12 years [[IPCC 2018](#)] – that requires significant actions and legislation well before 2030; and

**WHEREAS** human impacts on the environment including climate change, pollution, overfishing, and loss of habitats and species are causing the sixth major global extinction in the Earth’s history, and World Wildlife Fund's 2018 Living Planet report finds a 60 percent decline in global wildlife populations since 1970, including a 50 percent decline in coral reefs since 1980 [[WWF 2018](#)]; and

**WHEREAS** in 2019 IPCC climate scientists assessed “ethical considerations, and the principle of equity in particular”, noting that they “are central to this report, recognizing that many of the impacts of warming up to and beyond 1.5°C, and some potential impacts of mitigation actions required to limit warming to 1.5°C, fall disproportionately on the poor and vulnerable (*high confidence*)-[[IPCC 2019](#)]; and

**WHEREAS** climate change driven droughts, famine, disease, and war are killing more than 150,000 people annually [[WHO Climate](#)] and has displaced 21.5 million new climate refugees since 2010 [[WEforum2021](#)]; and

**WHEREAS** The Report of Working Group I Sixth IPCC Assessment in August of 2021 reconfirmed the earlier finding by writing “Many changes in the climate system become larger in direct relation to increasing global warming. They include increases in the frequency and intensity of hot extremes, marine heatwaves, and heavy precipitation, agricultural and ecological droughts in some regions, and proportion of intense tropical cyclones, as well as reductions in Arctic sea ice, snow cover and permafrost” and “With further global warming, every region is projected to increasingly experience concurrent and multiple changes in climatic impact-drivers” [[IPCC-AR6-2021](#)]; and

**WHEREAS** in 2021 the United Nations reiterated under the heading “What you need to know about the climate emergency,” that the cause is the burning of fossil fuels and the subsequent impacts on global populations, ecosystems, and economies [[UN 2021](#)]; and

**WHEREAS** in 2021 COP26 Glasgow (November 11) agreed on rapid global transition to zero emission vehicles, reduce GHGs from ships and shipping, transformational global health systems, further development of carbon markets, and to seek greater commitments from countries on emission reductions. The statement includes work towards “agreement between very diverse economies ranging from the wealthy industrialized countries, the rapidly developing developed

countries, major fossil fuel producers, countries whose very existence is threatened by climate change and large group of relatively poor developing countries who have low emissions, but which are at great risk from climate change.” [COP26-2021]; and

**WHEREAS** some climatic changes resulting in global warming above 1.5 degrees Celsius above pre-industrial levels, especially a growing number of changes resulting from global warming of more than 2 or 3 degrees Celsius above pre-industrial levels, hold the potential for creating an increasing number of irreversible, catastrophic changes to public health, livelihoods, quality of life, food security, water supplies, human security, and economic growth. Regions and ecosystems where such changes are already being observed on a large scale include the Greenland and West Antarctic Ice Sheets, coral reefs (globally), the slowing of the Atlantic Meridional Overturning Circulation effecting Connecticut weather and climate directly, Western U.S. wildfires and drought, and others; and

**WHEREAS** the United Nations IPCC has determined that limiting warming through emissions reduction and carbon sequestration will require rapid and immediate acceleration and proliferation of “far-reaching, multilevel, and cross-sectoral climate mitigation” and “transitions in energy, land, urban and rural infrastructure (including transport and buildings), and industrial systems” [IPCC Mitigation]

### **U.S. SUPPORT and DOCUMENTATION**

**WHEREAS** the last seven years (2015-2021) were the warmest years on record for the planet since data collection (127 years), and over the past five years (2017-2021) the U.S. has experienced 86 separate billion-dollar weather/climate disasters totaling \$745 billion, an average of \$148 billion annually, and 6 times greater than the average year between 1980-2004 according to 2022 reports from NOAA and the Rhodium Group. U.S. disaster costs for 2021 topped \$145 billion, the third costliest and most deadly (668 deaths) year on record according to 2022 NOAA data.

