STATE OF NEW YORK

7971--A

IN SENATE

March 15, 2018

Introduced by Sens. HOYLMAN, ADDABBO, AVELLA, BAILEY, BRESLIN, BROOKS, COMRIE, GIANARIS, HAMILTON, KAMINSKY, KAVANAGH, KENNEDY, KRUEGER, PARKER, SANDERS, SERRANO -- read twice and ordered printed, and when printed to be committed to the Committee on Environmental Conservation -- committee discharged, bill amended, ordered reprinted as amended and recommitted to said committee

AN ACT to amend the environmental conservation law, the public service law, the public authorities law, the labor law and the community risk and resiliency act, in relation to establishing the New York state climate and community protection act

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Legislative findings and declaration. The legislature hereby enacts the "New York state climate and community protection act" and finds and declares that:

1. Climate change is adversely affecting economic well-being, public health, natural resources, and the environment of New York. The adverse impacts of climate change include:

a. an increase in the severity and frequency of extreme weather events, such as storms, flooding, and heat waves, which can cause direct injury or death, property damage, and ecological damage (e.g., through the release of hazardous substances into the environment);

b. rising sea levels, which exacerbate damage from storm surges and flooding, contribute to coastal erosion and saltwater intrusion, and inundate low-lying areas, leading to the displacement of or damage to coastal habitat, property, and infrastructure;

c. a decline in freshwater and saltwater fish populations;

d. increased average temperatures, which increase the demand for air conditioning and refrigeration among residents and businesses;

e. exacerbation of air pollution; and

f. an increase in the incidences of infectious diseases, asthma attacks, heart attacks, and other negative health outcomes. These impacts are having a detrimental effect on some of New York's largest industries, including agriculture, commercial shipping, forestry, tour-

EXPLANATION--Matter in *italics* (underscored) is new; matter in brackets [-] is old law to be omitted.

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ism, and recreational and commercial fishing. These impacts also place additional strain on the physical infrastructure that delivers critical services to the citizens of New York, including the state's energy, transportation, stormwater, and wastewater infrastructure.

2. a. The severity of current climate change and the threat of additional and more severe change will be affected by the actions undertaken by New York and other jurisdictions to reduce greenhouse gas emissions. According to the U.S. Global Change Research Program (USGCRP) and the Intergovernmental Panel on Climate Change (IPCC), substantial reductions in greenhouse gas emissions will be required by mid-century in order to limit global warming to no more than 2°C and ideally 1.5°C, and thus minimize the risk of severe impacts from climate change. Specifically, industrialized countries must reduce their greenhouse gas emissions by at least 80% below 1990 levels by 2050 in order to stabilize carbon dioxide equivalent concentrations at 450 parts per million--the level required to stay within the 2°C target.

b. On December 12, 2015, one hundred ninety-five countries at the 21st Conference of the parties of the United Nations Framework Convention on Climate Change adopted an agreement addressing greenhouse gas emissions mitigation, adaptation, and finance starting in the year 2020, known as the Paris Agreement. The Paris Agreement was adopted on November 4, 2016, and is the largest concerted global effort to combat climate change to date.

3. Action undertaken by New York to reduce greenhouse emissions will have an impact on global greenhouse gas emissions and the rate of climate change. In addition, such action will encourage other jurisdictions to implement complementary greenhouse gas reduction strategies and provide an example of how such strategies can be implemented. It will also advance the development of green technologies and sustainable practices within the private sector, which can have far-reaching impacts such as a reduction in the cost of renewable energy components, and the creation of jobs and tax revenues in New York.

4. It shall therefore be a goal of the state of New York to reduce greenhouse gas emissions from all anthropogenic sources 100% over 1990 levels by the year 2050, with an incremental target of at least a 50 percent reduction in climate pollution by the year 2030, in line with USGCRP and IPCC projections of what is necessary to avoid the most severe impacts of climate change.

5. Although substantial emissions reductions are necessary to avoid the most severe impacts of climate change, complementary adaptation measures will also be needed to address those risks that cannot be avoided. Some of the impacts of climate change are already observable in New York state and the northeastern United States. Annual average temperatures are on the rise, winter snow cover is decreasing, heat waves and precipitation are intensifying, and sea levels along New York's coastline are approximately one foot higher than they were in 1900. New York has also experienced an increasing number of extreme and unusual weather events, like Hurricanes Irene and Lee and the unprecedented Superstorm Sandy in 2012, which caused at least 53 deaths and $32 billion in damage in New York state.

6. New York should therefore minimize the risks associated with climate change through a combination of measures to reduce statewide greenhouse gas emissions and improve the resiliency of the state with respect to the impacts and risks of climate change that cannot be avoided.

