

## GC3 Executive Actions

These are examples of executive actions that state agencies have taken to implement the recommendations of the Governor's Council on Climate Change (GC3) as shared at the January 15, 2021 meeting of the GC3.

### *Department of Energy and Environmental Protection (DEEP)*

DEEP is partnering with DoT in an effort to seek implementation of the Transportation Climate Initiative (TCI), which will be critical to target greenhouse gas emissions from the transportation sector. A minimum of 35% of the proceeds from this program will be invested to support communities that are overburdened by air pollution and underserved by our transportation system. DEEP also released in December, a draft of our integrated resources plan, which maps out a path for the state to achieve a 100% zero carbon electric grid by 2040 and reflects the progress that we have already made today. Currently 65% of our energy supply is from zero carbon nuclear and renewable resources and we expect that by 2025 this will increase to 91%. Reaching a 100% zero carbon electric grid is possible and these recommendations help to move towards that. There were a lot of recommendations about urban forestry and so we will be hiring an urban forester and we are looking to expand our urban forestry program across the state. We are investing in community engagement to inform the planning process of the GC3 moving forward. In the GC3 report, there was a recommendation to develop a statewide environmental mapping tool to provide a visual representation of the spatial distribution of environmental and climate health vulnerabilities across Connecticut. DEEP is going to commit to provide the funding to develop and launch this tool.

### *Connecticut Green Bank*

- **Revision to Vision Statement** – from “a world empowered by the renewable energy of community” to “a planet protected by the love of humanity”. This fits well with our “Green Bonds US” mantra for our Comprehensive Plan – which has financial meaning (i.e., green bonds as a financial instrument sold to American citizens to raise money to combat climate change) and social meaning (i.e., “green”...the environment, “bonds us”...brings us together, the environment unites us).
- **Inclusion of Vulnerable Communities Definition within Goal** – within our second goal “to strengthen Connecticut’s communities, especially vulnerable communities, by making the benefits of the green economy inclusive and accessible to all individuals, families, and businesses” – this is the definition from Public Act 20-05.
  - **Equity Metric** – from the statutory definition, we will focus on the Community Reinvestment Act portion to encourage more private capital investment from financial institutions in low-to-moderate income communities. We are working with the Department of Banking now on our equity metric framework, including (1) adopting low income (i.e., <50% AMI) and moderate income (i.e., 50-80% AMI) definitions within CRA, and (2) data collection and reporting on impact (e.g., investment, energy, economic development, environmental, etc.) in those census tracts (i.e., ≤80% AMI) within Metropolitan Statistical Areas
- **Establishing Investment and Benefit Targets** – “by 2025, no less than 40 percent of investment and benefits (e.g., jobs) from [Incentive and Financing Programs] is directed at vulnerable communities.” We are currently at about 25-30% based on our data. So, we have a ways to go to achieve what we need to, but with some time, planning, execution, and commitment we will get there!

- We already have “Environmental Infrastructure” within our Comprehensive Plan, but we need enabling legislation to do it. So, the inclusion of Recommendation #57 with the GC3 report, and subsequently the Governor’s Bill, will enable us to support a debate at the legislature to broaden our authority.
- We now have our award-winning Green Liberty Bond engine up and running – [www.greenlibertybonds.com](http://www.greenlibertybonds.com)
- Inclusion of resilience within C-PACE is a ‘no brainer’. We need enabling legislation and have that ready to go for E&T consideration.
- We just released a report called “Mapping Household Energy and Transportation Affordability in Connecticut” that we worked on with Operation Fuel and the analysis was completed by VEIC, to begin to identify the equity issues with respect to transportation burden (i.e., percentage of household income spent on transportation). It is quite unaffordable in Connecticut – more so than the energy affordability gap! <https://www.ctgreenbank.com/ct-energy-transportation-costs-unaffordable/>

