



March 22, 2021

Secretary Kathleen Theoharides
Executive Office of Energy and Environmental Affairs
100 Cambridge St, Suite 900
Boston, MA 02114

RE: Draft Clean Energy and Climate Plan for 2030

Dear Secretary Theoharides:

Thank you for the opportunity to submit comments on the draft Clean Energy and Climate Plan for 2030 (CECP). We appreciate the work of the Executive Office of Energy and Environmental Affairs (EEA) and its departments to evaluate pathways for the Commonwealth to reduce its greenhouse gas emissions over the coming decade.

Environment Massachusetts Research & Policy Center is a nonprofit organization dedicated to protecting our air, water and open spaces. We work to protect the places we love, advance the environmental values we share, and win real results for our environment.

Below, we offer general feedback on the framing of the CECP, as well comments on four of its sections, covering emissions related to transportation, buildings, electricity, and other sources.

General comments

We should aim higher than “net zero by 2050”: In April 2020, EEA established a 2050 target of “net zero emissions” under the authority granted by the Global Warming Solutions Act (GWSA). EEA subsequently established a 2030 emissions limit of 45 percent below 1990 levels. While we recognize that the CECP is designed to achieve these targets, we believe more aggressive action is needed.

To have the best shot at avoiding devastating climate change and ensuring a safe, livable planet for ourselves and our children, we should set Massachusetts on a path to achieve zero fossil fuel emissions (not just “net zero”) sooner than 2050. Rather than aiming for the global minimum of “net zero by 2050,” we should adopt more ambitious goals to set an example for other states and to account for the fact that not every state or country will reduce emissions as

quickly. Additionally, the IPCC forecasts contain a large degree of uncertainty. It is possible that even with net zero emissions globally by 2050, we could still experience more than 1.5 degrees of warming.

We should aim for a full phase-out of fossil fuels sooner than 2050, at least in the sectors where we have a good sense of how to achieve this goal and where technologies are available today to make rapid progress off of fossil fuels – including electricity, heating, and ground transportation.

A straight-line trajectory isn't fast enough: Massachusetts should not just meet the global target of cutting emissions by 45–50 percent by 2030. Rather, we should reduce emissions faster than the global average to take into account the high historical levels of emissions in the United States, as well as Massachusetts' role as a clean energy leader. We cannot rely on linear progress between 2020–2050 to meet our long-term goals, but must make greater reductions over the coming decade.

Efficiency and conservation should be a priority: The cleanest source of energy is the energy we never use in the first place. In all aspects of climate planning, the administration should prioritize strategies that reduce the amount of energy used through efficiency and conservation measures. For the transportation sector, we can reduce energy use by shifting trips from single-occupancy vehicles to public transit, walking, biking, and carpooling, and by reducing the need to travel. We can make our buildings more energy-efficient through weatherization, the installation of efficient appliances and plumbing fixtures, and the electrification of heating. We can reduce the amount of energy wasted in our electric grid by investing in generation and storage close to the places where electricity is consumed – for example, by installing solar panels on the roofs of our buildings.

Stop investing in outdated infrastructure: By mid-century, Massachusetts should end the use of fossil fuels for electricity, heating, and ground transportation. Any fossil fuel asset built today with an expected lifetime greater than 25–30 years, whether a pipeline, power plant, or home heating system, will therefore become a stranded asset. Rather than try to make fossil fuel systems incrementally cleaner – for example, through developing a low-carbon fuel standard – we should focus our efforts on technologies that will enable us to end fossil fuels use and achieve 100 percent clean energy.

Carbon pricing can play an important role: Since 2009, the Regional Greenhouse Gas Initiative has generated more than \$600 million in funding for energy efficiency and clean energy programs in Massachusetts. Extending a similar framework to the transportation sector, through the Transportation Climate Initiative, will help fund efforts to reduce carbon pollution associated with transportation. The Commonwealth should extend carbon pricing to heating fuels and other sectors that are not currently covered, and invest the income generated from carbon pricing in projects that reduce fossil fuel use and promote efficiency and clean energy.

Transportation

Set an ambitious timeline for electric vehicle deployment: We were pleased to see the CECP echo California's commitment to make 100 percent of light-duty vehicle sales electric vehicles or other zero-emission vehicles (ZEVs)

by 2035. The Commonwealth should work with California and other participating states to ensure that annual ZEV targets between 2021 and 2035 are ambitious and in line with achieving the ultimate goal of 100 percent EV sales.