7. Climate change especially heightens the vulnerability of disadvantaged communities, which bear environmental and socioeconomic burdens as well as legacies of racial and ethnic discrimination. Actions undertaken by New York state to mitigate greenhouse gas emissions should prioritize the safety and health of disadvantaged communities, control potential regressive impacts of future climate change mitigation and adaptation policies on these communities, and prioritize the allocation of public investments in these areas.

8. Creating good jobs and a thriving economy is a core concern of New York state. Shaping the ongoing transition in our energy sector to ensure that it creates good jobs and protects workers and communities that may lose employment in the current transition must be key concerns of our climate policy. Setting clear standards for job quality and training standards encourages not only high-quality work but positive economic impacts.

9. Workers are at the front lines of climate change. Construction workers and building service workers were some of the first workers dedicated to cleaning up damage inflicted by recent storms. These workers were often operating in unsafe and toxic environments, cleaning up mold, and working in unstable buildings. In order to protect the health and welfare of these workers, it is in the interest of the state of New York to establish safe and healthy working conditions and proper training for workers involved in climate change related activities. In addition, much of the infrastructure work preparing our state for additional climate change events must happen quickly and efficiently. It is in the interest of the state to ensure labor harmony and promote efficient performance of work on climate change related work sites by requiring workers to be well-trained and adequately compensated.

10. Ensuring career opportunities are created and shared geographically and demographically is necessary to ensure increased access to good jobs for marginalized communities while making the same neighborhoods more resilient. Climate change has a disproportionate impact on low-income people, women, and workers. It is in the interest of the state of New York to protect and promote the interests of these groups against the impacts of climate change and severe weather events and to advance our equity goals by ensuring quality employment opportunities in safe working environments.

11. The complexity of the ongoing energy transition, the uneven distribution of economic opportunity, and the disproportionate cumulative economic and environmental burdens on communities mean that there is a strong state interest in setting a floor statewide for labor standards, but allowing and encouraging individual agencies and local governments to raise standards.

12. By exercising a global leadership role on greenhouse gas mitigation and climate change adaptation, New York will position its economy, technology centers, financial institutions, and businesses to benefit from national and international efforts to address climate change. New York state has already demonstrated leadership in this area by undertaking efforts such as:

a. executive order no. 24 (2009), establishing a goal to reduce greenhouse gas emissions 80% by the year 2050, creating a climate action council, and calling for preparation of a climate action plan;

b. chapter 433 of the laws of 2009, establishing a state energy planning board and requiring the board to adopt a state energy plan;

c. chapter 388 of the laws of 2011, directing the department of environmental conservation to promulgate rules and regulations limiting

emissions of carbon dioxide by newly constructed major generating facilities;

d. the adoption of a state energy plan establishing clean energy goals for the year 2030 aimed at reducing greenhouse gas emission levels by 40% from 1990 levels, producing 50% of electricity from renewable sources, and increasing energy efficiency from 2012 levels by 23%;

e. collaboration with other states on the Regional Greenhouse Gas Initiative, and the development of a regional low carbon fuel standard;

f. creation of new offices and task forces to address climate change, including the New York state office of climate change, the renewable energy task force, and the sea level rise task force; and

g. the enactment of the Community Risk and Resiliency Act (CRRA), which requires agencies to consider sea level rise and other climate-related events when implementing certain state programs.

This legislation will build upon these past developments by creating a comprehensive regulatory program to reduce greenhouse gas emissions that corresponds with the targets established in executive order no. 24, the state energy plan, and USGCRP and IPCC projections.

§ 2. The environmental conservation law is amended by adding a new article 75 to read as follows:

ARTICLE 75
CLIMATE CHANGE

Section 75-0101. Definitions.
75-0103. New York state climate action council.
75-0105. Statewide greenhouse gas emissions report.
75-0107. Statewide greenhouse gas emissions limits.
75-0109. Scoping plan for statewide greenhouse gas emissions reductions.
75-0111. Promulgation of regulations to achieve statewide greenhouse gas emissions reductions.
75-0113. Climate justice working group.
75-0115. Implementation reporting.

§ 75-0101. Definitions.

For the purposes of this article the following terms shall have the following meanings:

1. "Allowance" means an authorization to emit, during a specified year, up to one ton of carbon dioxide equivalent.

2. "Carbon dioxide equivalent" means the amount of carbon dioxide by mass that would produce the same global warming impact as a given mass of another greenhouse gas over an integrated twenty-year time frame after emission, based on the best available science.

3. "Co-pollutants" means hazardous air pollutants produced by greenhouse gas emissions sources.