*Connecticut Department of Emergency Services and Public Protection (DESPP)*

- The Division of Emergency Management and Homeland Security (DEMHS) will continue its collaboration with the Department of Transportation, CT State Police and other state and local partners to complete a State Evacuation Response Framework as a piece of the overall State Response Framework.
- DEMHS will also continue to foster relationships with state and local partners through the CT Interagency Hazard Mitigation Committee to explore and prioritize future mitigation projects with the goal of incorporating climate change and GC3 recommendation elements into the project review and prioritization process.
- Finally, through the strong Emergency Support Function (ESF 15) External Affairs and Public Communications group, DEMHS will work with other partners to continue to enhance support for communication and outreach programs to educate residents about all aspects of preparedness, response and recovery for extreme weather events, including an emphasis on communication strategies for vulnerable and Spanish-speaking populations. This effort includes coordinating with state, local, and private sector partners to enhance access and functional needs (AFN) emergency preparedness and response to ensure safe and equitable access to communication and evacuation services and of medical care during natural disasters.

*Department of Transportation (DoT)*

- Battery Electric Bus integration into fleet
  - 2 BEBs put on road in 2020
  - 15 will be added in 2021
- DOT’s Light Duty EV Charging Program
  - Level 2 EV chargers installed at DOT HQ in 2020
  - More to be installed in 2021 including at motorpool to start integration of EVs into state vehicle fleet
  - Alt Fuel Corridor signage has been installed along highways
- Complete Streets/Bike-Ped
  - 90 CCGP construction grants to municipalities for improved bike/ped connections to city, town and neighborhood centers (including 10 announced this week – assuming announced by Friday)
  - Every projects undergoes a bike and ped design review as part of DOT’s Complete Streets design process
- Solar Power generation
  - 2 solar power generation projects in development at two DOT facilities in partnership with CT Green Bank

- Engineering Standards
  - Added a phrase “and new peak flow equations” to Engineering Standards below
  - DOT continues to pursue Best Available Science for data that supports engineering design standards and guidelines. Currently, in concert with USGS, DOT has updated flood-frequency estimates for streams and new peak flow equations. These updates are being integrated in the USGS “StreamStats” program, which estimates basin and climatic characteristics and streamflow statistics at unaged stream sites.

#### *Connecticut Department of Insurance*

- This Department is working with industry to better understand their investment decisions related to fossil fuels.
- The Department is encouraging insurers to provide incentives to insureds to mitigate risk by providing credits for more resilient construction.
- Connecticut is leading the effort for insurance companies to submit their annual climate disclosures through the Financial Stability Board Task Force on Climate-related Financial Disclosures (TCFD). The TCFD is a market-driven initiative, set up to develop a set of recommendations for voluntary and consistent climate-related financial risk disclosures in mainstream filings.
- We encourage our insurance leaders to help develop investment vehicles which will help the state and its’ communities to finance investments in resiliency and mitigation
- We’ve also been working with our state’s insurers regarding more resilient construction standards.
- This year, the Department plans to host a conference with insurers and other financial institutions to develop methods to incentivize investments in climate resiliency initiatives.
- We are actively working with other states through the National Association of Insurance Commissioner’s Supervisory Colleges to have insurers address their investments in fossil fuels in the hopes of reducing greenhouse gas emissions, a major contributor to *climate change*.
- The National Association of Insurance Commissioner’s (NAIC) Executive Committee created a new task force focused on Climate & Resiliency on July 14. The task force will report to the NAIC Executive (EX) Committee and include several new workstreams. The task Force has been charged with coordinating all the NAIC’s domestic and international efforts on climate-related risk and resiliency issues, including dialogue among regulators and with industry, consumers and other stakeholders.
- The International Association of Insurance Supervisors (IAIS), which Commissioner Mais is a member, has developed a **draft Application Paper on the Supervision of Climate-related Risks in the Insurance Sector** and developed jointly with the Sustainable Insurance Forum (SIF) -- a leadership group of insurance supervisors convened by the United Nations Environment Programme (UNEP). The draft Application Paper provides background and guidance on how the IAIS supervisory material can be used to manage the challenges and opportunities arising from climate-related risks. The IAIS is the international standard-setting body responsible for developing and assisting in the implementation of principles, standards and other supporting material for the supervision of the insurance sector.