**WHEREAS** according to the National Climate and Health Assessment of the United States Global Change Research Program [NCHA 2016/], climate change is a significant threat to the health of the people of the United States, leading to increased (A) temperature-related deaths and illnesses; (B) air quality impacts; (C) extreme weather events; (D) numbers of vector-borne diseases; (E) waterborne illnesses; (F) food safety, nutrition, and distribution complications; and (G) mental health and well-being concerns; and

**WHEREAS** the Urban Institute estimates more than 1.2 million Americans left their homes in 2018 for climate-related reasons, and that number has become the norm at least through 2020 [Urban Inst]; and

**WHEREAS** in January 2019 a bipartisan group of economists and policy makers announced their support for pricing carbon in addressing climate change, stating, “A carbon tax offers the most cost-effective lever to reduce carbon emissions at the scale and speed that is necessary” [[WSJ Economists 2019](#)]. The list of signatories includes over 3,589 economists, 28 of whom are Nobel Laureate economists, as well as four former Chairs of the Federal Reserve (Paul Volcker, Ben Bernanke, Alan Greenspan, and Janet Yellen [now Treasury Secretary]), 15 former chairs of the Council of Economic Advisors, and 2 former Secretaries of the U.S. Department of Treasury (George Shultz and Lawrence Summers); and

**WHEREAS** research published by the Nature Climate Change journal showed that pricing carbon using a carbon fee and dividend (cash back) methodology “would reduce poverty and inequality while strengthening the economy” [[CF&D reduces Poverty](#)] and [[CF&D Equity](#)]. The study showed that “an equal per capita refund of carbon tax revenues implies that achieving a 2 °C target can pay large and immediate dividends for improving well-being, reducing inequality and alleviating poverty. In an optimal policy calculation that weighs the benefits against the costs of mitigation, the recommended policy is characterized by aggressive near-term climate action followed by a slower climb towards full decarbonization” [[ClimateAction](#)].

**WHEREAS** carbon pricing mechanisms are in place in the 27 countries of the European Union and will be inputting a carbon border adjustment within a couple of years. Other countries, including Canada, Argentina, Chile, China, Colombia, Denmark, Japan, Kazakhstan, South Korea, Mexico, New Zealand, Norway, Singapore, South Africa, Sweden, the United Kingdom and Ukraine also have carbon pricing and are contemplating boarder adjustments [[C-Prices Worldwide](#)]. Of the world’s developed economies only the U.S. and Australia do not have some form of nationwide carbon pricing in place. The overseas carbon tax will be applied to goods imported from countries not having such a tax. U.S. and in fact Connecticut exports would be subject to this tax if not offset by a U.S. price on carbon and would have direct and local economic impacts to the value of U.S. exports.

**WHEREAS** in November 2019, 11,258 scientists worldwide declared “clearly and unequivocally that planet Earth is facing a climate emergency” [[Climate Emergency 2019](#)]; and

**WHEREAS** in 2019 the American Public Health Association declared “Climate Change is a Health Emergency;” the Association was allied with 15 other medical/health organizations including American Lung Association, Public Health Institute, National Medical Association, American College of Physicians, American Academy of Pediatrics and others [[APHA 2019](#)], and that this emergency requires immediate action; and

**WHEREAS** in 2019 the New England Journal of Medicine published a perspective from doctors, stating “Climate Change - a Health Emergency” [[NEJM 2019](#)]. The doctors cited impacts to human physical and mental health from forced evacuations and climate refugee status, insect borne

diseases, impacts to health from storms, flooding, droughts, heat stroke, heart stroke, and respiratory illness related to global warming. This agrees with CDC findings; and

**WHEREAS** in March 2020 climate scientists calculated that global warming had already exceeded pre-industrial temperatures by over 1.2°C, accelerating self-reinforcing changes (“positive feedback loops”), including the exponential increase in the release of sequestered methane, a greenhouse gas with 84 times (over 20 years) the global-warming potential of carbon dioxide [GHG GWpotent]. Methane is the dominant gas in natural gas; and

**WHEREAS** Climate-related natural disasters have increased dramatically over the past decade, and costs to the United States since 1980 that include over 300 (and climbing) \$1 billion+ weather and climate disasters that have thus far resulted in damages and total costs exceeding \$2.085 trillion. Costs were more than double the long-term average during the period of 2014 through 2018, with total costs of natural disasters during that period varying significantly on both sides of approximately \$100 billion per year [NCDC-NOAA]; and