4. "Council" means the New York state climate action council established pursuant to section 75-0103 of this article.

5. "Disadvantaged communities" means communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, as identified pursuant to section 75-0113 of this article.

6. "Emissions reduction measures" means programs, measures and standards, authorized pursuant to this chapter, applicable to sources or categories of sources, that are designed to reduce emissions of greenhouse gases.

7. "Greenhouse gas" means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and any other

substance emitted into the air that may be reasonably anticipated to cause or contribute to anthropogenic climate change.

8. "Greenhouse gas emission limit" means an authorization, during a specified year, to emit up to a level of greenhouse gases specified by the department, expressed in tons of carbon dioxide equivalent.

9. "Greenhouse gas emission source" or "source" means any anthropogenic source or category of anthropogenic sources of greenhouse gas emissions, with the exception of agricultural emissions from livestock, determined by the department:

a. that its participation in the program will enable the department to effectively reduce greenhouse gas emissions; and,

b. to be capable of being monitored for compliance.

10. "Leakage" means a reduction in emissions of greenhouse gases within the state that is offset by an increase in emissions of greenhouse gases outside of the state.

11. "Market-based compliance mechanism" means any of the following:

a. A price on greenhouse gas emissions from regulated sources, expressed as a fee per ton of carbon dioxide equivalent released in a given year.

b. A system of market-based declining annual aggregate emissions limitations for sources or categories of sources that emit greenhouse gases.

12. "Statewide greenhouse gas emissions" means the total annual emissions of greenhouse gases produced within the state from anthropogenic sources and greenhouse gases produced outside of the state that are associated with the generation of electricity imported into the state and the extraction and transmission of fossil fuels imported into the state. Statewide emissions shall be expressed in tons of carbon dioxide equivalents.

13. "Statewide greenhouse gas emissions limit" or "statewide emissions limit" means the maximum allowable level of statewide greenhouse gas emissions in a specified year, as determined by the department pursuant to this article.

14. "Environmental justice advisory group" shall mean the permanent environmental justice advisory group established by a chapter of the laws of two thousand eighteen amending the environmental conservation law relating to establishing a permanent environmental justice advisory group and an environmental justice interagency coordinating council, as proposed in legislative bills numbers S.3110 and A.2234.

§ 75-0103. New York state climate action council.

1. There is hereby established, within the department, the New York state climate action council ("council") which shall consist of the following twenty-five members:

a. the commissioners of transportation, health, economic development, agriculture and markets, housing and community renewal, general services, labor, environmental conservation, homeland security and emergency services, the chairperson of the public service commission, the superintendent of financial services, the presidents of the New York state energy research and development; New York power authority; Long Island power authority; secretary of state, the chairman of the metropolitan transportation authority and dormitory of the state of New York, or their designee.

b. two members appointed by the governor;

c. two members to be appointed by the temporary president of the senate;

d. two members to be appointed by the speaker of the assembly;

e. one member to be appointed by the minority leader of the senate; and

f. one member to be appointed by the minority leader of the assembly.

2. The at large members shall include at all times individuals with expertise in issues relating to climate change mitigation and/or adaptation, such as environmental justice, labor, public health and regulated industries.

3. Council members shall receive no compensation for their services but shall be reimbursed for actual and necessary expenses incurred in the performance of their duties.

4. The chairperson of the council shall be the commissioner of environmental conservation or his or her designee.

5. A majority of the members of the council shall constitute a quorum.

6. Any vacancies on the council shall be filled in the manner provided for in the initial appointment.

7. The council shall be authorized to convene advisory panels to assist or advise it in areas requiring special expertise or knowledge.

8. The department shall provide the council with such facilities, assistance and data as will enable the council to carry out its powers and duties. Additionally, all other agencies of the state or subdivisions thereof may, at the request of the chairperson, provide the council with such facilities, assistance, and data as will enable the council to carry out its powers and duties.

9. The council shall consult with the climate justice working group established in section 75-0113 of this article, the department of state utility intervention unit, and the federally designated electric bulk system operator.

10. The council shall advise the department on:

a. The development of statewide greenhouse gas emissions limits rules and regulations, pursuant to section 75-0107 of this article, and regulations to achieve statewide greenhouse gas emissions reductions, pursuant to section 75-0111 of this article.

b. The preparation of a scoping plan for reducing greenhouse gas emissions, pursuant to the procedures set forth in section 75-0109 of this article.

11. The council shall identify existing climate change mitigation and adaptation efforts at the federal, state, and local levels and may make recommendations regarding how such policies may improve the state's efforts.

12. The council shall maintain a website that includes public access to the scoping plan and greenhouse gas limit information.