#### *Department of Administrative Services (DAS)*

- DAS is a member of the [Steering Committee for Executive Order No. 1](#) focused on reduction of GHG emissions.
- Data Collection: DAS has worked with DEEP to upload building energy use into EnergyCAP in order to better monitor and mitigate GHG emissions.
- Energy Audits: DAS recently administered ASHRAE Level Two Energy Audits of nearly 30 state buildings. The results of these audits will be used to help identify projects that may be good candidates for energy efficiency projects.

- Financing: DAS has partnered with local utility Companies, Eversource and United Illuminated, to help secure low cost financing for energy efficiency projects.
- Composting: DAS has implemented a composting program for the entire building at 450 Columbus Blvd.
- Electric Vehicle Conversion & Infrastructure: DAS Fleet has developed an extensive plan, including a detailed fiscal analysis of the prerequisites to fleet conversion.
- Solar PPA: DAS and other Executive Branch agencies have worked with the Connecticut Green Bank to execute a power purchase agreement for the installation and use of solar electric systems. DAS is working with the Connecticut Green Bank to determine the feasibility of installing solar arrays on buildings that may be good candidates.

#### *Public Utility Regulatory Authority (PURA)*

PURA has an overarching initiative called Equitable Modern Grid Proceedings which has 11 different tracks, including electric vehicles, storage, and smart meters. We recently issued a straw proposal for an electric vehicle program that takes cues from the EV roadmap from DEEP. We also issued a straw proposal that would look to incentivize behind the meter and in front of the meter for all consumer types. Also within that initiative, we are devoting resources to an affordability initiative.

#### *Department of Economic and Community Development (DECD)*

We are extremely grateful for the heavy lift that DEEP and others have made to help with the two bundled procurements we have made of offshore wind. As part of both of those procurements there are large, multimillion dollar economic and community development packages. We are honored to have the opportunity to play a part in deciding how those are going to be spent at DECD. These packages will importantly go to train our workforce for offshore wind jobs and ancillary green jobs that may result after these initial installations and procurements. This year, along with one of our developer partners, we plan to establish a supply chain directory that catalogs all the different suppliers who are either already working in the offshore industry or who have skills and capabilities that are tangential enough to easily pivot them into that industry. The supply chain and workforce are the two places that we are really focused on setting up in Connecticut to participate in offshore wind and create ancillary and tangential green job.

#### *Office of Policy and Management (OPM)*

OPM plays a coordinating role and we have identified several areas where we can hone in on some of these implementation challenges and break down agency silos. We have been looking at what our programmatic efforts on adaptation and resilience and making sure that there is a focus on equity and investing in vulnerable communities. We have also been engaged in thinking about how our data analytics team can better help to coordinate some of the GIS mapping efforts. Our Office of Responsible Growth, which developed the state Plan of Conservation and Development (POCD) is looking at how to better integrate greenhouse gas metrics and actions and some of the other recommendations on resiliency and adaptation into the next planning process for the POCD.

#### *Metro CoG*

A great effort has gone into the GC3 and there is a great path forward through both state level down and municipal level up through the regions. These mitigation, adaptation, and resilience measures are best tackled, not only on a municipal scale, but also a regional and statewide level

as well. There is a great opportunity for the state to utilize regional planning work through the CoGs, the state agencies, private sector, and the nonprofit world to move the state forward from a climate change adaptation, resilience, and mitigation perspective. A lot of the work that has been done thus far on the short-term recommendations is very good, but we know that there is a lot more work to do over the next year and the years coming after that on behalf of the nine CoGs.