**WHEREAS** the U.S. Department of State, the Department of Defense, and the intelligence community have identified climate change as a risk-enhancing threat to national security, and the Department of Homeland Security views climate change as a top homeland security risk, all of which impacts Connecticut [DOD-2021-CLIMATE-RISK]; and

### **CONNECTICUT SUPPORT and DOCUMENTATION**

**WHEREAS** the GC3 Public Health and Safety Working Group found that impacts of climate change have a direct impact on public health, including heat stress, poor air quality, restricted access to safe and adequate drinking water, food insecurity, negative impacts on mental health and wellbeing, increased prevalence of vector-borne disease, and the need to directly address health equity and the impact to the most vulnerable populations in Connecticut (from EO 21-3); and

**WHEREAS** the Connecticut Department of Public Health ("DPH") and Connecticut Health Improvement Coalition's 2019 State Health Assessment found that Connecticut's residents are susceptible to heat-related illness, with an average of 410 Emergency Department visits per year, and that those rates are strongly associated with the number of days each year for which the heat index was over 95°F, a threshold used by the National Weather Service for issuing a heat advisory, in Connecticut Non-Hispanic Black populations are at higher risks for heat-related illness compared to both non-Hispanic White and Hispanic populations, and populations most vulnerable to heat-related illness generally include people with chronic health problems (cardiovascular disease, diabetes, and obesity), infants and young children, outside workers, and older people (from EO 21-3); and

**WHEREAS**, there is overwhelming and incontrovertible evidence that man-made greenhouse gas emissions are causing climate change, and that according to the Long Island Sound Study and the University of Connecticut, the state is already experiencing climate change impacts including 8 to 9 inches of global sea level rise since 1880, accelerating coastal erosion, a warming Long Island Sound, hotter warmest and coldest days of the year, more annual rain and snowfall, and more intense rainfall (from EO 21-3); and

**WHEREAS** in 2021 alone, Connecticut communities have been harmed by multiple unprecedented and extreme weather events, including record-breaking rainfall from Tropical Storms Elsa, Fred, Henri, and the remnants of Hurricane Ida, poor air quality and closed schools and businesses due to heat waves, multiple federal disaster declarations, and the first National Weather Service "Flash Flood Emergency" in Connecticut's history, which resulted in more than 1,000 rescues of residents trapped by floodwaters (from EO 21-3); and

**WHEREAS** individuals and families on the frontlines of climate change in Connecticut and across the United States living with income inequality and poverty, institutional racism, inequity of the basis of gender and sexual orientation, poor infrastructure, and lack of access to health care, housing, clean water, and food security are often in close proximity to environmental stressors or sources of pollution, particularly communities of color, indigenous communities, and low-income communities, which, (A) are often the first exposed to the impacts of climate change; (B) experience outsized risk because of the close proximity of the community to environmental hazards and stressors, in addition to collection with waste and other sources of pollution; and (C) have the fewest resources to mitigate those impacts or to relocate, which will exacerbate pre-existing challenges. This was also the finding of the Connecticut GC3 "Equity & Environmental Justice Working Group Report" [GC3-EJ-RPT]; and

**WHEREAS** The Governor's E0 21-33 calls for equitable distribution of the costs and benefits of climate mitigation, including addressing disproportionate impacts of these strategies on environmental justice communities, and the protection of vulnerable communities disproportionately impacted by the effects of climate change (from EO 21-3); and

**WHEREAS** the GC3 Equity and Environmental Justice Working Group recommended ongoing community engagement for climate planning recognizing existing disparities, including health and living conditions, providing communities with meaningful opportunities to participate in policy processes that address climate justice, health equity and mitigate environmental racism, and consideration of community perspectives and viewpoints (from EO 21-3); and

**WHEREAS** a United States Environmental Protection Agency ("EPA") 2021 report assessing climate change and social vulnerability found that Black and African American individuals are projected to face disproportionately higher impacts of climate change compared to all other demographic groups, including being more likely to live in areas with increased rates of childhood asthma and deaths from extreme temperatures, and that Hispanics and Latinos have high

participation in weather-exposed industries, such as construction and agriculture, which are especially vulnerable to the effects of extreme temperatures (from EO 21-3); and

