PRIORITY CLIMATE ACTION PLAN

IMPLEMENTATION-READY CLIMATE ACTIONS TO REDUCE GREENHOUSE GAS EMISSIONS

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Connecticut Department of Energy & Environmental Protection

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CLIMATE POLLUTION REDUCTION GRANT: PRIORITY CLIMATE ACTION PLAN

This presentation shows the climate actions proposed by the Connecticut Department of Energy and Environmental Protection (CT DEEP) for inclusion in the Priority Climate Action Plan, funded by the federal US EPA Climate Pollution Reduction Grant.

There are 14 proposed climate actions the state may implement to reduce air pollution that is warming our planet, clean up our air, and provide important benefits to communities in the region, such as reduced energy bills, improved public health, and more jobs.

The 14 climate actions are organized under each related sector: Transportation, Residential and Commercial Buildings, Electric Power, Waste and Materials Management, and Natural and Working Lands.

More information can be found at:

Connecticut Climate Pollution Reduction Grant - Climate Action Plans



SCHOOL BUS ELECTRIFICATION

- The measure would replace diesel school buses in environmental justice areas with zero emitting electric buses.
- There are 2,000 school buses in the districts.
- Electric school buses reduce fine particulate (PM2.5), oxides of nitrogen (NOx), volatile organic compounds (VOC), and toxic emissions.





TRANSIT BUS ELECTRIFICATION

- This measure would replace diesel transit buses with electric transit buses.
- Diesel buses release exhaust into the air that contains harmful pollutants.
- Electric buses have zero tailpipe emissions.
- EPA estimates that each electric bus that replaces a diesel bus reduces respiratory diseases in disadvantaged communities.





ESTABLISH ELECTRIC VEHICLE INCENTIVES

- The measure would expand the existing <u>CHEAPR program</u>, which offers rebates for many types of electric vehicle.
- New incentives will be created to make buying electric vehicles more affordable.
- Fully electric and plug-in hybrid vehicles will be eligible for incentives.





DEPLOY ELECTRIC VEHICLE CHARGERS STATEWIDE

- Electric vehicle chargers for cars, SUVs, small and medium pick-up trucks, delivery vans, and other medium sized vehicles would be installed.
- Zero emission vehicles reduce particulate matter, ozone forming pollution, hydrocarbons, and toxic emissions from vehicles.





REDUCE IDLING FROM CONNECTICUT DOT CRASH UNIT TRUCKS

- CT Department of Transportation would install idle reduction systems in Crash Unit trucks.
- The trucks idle for long periods while they protect highway crews during road construction.
- The new system would use batteries to allow the trucks to be shut off.
- Reduced idling would lower harmful air pollution and reduce fuel consumption.





EXPAND SHARED RIDE PROGRAM

- The measure would increase access to on-demand and accessible shared-ride services by expanding the Microtransit program.
- The program expansion would be focused in rural areas.
- Increasing shared rides would lower harmful air pollution by reducing the number of car miles traveled.



Residential & Commercial Buildings

SUPPORT ADOPTION OF RESIDENTIAL AND COMMERCIAL HEAT PUMPS

- Heat pumps use much less energy and greatly reduce air pollution from the use of fossil fuels for heating, ventilation, and air conditioning equipment (HVAC).
- Heat pumps can replace gas, fuel oil, propane, or other HVAC.
- Heat pumps for space heating, water heating, and clothes dryers are all commercially available.



Residential & Commercial Buildings

EXPAND FUNDING FOR RESIDENTIAL ENERGY PREPARATION SERVICES (REPS)

The measure would increase funding to address health and safety barriers to weatherization.

These barriers need to be addressed before weatherization can take place. Examples are:

- Asbestos
- Mold
- Knob and tube wiring
- Leaking roofs

REPS has already expanded the number of customers that can weatherize buildings and with additional funding, more people would be able to weatherize.





EXPAND ENERGY EFFICIENCY PROGRAMS

 The measure would increase energy efficiency programs under the Conservation and Load Management (C&LM) Plan.

 Energize CT, through the Plan, helps homes and business save energy and money with rebates, financing, and other services for energy efficiency and clean energy improvements.



Residential & Commercial Buildings

NETWORKED GEOTHERMAL SYSTEMS

 Networked geothermal uses the earth's ground temperature to heat and cool groups of buildings. Often a system would consist of a network of buried water pipes.

- A neighborhood can share a networked geothermal system, which reduces costs and increases efficiency.
- The measure will reduce emissions that occur when fuel oil, gas, and propane are used for home heating.
- Particulate, ozone forming pollution, and air toxics will be reduced.





ENERGY STORAGE AND DEMAND RESPONSE

This measure lowers power plant emissions while ensuring power system reliability.

 Demand response allows businesses and people to voluntarily reduce energy use during heat waves or other times of high electricity demand.

 Participants receive a rebate for reducing energy use.

- Batteries can store energy to be used at times of high energy demand.
- These measures reduce brownouts and blackouts.





HYDROGEN FOR PORT OPERATIONS AND STORAGE

- The measure would replace diesel trucks with zero emission hydrogen fueled trucks at ports.
- The measure would also use hydrogen to store energy for use on high electricity demand days – such as during heat waves.
- The measure would reduce emissions, provide grid flexibility, and demonstrate the use of hydrogen to electrify sectors such as manufacturing.





FOOD SCRAP DIVERSION

- The measure would fund cities and towns to implement food scrap diversion programs.
- Recycling food waste, instead of incinerating it or putting it in landfills reduces harmful pollution and methane emissions.
- Local recycling facilities can be compositing or anaerobic digestors.





Agriculture/ Natural & Working Lands

PLANT TREES IN URBAN AREAS

- Planting trees in urban areas can reduce pollution, increase shade, and store carbon.
- The Department of Energy and Environmental Protection's Urban and Community Forestry Program supports urban tree planting.
- Planting is focused in underserved areas and additional funding would allow the program to reach more communities.



Community tree planting event in Bridgeport