*Department of Public Health (DPH)*

All year we have been focusing on health equity and it is fantastic to have that work highlighted here in the GC3. Being able to focus on education, human health conditions, and educating the public on what is necessary to fight climate change is part of our mission and therefore, we are very excited about all the work that has been done to help us to keep a healthy Connecticut.

*Department of Housing (DOH)*

DOH is overseeing the Resilient Bridgeport project funded by the US HUD CDBG National Disaster Resilience program. DOH invites all interested to Resilient Bridgeport public forums that will take place in February. DOH will post dates on the Resilient Bridgeport & DOH websites. We are happy to report we are working towards 60% design and have been making great progress with the help of our sister agencies: DOT & DEEP.

<https://resilientbridgeport.com/>

<https://portal.ct.gov/doh/doh/Sandy-Pages/Sandy-Programs/NDRC>

## GC3 Non-State Agency Actions

These are examples of actions that the non-state agencies have taken to implement the recommendations of the Governor's Council on Climate Change (GC3) as shared at the January 15, 2021 meeting of the GC3.

### *Fuss & O'Niell*

About a year ago - recognizing the significance of climate mitigation and adaptation for all of our clients (agencies, communities, businesses and NGOs) - Fuss & O'Neill made the decision to consciously incorporate considerations of climate into all of our planning and engineering consulting service areas. We developed the position of Chief Resilience Officer within the company to lead this initiative (that individual is Diane Mas, copied). Actions we have and continue to take include:

- integrating climate change into our internal technical and management training and encouraging professional development related to climate mitigation and adaptation for all of our disciplines,
- incorporating consideration of climate change over the useful life of our projects into our planning and design work,
- working with our clients to find opportunities to reduce their risk from climate-related hazards.

In addition, we are converting our entire internal-combustion and hybrid vehicle fleet to PZEVs and planning to relocate our Manchester, CT offices to a more modern and energy-efficient facility with electric vehicle charging stations (eventually we want to go all-electric with our fleet).

The work of the GC3, including the recommendations in the working group reports and priority actions in the Phase 1 report, have confirmed that we made the right decision to be proactive on climate as the work of the GC3 over the past year or so has demonstrated the range of climate-related challenges and opportunities we face across the state.

### *Save The Sound*

We would like to express our deep appreciation for the hard work and dedication shown by the appointees and workgroups of the GC3, the DEEP staff, and the members of the public over an intensive year of coordination, collaboration, and analysis," said Curt Johnson, president of Save the Sound. "Now we must move to action. It has been thirteen years since Connecticut established legal commitments to slash its climate pollution, and we are feeling the impact of climate change from stronger storms that batter our shores and disrupt our energy grid. Residents can't wait: we must pass legislation this year to establish accountability for meeting our greenhouse gas reduction targets, to enact the Transportation and Climate Initiative, to rapidly grow renewable energy and protect energy efficiency programs, and to invest in the resiliency programs that will prepare our communities for the future.

### **Legislative (Mitigation):**

#### **Global Warming Solutions Act Accountability:**

- Establish a citizen suit provision to facilitate enforcement.
- Require greenhouse gas reduction targets be an explicit consideration in state actions.

**Clean Energy:** Codify Governor Lamont's 100% clean energy goal to provide statutory security that can be used in regulatory decision-making.

#### **Electric Vehicles:**

- Ratify the Transportation and Climate Initiative, establishing a declining limit on greenhouse gas emissions from the transportation sector.
- Establish state medium and heavy duty vehicle standards.

- Transition state fleet to 100% electric by 2030 for light-duty vehicles, and by 2040 for medium- and heavy-duty vehicles.
- Transition 30% of school buses to zero-emission by 2030, and 100% by 2040.
- Expand rebates for EVs to achieve 20% zero-emission vehicle penetration statewide by 2030 and 95% by 2050.

## **Protect Energy Efficiency and Clean Energy Funds**

### **Legislative (Resilience):**

**Dam Disclosure:** Improve public understanding of the risks of under-maintained dams and increase transparency by including on real estate disclosure forms a question about the presence of a dam on the property.