§ 75-0105. Statewide greenhouse gas emissions report.

1. No later than one year after the effective date of this article, and each year thereafter, the department shall issue a report on statewide greenhouse gas emissions, expressed in tons of carbon dioxide equivalents, from all greenhouse gas emission sources in the state, including the relative contribution of each type of greenhouse gas and each type of source to the statewide total.

2. The statewide greenhouse gas emissions report shall be a comprehensive evaluation, informed by a variety of data, including but not limited to:

a. information relating to the use of fossil fuels by sector, including for electricity generation, transportation, heating, and other combustion purposes;

b. information relating to fugitive and vented emissions from systems associated with the production, processing, transport, distribution, storage, and consumption of fossil fuels, including natural gas;

c. information relating to emissions from non-fossil fuel sources, including, but not limited to, garbage incinerators, biomass combustion, landfills and landfill gas generators, and anaerobic digesters;

d. information relating to emissions associated with manufacturing, chemical production, cement plants, and other processes that produce non-combustion emissions; and

e. information from sources that may be required to participate in the registration and reporting system pursuant to subdivision four of this section.

3. The statewide greenhouse gas emissions report shall also include an estimate of greenhouse gas emissions associated with the generation of imported electricity and with the extraction and transmission of fossil fuels imported into the state which shall be counted as part of the statewide total.

4. Within one year after the effective date of this article, the department shall consider establishing a mandatory registry and reporting system from individual sources to obtain data on greenhouse gas emissions exceeding a particular threshold. If established, such registry and reporting system shall apply a consistent reporting threshold to ensure the unbiased collection of data.

5. The statewide greenhouse gas emissions report shall also include an estimate of what the statewide greenhouse gas emissions level was in 1990.

6. The statewide greenhouse gas emissions report shall utilize best available science and methods of analysis, including the comparison and reconciliation of emission estimates from all sources, fuel consumption, field data, and peer-reviewed research.

7. The statewide greenhouse gas emissions report shall clearly explain the methodology and analysis used in the department's determination of greenhouse gas emissions and shall include a detailed explanation of any changes in methodology or analysis, adjustments made to prior estimates, as needed, and any other information necessary to establish a scientifically credible account of change.

8. The department shall hold at least two public hearings to seek public input regarding the methodology and analysis used in the determination of statewide greenhouse gas emissions, and periodically thereafter.

§ 75-0107. Statewide greenhouse gas emissions limits.

1. No later than one year after the effective date of this article, the department shall, pursuant to rules and regulations promulgated after at least one public hearing, establish a statewide greenhouse gas emissions limit as a percentage of 1990 emissions, as estimated pursuant to section 75-0105 of this article, as follows:

a. 2020: 85% of 1990 emissions.

b. 2025: 65% of 1990 emissions.

c. 2030: 50% of 1990 emissions.

d. 2035: 35% of 1990 emissions.

e. 2040: 20% of 1990 emissions.

f. 2045: 10% of 1990 emissions.

g. 2050: 0% of 1990 emissions.

2. Greenhouse gas emission limits shall be measured in units of carbon dioxide equivalents and identified for each individual type of greenhouse gas.

3. In order to ensure the most accurate determination feasible, the department shall utilize the best available scientific, technological, and economic information on greenhouse gas emissions and consult with the council, stakeholders, and the public in order to ensure that all emissions are accurately reflected in its determination of 1990 emissions levels.

§ 75-0109. Scoping plan for statewide greenhouse gas emissions reductions.

1. On or before two years of the effective date of this article, the department shall prepare and approve a scoping plan outlining the department's recommendations for attaining the statewide greenhouse gas emissions limits in accordance with the schedule established in section 75-0107 of this article.

2. The draft scoping plan shall be developed in consultation with the council, environmental justice advisory group, and the climate justice working group established pursuant to section 75-0113 of this article and other stakeholders.

a. The department and the council shall hold at least six regional public comment hearings on the draft scoping plan, including three meetings in the upstate region and three meetings in the downstate region, and shall allow at least one hundred twenty days for the submission of public comment.

b. The department shall provide meaningful opportunities for public comment from all persons who will be impacted by the plan, including persons living in disadvantaged communities as identified pursuant to section 75-0113 of this article.

c. On or before thirty months of the effective date of this article, the department shall submit the final scoping plan to the governor, the speaker of the assembly and the temporary president of the senate and post such plan on its website.