**WHEREAS** the Connecticut Integrated Resources Plan of 2021 states these key objectives: (1) Commit to a 100% Zero Carbon Electric sector target by 2040, as over a dozen other states have since 2018; (2) Advocate for and pursue wholesale energy market reforms so that clean energy resources are deployed efficiently, cost-effectively, and costs are spread equitably; (3) Support and maintain historic deployment levels of distributed generation throughout the state; (4) Identify and remove barriers to participation in Connecticut's clean energy programs for overburdened and underserved communities; and (5) Advance proactive planning policies for regional transmission development [CTIRP-2020]; and

**WHEREAS** the Connecticut Governor's Council on Climate Change (GC3) established in its Phase 1 Report that Connecticut could expect by 2050 serious adverse changes, including increase in mean sea level in Long Island Sound of 20 inches, an increase in flood risk by a factor of 5 to 10, high water levels comparable to (or exceeding) those of Superstorm Sandy every 5 to 10 years; in fact, sea level rise will make all types of coastal storms more intense, more frequent, and more damaging than they are now. Connecticut can also expect an average temperature increase of 5°F compared to the 1970-1999 baseline, resulting in a quintupling of above-90°F days per year from around 5 to 25 plus or minus a bit, a 30% reduction in days with frost from roughly 12 or so to something close to 85, increased drought risk and resulting increased risk of low fresh water availability, increased risk of extreme precipitation events, and stronger hurricanes with higher speed winds and higher precipitation amounts [CT GC3 2020]; and

**WHEREAS** the GC3 also found that without rapid climate mitigation action now, warming in Connecticut will accelerate and sea level rise could be as much as 80 inches by 2100 (from EO 21-3); and

**WHEREAS** Projected cost of adaptation to protect the Connecticut coastline and riverine shores from sea level rise and other risks are growing and projected to exceed \$5.3 billion through 2040 [climatecosts2040]. The three most costly U.S. Congressional Districts are District 2 (Rep. Courtney) including 10 state senators and 31 state representatives, District 3 (Rep. DeLauro) including 8 state senators and 30 state representatives, and District 4 (Rep. Himes) including 9 state senators and 32 state representatives. Connecticut's 2019 Natural Hazards Mitigation Plan reports that the state has experienced \$1.8 billion in property losses from natural disasters since 1950, with an increasing number of them being intensified by climate change [CT-NHMP-2019].

**WHEREAS** the Global Warming Solutions Act ("GWSA"), Section 22a-200a of the Connecticut General Statutes, established a requirement to reduce GHG emissions economy-wide by 45% below 2001 levels by 2030 and 80% below 2001 levels by 2045, and these targets contribute to the United States' national emissions reduction target of 50 to 52% below 2005 levels by 2030 and net zero by 2050 (from EO 21-3); and

**WHEREAS** the Department of Energy and Environmental Protection ("DEEP") is required to report annually on Connecticut's progress toward meeting the GWSA targets, and DEEP's most recent progress report, the *2018 Connecticut Greenhouse Gas Emissions Inventory*, indicates that Connecticut continues to reduce emissions from its electric supply, with a 35% drop in power sector emissions since 2001, but that emissions continue to increase from the building and transportation sectors, at a time when emissions from both need to be reduced by one-third in order for the state to meet its 2030 GWSA target. The use of fossil fuels for heating and cooling makes buildings the second largest source of GHG emissions in the state, while emissions from internal combustion engine vehicles make transportation the largest source of emissions in Connecticut, accounting for 38% of total emissions in the state (from EO 21-3); and

**WHEREAS** the significant GHG emissions reductions necessary to achieve the GWSA 2030 target and become resilient to the impacts of climate change cannot be achieved unless the General Assembly authorizes expanded investment and decarbonization programs to the extent possible to address climate mitigation and resilience (from EO 21-3); and

**WHEREAS** climate change is a threat multiplier with the potential to exacerbate many of the challenges the U.S. and Connecticut already confront, including resource scarcity and sourcing, threats from violent extremism, and the spread of infectious diseases; and