**Sewage Right to Know Act:** Improve the system for notifying downstream communities of sewage spills and ensure prompt, full notification. (This summer’s Mill River spill in Hamden/New Haven illustrates the need to improve this law; details: [www.savethesound.org/2020/08/09/connecticut-needs-stronger-public-notification-of-sewage-spills](http://www.savethesound.org/2020/08/09/connecticut-needs-stronger-public-notification-of-sewage-spills).)

**Stormwater Authorities:** Give municipalities the opportunity to create local Stormwater Authorities to direct funds for projects that reduce local sewage overflows, filter runoff pollution, reduce flooding, and create more resilient communities. (New London is a successful example.)

**Provide Resiliency Funding:** Enhance resiliency bonding to ensure Connecticut can provide funding to the hundreds of nature-based projects—like green infrastructure and living shorelines—that are ready to be deployed for flood management and limiting sea level rise impacts.

### **Construction (Resilience):**

**Nature Based Solutions:** we are developing and implementing 10 river and coastal projects (like Chittenden Marsh a shoreline softening project, funding for East Shore living shoreline, and a flood retention pocket park on the Mill River), as well as a slew of raingardens, in cities and towns throughout Connecticut. In the past four years, we’ve [installed 28 rain gardens](#) in environmental justice communities, they will divert 600,000 gallons of stormwater annually and reduce runoff to the West River in New Haven.

**Culvert Assessment:** we are embarking on an expanded river and culvert monitoring program that we plan to supplement with municipal support and youth engagement.

### **Administrative (Mitigation):**

**Shared Solar and Net Metering:** Working before PURA to strengthen and expand Connecticut’s shared solar program and to ensure that both the valuation of distributed energy resources study and the new net metering/tariff results in promoting not detracting from solar progress in Connecticut.

*The Nature Conservancy*

**Equity and Environmental Justice: Recommendations #1-4**

**Our work as it relates to Rec #4, “Establish Connecticut community resilience program.”**

In 2007, TNC in Connecticut initiated a program for building resilience in natural and human communities in Connecticut. Since that time, TNC has continued to advance resilience in three ways with multiple projects and products under each:

- Resource and Decision Support Tools:
- Engagement with Communities across State of Connecticut
- Nature Based Projects and Solutions

Over the past decade, we have provided Community Resilience Building workshops to over 425 communities across 9 states and D.C., with 12,750 participants and 90,000 hours committed to resilience at the local level. We stand ready to work with the State to support development of a Connecticut Community Resilience Program.

**Progress on Mitigation Strategies: Recommendations #5-23**

**Our work addresses Rec #12, “Achieve at least 66 percent zero-carbon electricity generation by 2030.”**

We are working in support of:

**Rec 12f:** *Establish clear targets for offshore wind procurement and*

**Rec 12h:** *Identify transmission constraints and evaluate the need for new transmission infrastructure required to support a zero-carbon electric grid.*

We do this by being an active member of DEEP’s Commission for Environmental Standards (CES) re offshore wind. We are also active with partners on a regional basis to establish standards that protect marine ecosystems and better enable deployment of offshore wind by making permitting more timely. We are also deeply involved in the LIS Blue Plan which will enable timely decisions about offshore wind infrastructure coming thru Long Island Sound.

Finally, we have expanded our climate and energy policy program to work with partners in raising attention to the need for reforms in how ISO-New England manages the electric grid including addressing transmission constraints that could seriously restrict offshore wind.

**Working and Natural Lands: Recommendations #24-48**

**Our work contributes to many WNL recommendations including Rec # 31, “Identify funding, programs, and resources needed for implementation of recommendations.”**

TNC is a science-based organization that produces tools to better enable conservation and address climate resilience. For more than 10 years, a team of 150 TNC scientists have developed a comprehensive map of resilient lands and significant climate corridors across North America: the *Resilient and Connected Network (RCN)*. These sites, together with mapped climate corridors and movement zones can help sustain Connecticut’s biodiversity in the face of climate change. This state-of-the-art tool is ready for the State to utilize in fulfilling many of the WNL recommendations.