3. The scoping plan shall identify and make recommendations on regulatory measures and other state actions that will ensure the attainment of the statewide greenhouse gas emissions limits established pursuant to section 75-0107 of this article. The measures and actions considered in such scoping plan shall at a minimum include:

a. Performance-based standards for sources of greenhouse gas emissions, including but not limited to sources in the transportation, building, industrial, commercial, and agricultural sectors.

b. Market-based mechanisms to reduce statewide greenhouse gas emissions or emissions from a particular source category, including an examination of: the imposition of fees per unit of carbon dioxide equivalent emitted and the imposition of emissions caps accompanied by a system of tradable emission allowances.

c. Measures to reduce emissions from the electricity sector by displacing fossil-fuel fired electricity with renewable electricity or energy efficiency.

d. Land-use and transportation planning measures aimed at reducing greenhouse gas emissions from motor vehicles.

e. Measures to achieve long-term carbon sequestration and/or promote best management practices in land use, agriculture and forestry.

f. Verifiable, enforceable and voluntary emissions reduction measures.

4. In developing such plan the department shall:

a. Consider all relevant information pertaining to greenhouse gas emissions reduction programs in other states, regions, localities, and nations.

b. Evaluate, using the best available economic models, emission estimation techniques and other scientific methods, the total potential costs and potential economic and non-economic benefits of the plan for reducing greenhouse gases, and make such evaluation publicly available. In conducting this evaluation, the department shall quantify:

i. The economic and social benefits of greenhouse gas emissions reductions, taking into account the federal social cost of carbon, any other tools that the department deems useful and pertinent for this analysis, and any environmental, economic and public health co-benefits (such as the reduction of co-pollutants and the diversification of energy sources); and

ii. The costs of implementing proposed emissions reduction measures, and the emissions reductions that the department anticipates achieving through these measures.

c. Take into account the relative contribution of each source or source category to statewide greenhouse gas emissions, and the potential for adverse effects on small businesses, and recommend a de minimis threshold of greenhouse gas emissions below which emission reduction requirements will not apply.

d. Identify measures to maximize reductions of both greenhouse gas emissions and co-pollutants in disadvantaged communities as identified pursuant to section 75-0113 of this article.

5. The department shall update its plan for achieving the statewide greenhouse gas emissions limits at least once every five years and shall make such updates available to the governor, the speaker of the assembly and the temporary president of the senate and post such updates on its website.

§ 75-0111. Promulgation of regulations to achieve statewide greenhouse gas emissions reductions.

1. No later than three years after the effective date of this article, the department, after public workshops and consultation with the council, the environmental justice advisory group, and the climate justice working group established pursuant to section 75-0113 of this article, representatives of regulated entities, community organizations, environmental groups, health professionals, labor unions, municipal corporations, trade associations and other stakeholders, shall, after no less than two public hearings, promulgate rules and regulations to ensure compliance with the statewide emissions reduction limits.

2. The regulations promulgated by the department pursuant to this section shall:

a. Ensure that the aggregate emissions of greenhouse gases from greenhouse gas emission sources will not exceed the statewide greenhouse gas emissions limits established in section 75-0107 of this article.

b. Include legally enforceable emissions limits, performance standards, or measures or other requirements to control emissions from greenhouse gas emission sources.

c. Include measures to reduce emissions from greenhouse gas emission sources that have a cumulatively significant impact on statewide greenhouse gas emissions, such as internal combustion vehicles that burn gasoline or diesel fuel and boilers or furnaces that burn oil or natural gas.

3. In promulgating these regulations, the department shall:

a. Design and implement all regulations in a manner that seeks to be equitable, to minimize costs and to maximize the total benefits to New York, and encourages early action to reduce greenhouse gas emissions.

b. Ensure that greenhouse gas emissions reductions achieved are real, permanent, quantifiable, verifiable, and enforceable by the department.

c. Ensure that activities undertaken to comply with the regulations do not result in a net increase in co-pollutant emissions or otherwise disproportionately burden disadvantaged communities as identified pursuant to section 75-0113 of this article.

d. Prioritize measures to maximize net reductions of greenhouse gas emissions and co-pollutants in disadvantaged communities as identified pursuant to section 75-0113 of this article and encourage early action to reduce greenhouse gas emissions and co-pollutants.

e. Minimize leakage.