Electrify our public transit systems: While the CECP proposes that 30 percent of medium- and heavy-duty vehicle sales be ZEVs by 2030, it does not establish a timeline for electrifying the Commonwealth’s public transit systems, including the MBTA and regional transit authorities (RTAs). Our public transit agencies have an important role to play in leading the transition to a zero-carbon future and reducing harmful air pollution. All of the buses operated by the MBTA should be electric buses by 2030, and all RTA buses should be electric by 2035. The MBTA should electrify its commuter rail system by 2035. Additionally, state agencies should work with municipal governments and school committees to electrify school buses and other vehicles in public fleets.

Prioritize transit, walking, and biking: Electric vehicles have an important role to play in the transition away from fossil fuels, but relying on electric vehicles alone is an inefficient way to achieve our transportation sector emissions targets, leading to a significant increase in our demand for electricity. Rather than just “stabilizing” vehicle miles traveled, as proposed in the CECP, we should reduce the number of car trips and encourage more travel by walking, biking, and public transit. We can promote public transit ridership by increasing the frequency and reliability of service, making trips faster (for example, by setting aside designated bus-only lanes on key routes), modernizing our commuter rail system, and expanding transit service to new areas. We can also invest in sidewalks, protected bike lanes, and other elements of safe street design to encourage more walking and biking.

Buildings

Plan for a full phase-out of fossil fuel heating: While the CECP proposes a laudable goal of installing electric heating in one million homes and 300–400 million square feet of commercial space by 2030, it is vague on the Commonwealth’s long-term objectives, calling for “at least 60 percent and potentially over 95 percent” of buildings to receive electric heating and efficiency upgrades by 2050. To protect public health, eliminate safety risks associated with gas infrastructure, and avoid the worst impacts of climate change, we should commit to getting all buildings off of fossil fuel heating by mid-century. Putting aside the question of whether it is desirable for 40 percent of buildings to use fossil fuel heating in 2050 and beyond, it may not be financially feasible to maintain our gas distribution infrastructure when 60 percent or more of the customer base has defected to other technologies. The longer we delay the decision to retire fossil fuel infrastructure, the greater the likelihood we will waste money on future stranded assets.

Require new buildings to be fossil-fuel-free: The CECP proposes to “avoid lock-in of building systems that are not 2050-compliant” but is vague on the requirements that will be established for new buildings. A “high-performance stretch energy code” could still allow for the installation of oil or gas heating systems. Any new building that is built with fossil fuel heating will require an upgrade to electric heating before 2050 in order to ensure a full transition to clean energy. It is much more sensible, therefore, to ensure that new buildings are built fossil-fuel-free. At a minimum, all new houses and small commercial buildings should be built without fossil fuel heating by 2025, and all other new buildings should use non-fossil-fuel heating by 2030.

Energy supply

Be more ambitious: Our existing commitments to clean electricity are insufficient to prevent the worst impacts of climate change and protect public health. While expanding the clean energy standard may allow the Commonwealth to take credit for more carbon-free electricity generation, it does not necessarily incentivize the deployment of more renewable energy generation in Massachusetts or our neighboring states. We should ensure that a growing percentage of our electricity comes from local sources of renewable energy by increasing the Class I renewable portfolio standard to at least 50 percent by 2030.

Go big on solar: We should expand incentive programs to allow Massachusetts' installed solar capacity to reach at least 10 gigawatts by 2030. We should also encourage the deployment of distributed generation like rooftop solar and ensure that the benefits of solar energy are accessible to all communities.

Go big on offshore wind: We should expand our existing offshore wind mandates and procure at least 6 gigawatts of offshore wind energy by 2030.

Other sources

Reduce industrial energy use: The industrial sector accounts for 10 percent of the energy used in Massachusetts. While emissions from industrial sector energy use have declined and some businesses have taken significant steps to make their facilities more efficient, more can be done. Services offered by Mass Save aren't always tailored to the needs of the industrial sector, and many facility owners may be unaware of the potential benefits to their business from implementing energy efficiency measures. Through improved outreach, better coordination among programs, and targeted incentives, the Commonwealth should reduce emissions from industrial energy use by at least 10-20 percent by 2030.

Thank you for considering our comments. You may contact me with any questions at ben@environmentmassachusetts.org or 617-747-4368.

Sincerely,



Ben Hellerstein
State Director
Environment Massachusetts Research & Policy Center