*Operation Fuel*

We use social media for our outreach and recently began to share updates from DEEP, PURA, as well as the Connecticut Green Bank and other energy related organizations. Our organization is well positioned to work on outreach efforts including social media campaigns, webinars, case studies, testimonials, and customer engagement platforms and that is something we are going to intentionally work on over the next few months.



We are developing a kiosk that will allow for customers to pay their bills, apply for Operation Fuel grants, access Energize CT information, and information from the Connecticut Green Bank. This will serve as an intake site right in the community for those who do not have access to transportation, computer, or WIFI.

#### *Stanley Black and Decker*

At Stanley Black and Decker, we do not only focus on financials but also the issues, similar to what we are tackling here with the GC3. In June, we reached our publicly disclosed 2020 environmental targets by globally reducing our energy consumption and carbon emissions, water usage, and waste generated. We have now set our eyes on interim targets for 2023 which will ultimately get us to our 2030 target which is to become “carbon positive” by 2030. That means making our own carbon footprint zero and additionally offsetting someone else’s carbon footprint. Locally in Connecticut, we are investing in our main headquarters to make the building more energy efficient and reduce our carbon emissions. The building now receives 65% of its energy from renewable sources. We similarly working on improving the efficiency of all of our buildings. In addition, we made a commitment that if we cannot offset our emissions through our building improvements, we have invested in offsetting our full scope to load through the purchase of renewable energy credits. The long-term objective is to switch from purchasing energy credits to sourcing a North America virtual power purchase agreement, by investing in the creation of a wind farm or solar field that will source renewable energy to all of our operations in North America, Connecticut included. Stanley Black and Decker does own a power plant located on the Farmington River, known as the Rainbow Dam. This hydroelectric dam was created back in 1925, it has to 4.5 megawatt generators and it produces an average of 30,000 megawatts of annual clean energy that goes into the grid here in Connecticut for all uses that the state needs.

#### *The Hartford*

We have reduced our own greenhouse gas emissions by 67% since 2007 and 0% of our electronics go into landfills. We have 30 heavily used electric vehicle charging ports across our campuses. From an investment perspective, as of the end of 2019 we have invested 100 million dollars directly in utility grid, solar, wind, and hydroelectric power generation facilities. Looking forward, we have a corporate goal of reducing our greenhouse gas emissions footprint by 2.1% on an annual basis translating to a 25.7% reduction by 2027 and a 46.2% reduction by 2037, which aligns closely to the state's goals. By 2022 we will have converted 100% of our shuttles and security vehicles on our campuses to electric vehicles, we will have reduced use of Styrofoam to zero, we are anticipating reducing our water use by 15%, energy use in our facilities by 15%, and reduce our non-biodegradable and non-recyclable solid waste by 20%. In 2019, the Hartford had announced that we would no longer ensure or invest in companies that generate more than 25% of their revenues from thermal coal mining and that we will also stop insuring and investing in companies that generate more than 25% of their revenues directly from the extraction of oil from tar sands.

#### *UConn and CIRCA*

On the university scale, UConn is ranked number 6 out of over 1000 universities worldwide who report statistics on sustainability, efficient use of energy, and recycling. On the faculty scale, there are initiatives across the university through engineering and marine sciences on how to be more efficient in generating power from wind and how to minimize the impact of wind generation on the environment and the animals that live in the ocean. One role of CIRCA is to try and coordinate the capacity of the faculty across the university to help address the problems arising from climate change that effect Connecticut and its citizens. Last year, the university’s board of trustees reauthorized CIRCA for another five-year operation and so we are ready to help. We can guide, lead, and coordinate assessment of science going forward and are also happy to continue providing support through engagement and technical capacity to towns, CoGs, and citizens as much as we can.