4. Market-based compliance mechanisms.

a. The department may consider provisions for the use of market-based compliance mechanisms to comply with the regulations.

b. Prior to the inclusion of any market-based compliance mechanism in the regulations, to the extent feasible and in the furtherance of achieving the statewide greenhouse gas emissions limit, the department shall do all of the following:

i. Consider the potential for direct, indirect, and cumulative emission impacts from these mechanisms, including localized impacts in disadvantaged communities as identified pursuant to section 75-0113 of this article;

ii. Design any market-based compliance mechanism to prevent any increase in the emissions of co-pollutants; and

iii. Maximize additional environmental, public health, and economic benefits for the state of New York and for disadvantaged communities identified pursuant to section 75-0113 of this article, as appropriate.

c. Such regulations shall include provisions governing how market-based compliance mechanisms may be used by regulated entities subject to greenhouse gas emissions limits and mandatory emission reporting requirements to achieve compliance with their greenhouse gas emissions limits.

d. The department shall ensure that, at a minimum, forty percent of any funds collected pursuant to any market-based compliance regulations promulgated under this section as a result of legislative authorization, funds authorized by the public service commission to be collected solely for and directed to the New York state energy research and development authority and proceeds collected by the New York state energy research and development authority from the auction or sale of carbon dioxide emission allowances allocated by the department are invested in a manner which will benefit disadvantaged communities, identified pursuant to section 75-0113 of this article, consistent with the purposes of this article, including, but not limited to, increased access to renewable energy, energy efficiency, weatherization, zero- and low-emission transportation, and adaptation opportunities. The department shall consult with the climate justice working group in developing and carrying out such investments.

§ 75-0113. Climate justice working group.

1. There is hereby created within the department, no later than six months after the effective date of this article, a "climate justice working group". Such working group will be comprised of representatives from: environmental justice communities, the department, the department of health, the New York state energy and research development authority, and the department of labor.

a. Environmental justice community representatives shall be members of communities of color, low-income communities, and communities bearing

disproportionate pollution and climate change burdens, or shall be representatives of community-based organizations with experience and a history of advocacy on environmental justice issues, and shall include at least three representatives from New York city communities, three representatives from rural communities, and three representatives from upstate urban communities.

b. The working group, in consultation with the department, the departments of health and labor, the New York state energy and research development authority, and the environmental justice advisory group, will establish criteria to identify disadvantaged communities for the purposes of co-pollutant reductions, greenhouse gas emissions reductions, regulatory impact statements, and the allocation of investments related to this article.

c. Disadvantaged communities shall be identified based on geographic, public health, environmental hazard, and socioeconomic criteria, which shall include but are not limited to:

(i) areas burdened by cumulative environmental pollution and other hazards that can lead to negative public health effects;

(ii) areas with concentrations of people that are of low income, high unemployment, high rent burden, low levels of home ownership, low levels of educational attainment, or members of groups that have historically experienced discrimination on the basis of race or ethnicity; and

(iii) areas vulnerable to the impacts of climate change such as flooding, storm surges, and urban heat island effects.

2. Before finalizing the criteria for identifying disadvantaged communities and identifying disadvantaged communities pursuant to subdivision one of this section, the department shall publish draft criteria and a draft list of disadvantaged communities and make such information available on its website.

a. The department shall hold at least six regional public hearings on the draft criteria and the draft list of disadvantaged communities, including three meetings in the upstate region and three meetings in the downstate region, and shall allow at least one hundred twenty days for the submission of public comment.

b. The department shall also ensure that there are meaningful opportunities for public comment for all persons who will be impacted by the criteria, including persons living in areas that may be identified as disadvantaged communities under the proposed criteria.

3. The group will meet no less than annually to review the criteria and methods used to identify disadvantaged communities and may modify such methods to incorporate new data and scientific findings. The climate justice working group shall review identities of disadvantaged communities and modify such identities as needed.

§ 75-0115. Implementation reporting.

1. The department shall, not less than every four years, publish a report which shall include recommendations regarding the implementation of greenhouse gas reduction measures.

2. The report shall, at minimum, include:

a. Whether the state is on track to meet the statewide greenhouse gas emissions limits established in section 75-0107 of this article.

b. An assessment of existing regulations and whether modifications are needed to ensure fulfillment of the statewide greenhouse gas emissions limits.

c. An overview of social benefits from the regulations or other measures, including reductions in greenhouse gas emissions and copollutants,

diversification of energy sources, and other benefits to the economy, environment, and public health, including women's health.

d. An overview of compliance costs for regulated entities and for the department and other state agencies.

e. Whether regulations or other greenhouse gas reduction measures undertaken are equitable, minimize costs and maximize the total benefits to the state, and encourage early action.

f. Whether activities undertaken to comply with state regulations disproportionately burden disadvantaged communities as identified pursuant to section 75-0113 of this article.

g. An assessment of local benefits and impacts of any reductions in co-pollutants related to reductions in statewide and local greenhouse gas emissions.

h. An assessment of disadvantaged communities' access to or community ownership of the services and commodities identified in section eight of the chapter of the laws of two thousand eighteen which added this article.

i. Whether entities that have voluntarily reduced their greenhouse gas emissions prior to the implementation of this article receive appropriate credit for early voluntary reductions.

j. Recommendations for future regulatory and policy action.