**WHEREAS** emissions reductions targets set by the Connecticut Governor Lamont's Executive Order #3 (45% GHG reduction by 2030; 80% GHG cut by 2050 [CT EO#3]), and the Integrated Resources Plan (zero emissions from electrical generation by 2040 [CT IRP 2020]) require dramatic expansion of renewable energy systems, avoiding additional fossil fuels infrastructure, at an emergency-level response to environmental, economic and social components of climate change actions; and

**WHEREAS** the Connecticut Millstone Power Plant, which provides 41 percent of the State's electricity and the majority of its low carbon electricity, is scheduled to be decommissioned in 2032 [MILLSTONE 2019], necessitating dramatic expansion of renewable energy systems, and not fossil fuel systems, to meet emissions reduction goals. In fact, the energy output of even fossil fuel sources of energy will have to be replaced because they are rapidly becoming obsolete; and

**WHEREAS** amidst a global pandemic, the GC3 established a broad, participatory process to seek input and solutions from stakeholders across the state, established seven working groups with 231 members representing over 100 organizations, and over the course of nearly 200 meetings delivered the *Phase 1 Report: Taking Action on Climate Change and Building a More Resilient Connecticut for All*, with 61 recommendations for near-term climate action, and those 61 recommendations inform the executive actions directed in this order (from EO 21-3); and

**WHEREAS** the Governor's Council on Climate Change (GC3) has produced 61 recommendations requiring significant investment and societal mobilization to achieve critical components of climate change actions [CT GC3 Phase 1 2020]; and



**WHEREAS** since Connecticut’s 2001’s Climate Change Action Plan [Climate Action Bills], over 25 bills, 45 reports and inventories, 10 designations and authorities, 6 plans and strategies, 8 declarations and initiatives, and 2 summits have occurred. Connecticut has established climate change as an urgent problem but not yet taken the rapid and aggressive actions necessary to achieve its own meaningful climate action targets, thereby creating an emergency response situation; and

**WHEREAS** black, indigenous, other communities of color, marginalized and low-income communities in Connecticut and the United States, and around the world, have suffered the gravest consequences of the carbon economy since its inception and also suffer first and most acutely from climate disruption and environmental hazards, including air, water, and land pollution [Princeton 2020] [Scientific Am 2020]; and

**WHEREAS** reducing GHG emissions now is not only necessary to provide a more livable future for current and future generations, but will also advance health equity and environmental justice for communities overburdened by the effects of climate change and pollution, protect Connecticut’s natural resources and working lands, provide for more affordable and reliable energy options, and make Connecticut’s infrastructure more resilient while expanding economic opportunity and providing for a safer, healthier environment for Connecticut’s citizens (from EO 21-3); and

**WHEREAS** adopting sustainability measures in state facilities and operations not only reduces emissions, but also saves taxpayers money on operating costs, and through Executive Order No. 1 ("EO1") issued April 24, 2019, I directed that by 2030, all Executive Branch operations shall Lead By Example by reducing greenhouse gas emissions 45% below 2001 levels, waste disposal by 25% from 2020 baseline, water use by 10% from 2020 baselines, and by achieving any subordinate targets established by the Steering Committee in GHG emissions from onsite heating and cooling, vehicle fleet, purchased electricity, and product procurement, as well as materials management, water use, and land use and grounds management (from EO 21-3); and

**WHEREAS** a number of Connecticut cities and towns have been designated as “Environmental Justice Communities” by the Connecticut Department of Energy and Environmental Protection [CT EJC 2020]; and

**WHEREAS** local businesses and workers in Connecticut are recovering from closures, furloughs, and other setbacks caused by the COVID-19 pandemic. Investing in renewable energy research and development, especially in offshore wind, hydroelectric, and solar energy will spur the growth of jobs in our communities. For the statewide economy to recover from the pandemic, it is imperative for businesses to integrate economic revitalization strategies with clean energy. Sustainable jobs in the renewable energy sector will not only provide hundreds of thousands of jobs to unemployed Connecticut residents; they will also accelerate the pace of the clean energy transition and eliminate the state economy’s reliance on fossil fuels; and

**WHEREAS** Connecticut’s citizens are very concerned about global warming and climate change impacts. According to the Yale Program on Climate Change Communications [[YPCCC 2020](#)], 72 percent believe global warming is happening, over 57 percent believe it is human-caused, 71 percent believe it is harmful to future generations, 61 percent believe it is harmful to people in the US, 53 percent believe global warming is harmful to their community, and the majority of both Democrats and Republicans want the state’s utilities to produce at least 20 percent of electricity from renewable resources and support requiring fossil fuel companies to pay a carbon tax. A majority of Connecticut residents want more action on climate and more renewable energy; and

**WHEREAS** the Connecticut transportation sector is the largest contributor to GHG emissions (38%), ozone forming emissions (67%), and particulate matter emissions, contributing to poor air quality and asthma rates that are worse than the nation's average - 11% of children and 10.5% of adults - with these burdens falling disproportionately on our cities, and investments in zero-emission transit vehicles will significantly reduce GHG emissions and air pollution from state operations (from EO 21-3); and

**WHEREAS** more than 100 municipalities across the U.S. have declared climate emergencies and/or support for carbon fee and dividend system of pricing carbon. In Connecticut these include Bridgeport, Hartford, New Haven, Middletown, New Britain, Bloomfield, Stamford and Greenwich (letter of intent), as well as the Southeast Connecticut Council of Governments (SCCOG – representing 22 communities in southeast Connecticut); and

**WHEREAS** GreenerGov CT, a Lead By Example initiative, has, since 2014, implemented measures at the facilities of state agencies that have led, or will lead to, significant energy savings, cost savings, and greenhouse gas reductions, including 165 Energize CT projects at a savings of \$2.1 million in annual utility costs, energy retrofit improvements at several District 1 Department of Correction facilities, installing GPS telematics hardware on 85% of executive branch light duty vehicles to identify operational fuel savings and candidates for transition to electric vehicles, and securing zero emission renewable energy credit contracts for pilot projects at nine state facilities that will, once built, host over 10,000 kWDC of new solar capacity (from EO 21-3); and

**WHEREAS** Governor Lamont signed the “Executive Order No. 21-3 on Climate” [[EO21-3 Climate](#)] to meet emissions targets, update building codes for greater efficiency and consider sea level rise in planning, appliance energy efficiency, solar arrays, community resilience, climate health and justice in vulnerable communities, climate mitigation, clean energy, resilience and sustainability job opportunities,

**WHEREAS** the Appliance Standards Awareness Project has estimated that adoption of modernized appliance efficiency standards has the potential to lower energy demand in Connecticut by 81 GWh per year by 2025 and 243 GWh per year by 2035, thereby avoiding 19,000 metric tons of annual carbon emissions by 2025 and 68,000 metric tons by 2035, and saving

consumers, including low-income customers, approximately \$20 million dollars per year in energy costs in 2025 and \$70 million in 2035 (from EO 21-3); and

**WHEREAS** Governor Malloy's Executive Order No. 53 ("E053") of April 22, 2016 recognized the need for updates to statewide building codes to address carbon mitigation and climate adaptation, but further research and study, as described herein, demonstrates a clear and present need for more comprehensive and equitable action, substantial evidence demonstrates that adopting more energy-efficient building codes will reduce the climate change impacts from the building sector, and adopting up-to-date building codes is an effective climate mitigation and resiliency strategy (from EO 21-3); and

**WHEREAS** *An Act Concerning Climate Change Adaptation*, signed into law as Public Act 21-115, provides all Connecticut municipalities with the option to adopt a stormwater authority to address flooding and water quality in their communities and to establish flood prevention, climate resilience and erosion control boards to implement climate resilience projects (from EO 21-3); and

**WHEREAS** in light of recent price spikes for heating oil, propane, and natural gas and their negative impact on Connecticut consumers, as well as the findings of the *2018 Connecticut Greenhouse Gas Emissions Inventory* that GHG emissions from buildings have increased instead of being on track to achieve the roughly one-third reduction in such emissions needed to achieve the GWSA 2030 target, a new Comprehensive Energy Strategy is needed that identifies the best clean, affordable and resilient heating and cooling options for buildings, and reconsiders the natural gas expansion program recommended in the 2013 Comprehensive Energy Strategy (from EO 21-3); and