3. In preparing this report, the department shall, at a minimum, consult with the council, and the climate justice working group established in section 75-0113 of this article.

4. The report shall be published and posted on the department's website.

§ 3. Subdivision 1 of section 54-1523 of the environmental conservation law is amended by adding a new paragraph h to read as follows:

h. to establish and implement easily-replicated renewable energy projects, including solar arrays, heat pumps and wind turbines in public low-income housing in suburban, urban and rural areas.

§ 4. The public service law is amended by adding a new section 66-p to read as follows:

§ 66-p. Establishment of a renewable energy program. 1. As used in this section:

(a) "load serving entity" means any entity that secures energy to serve the electrical energy requirements of end-use customers in New York state;

(b) "prevailing rate of wages" shall have the same meaning as such term is defined in paragraph a of subdivision five of section two hundred twenty of the labor law; and

(c) "renewable energy systems" means systems that generate electricity or thermal energy through use of the following technologies: solar thermal, photovoltaics, wind, hydroelectric, geothermal electric, geothermal ground source heat, tidal energy, wave energy, ocean thermal, offshore wind and fuel cells which do not utilize a fossil fuel resource in the process of generating electricity.

2. No later than January first, two thousand nineteen, the commission shall establish a program to require that a minimum of fifty percent of the statewide electric generation secured by load serving entities to meet the electrical energy requirements of all end-use customers in New York state in two thousand thirty shall be generated by renewable energy systems.

The commission shall set annual minimum percentage levels of electricity generated by renewable energy systems and delivered to end-use customers in New York state for each year of the program.

3. No later than July first, two thousand twenty and every two years thereafter, the commission shall, after notice and provision for the opportunity to comment, issue a comprehensive review of the program established pursuant to this section. The commission shall determine, among other matters: (a) progress in meeting the overall annual targets for deployment of renewable energy systems; (b) distribution of systems by size and load zone; and (c) annual funding commitments and expenditures. The commission shall evaluate the annual targets established pursuant to subdivision two of this section and determine whether the annual targets should be accelerated, increased or extended, taking into consideration load modifications associated with, but not limited to, energy efficiency measures and the electrification of transportation, heating systems and industrial processes.

4. The commission may temporarily suspend or modify the obligations under such program provided that the commission, after conducting a hearing as provided in section twenty of this chapter, makes a finding that the program impedes the provision of safe and adequate electric service or that there is a significant increase in arrears or service disconnections that the commission determines is related to the program.

5. Every contractor employed pursuant to this section, not otherwise required to pay laborers, workers or mechanics the prevailing rate of wages pursuant to article eight of the labor law, shall pay employees under contract for the development of renewable energy systems rated at two hundred fifty kilowatts or more, a wage of not less than the prevailing rate of wages for such work in the locality where such installation occurs. This requirement shall be in effect for the duration of the receipt by the contractor of the incentives established pursuant to this section and in no event shall such requirement extend beyond the availability of such incentives. Every contractor subject to the provisions of this subdivision shall maintain payroll records in accordance with section two hundred twenty of the labor law.

§ 5. Section 1005 of the public authorities law is amended by adding a new subdivision 26 to read as follows:

26. Renewable energy program. As deemed feasible and advisable by the trustees, no later than January first, two thousand nineteen, the authority shall secure energy to serve the electrical energy requirements of its end-use customers in accordance with the renewable energy program as set forth and defined in section sixty-six-p of the public service law.

§ 6. Sections 1020-jj, 1020-kk and 1020-11 of the public authorities law, as renumbered by chapter 415 of the laws of 2017, are renumbered sections 1020-kk, 1020-ll and 1020-mm and a new section 1020-jj is added to read as follows:

§ 1020-jj. Renewable energy program. The authority and all load serving entities that secure energy to serve the electrical energy requirements of end-use customers in its service territory shall comply with the renewable energy program as set forth and defined in section sixty-six-p of the public service law.

§ 6-a. Subdivision 1 of section 1020-s of the public authorities law, as amended by chapter 415 of the laws of 2017, is amended to read as follows:

1. The rates, services and practices relating to the electricity generated by facilities owned or operated by the authority shall not be subject to the provisions of the public service law or to regulation by, or the jurisdiction of, the public service commission, except to the extent (a) article seven of the public service law applies to the siting

and operation of a major utility transmission facility as defined therein, (b) article ten of such law applies to the siting of a generating facility as defined therein, (c) section eighteen-a of such law provides for assessment for certain costs, property or operations, (d) to the extent that the department of public service reviews and makes recommendations with respect to the operations and provision of services of, and rates and budgets established by, the authority pursuant to section three-b of such law, [~~and~~] (e) that section seventy-four of the public service law applies to qualified energy storage systems within the authority's jurisdiction **and (f) that section sixty-six-p of the public service law applies to the authority and load serving entities that secure energy to serve the electrical energy requirements of end-use customers within the authority's jurisdiction**.