**WHEREAS** guidance on the design and protection of infrastructure and critical facilities must be updated regularly to reflect the best available climate science and understanding of risk (from EO 21-3); and

**WHEREAS** the GC3 Natural and Working Lands Working Group found that nature-based solutions associated with forests, agriculture, wetlands, and rivers offer the potential dual benefit of carbon sequestration and storage while also making Connecticut more resilient to the impacts of climate change (from EO 21-3); and

**WHEREAS** Connecticut's senators Chris Murphy and Richard Blumenthal have publicly recognized the climate emergency and have sponsored a carbon pricing bill "Save Our Future Act" in the U.S. Senate [S.2085]. Representatives Jim Himes (CT, 04) and Jahana Hayes (CT, 05) are co-sponsors support carbon fee and dividend in the U.S. House of Representatives with the "Energy Innovation and Carbon Dividend Act" [HR2307]. Representative Jahana Hayes (CT, 05) is a co-sponsor for the House bill "Climate Emergency Act of 2021" [HR794]. All five Connecticut representatives, John Larson (CT, 01), Joe Courtney (CT, 02), Rosa DeLauro (CT, 03), Jim Himes (CT, 04), and Jahana Hayes (CT, 05) co-sponsored the "Climate Action Now Act of 2020" [H.R.9]. All of these actions confirm Connecticut's elected officials in the U.S. House

of Representatives and U.S. Senate support the climate emergency status of climate change, a price on carbon, and aggressive actions for the people of Connecticut; and

**WHEREAS** the will of the people is not being fully represented in the Connecticut General Assembly in terms of meaningful climate actions. According to the CSSN 2021 report on “Who’s Influencing Connecticut Climate and Clean Energy Politics?”, the research group found strong support for climate action in written testimony: “91.7 % of the positions taken on climate and clean energy bills supported priority climate legislation” [CSSN 2021]. Tactics led by fossil fuel companies and energy providers “sought to delay or stop the passage of individual climate and clean energy bills.” This is at odds with the expressed needs and demands of the majority of Connecticut residents. CSSN presents four recommendations for the Connecticut Legislature: (1) Evaluate and address utilities’ political influence; (2) Understand the new climate discourses (caution anti-science or climate denial arguments); (3) Improve public voice and accountability at the Capitol; and (4) Improve transparency and accountability.

**WHEREAS** it is vital that Connecticut rises to the challenge of the greatest challenge in modern human history - global warming and climate change impacts - by joining local and national efforts to transition toward a just and sustainable economy and away from a society based on fossil fuels, with particular attention to marginalized and at-risk communities; and

**WHEREAS** clean energy and climate-resilient economic development investments directly enhance the quality of life for all residents while promoting shared prosperity, providing equitable access to good jobs at good wages in growing industries, supporting our regional strategic partnerships, strengthening long-term economic resilience, and creating innovative infrastructure to attract new businesses and train talented employees who want to thrive and contribute to their communities (from EO 21-3); and

**WHEREAS** the U.S. Climate Alliance's 2020 *Clean Energy Employment Report* found that Connecticut added 44,094 clean energy jobs between 2016 and 2019, a 7.3% increase, and the state continues its growth as a national leader in the clean energy economy (from EO 21-3); and

**WHEREAS** economic and community development programs provide an opportunity to improve community resilience to the impacts of climate change by integrating climate resilience into project planning and design (from EO 21-3); and

**WHEREAS** the massive scope and scale of action necessary to stabilize the climate will require unprecedented levels of public awareness, engagement, and deliberation that requires Connecticut to lead and to develop and implement effective, just, and equitable policies as direct actions to address this climate emergency; and

**WHEREAS** with the enactment of the federal *Infrastructure Investment and Jobs Act*, Connecticut's state agencies and local governments, tribes, non-profits, and universities are eligible for billions of dollars of federal funding opportunities for climate mitigation and resilience projects

that require planning and project design, non-federal matching funds, the use of nature- based solutions, including green infrastructure and climate-smart agriculture and forestry, and prioritization of vulnerable communities (from EO 21-3).

As of January 10, 2022