§ 7. The labor law is amended by adding a new article 8-B to read as follows:

ARTICLE 8-B

LABOR AND JOB STANDARDS AND WORKER PROTECTION

Section 228. Labor and job standards and worker protection.

§ 228. Labor and job standards and worker protection. 1. All state agencies involved in implementing the New York state climate and community protection act shall assess and implement strategies to increase employment opportunities and improve job quality. Within one hundred twenty days of the effective date of this section, all state agencies, offices, authorities, and divisions shall report to the legislature on:

a. steps they will take to ensure compliance with this section; and

b. regulations necessary to ensure that they prioritize the statewide goal of creating good jobs and increasing employment opportunities.

2. In considering and issuing permits, licenses, regulations, contracts, and other administrative approvals and decisions pursuant to the New York state climate and community protection act, all state agencies, offices, authorities, and divisions shall apply the following labor, training, and job quality standards to the following project types: public work; projects in receipt of more than one hundred thousand dollars in total financial assistance; or to projects with a total value of more than ten million dollars; and privately-financed projects on public property.

a. the payment of no less than prevailing wages for all employees in construction and building, consistent with article eight of the this chapter, and building services, consistent with article nine of this chapter;

b. the inclusion of contract language requiring contractors to establish labor harmony policies; dispute resolution mechanisms; prevailing wage compliance; safety policies; workers compensation insurance (including review of contractor experience rating and other factors); and apprenticeship program appropriate for crafts employed. Procurement rules should encourage bundling of small contracts and projects to improve the efficiency of compliance;

c. apprenticeship utilization:

i. that all contractors and subcontractors, including those that participate in power purchase agreements, energy performance contracts, or other similar programs, participate in apprenticeship programs in the trades in which they are performing work;

ii. maximum use of apprentices as per department of labor approved ratios;

iii. encouragement of affiliated pre-apprentice direct entry programs, including but not limited to EJM Construction Skills; NYC Helmets to

Hardhats, and Nontraditional Employment for Women (NEW) for the recruitment of local and/or disadvantaged workers;

iv. existing workforce development programs, including those at the New York state energy research and development authority, should be made to conform to these standards.

3. The commissioner, the fiscal officer and other relevant agencies shall promulgate such regulations as are necessary to implement and administer compliance with the provisions of this section. The department and the fiscal officer shall coordinate with organized labor and local and county level governments to implement a system to track compliance, accept reports of non-compliance for enforcement action, and report annually on the adoption of these standards to the legislature starting one year from the effective date of this section.

a. For the purposes of this section, "fiscal officer" shall mean the industrial commissioner, except for construction and building service work performed by or on behalf of a city, in which case "fiscal officer" shall mean the comptroller or other analogous officer of such city.

b. The provisions of the contract by the recipient of financial assistance pertaining to prevailing wages are to be considered a contract for the benefit of construction and building service workers, upon which such workers shall have the right to maintain action for the difference between the prevailing wage rate of pay, benefits, and paid leave and the rates of pay, benefits, and paid leave actually received by them, and including attorney's fees.

c. i. Where a recipient of financial assistance contracts building service work to a building service contractor, the contractor is held to the same obligations with respect to prevailing wages as the recipient. The recipient must include terms establishing this obligation within any contract signed with a contractor.

ii. Where a recipient of financial assistance contracts for construction, excavation, demolition, rehabilitation, repair, renovation, alteration or improvement to a subcontractor, the subcontractor is held to the same obligations with respect to prevailing wages as the recipient. The recipient must include terms establishing this obligation within any contract signed with a subcontractor.

4. For the purposes of this section "financial assistance" means any provision of public funds to any person, individual, proprietorship, partnership, joint venture, corporation, limited liability company, trust, association, organization, or other entity that receives financial assistance, or any assignee or successor in interest of real property improved or developed with financial assistance, for economic development within the state, including but not limited to cash payments or grants, bond financing, tax abatements or exemptions, including but not limited to abatements or exemptions from real property, mortgage recording, sales, and use taxes, or the difference between any payments in lieu of taxes and the amount of real property or other taxes that would have been due if the property were not exempted from such taxes, tax increment financing, filing fee waivers, energy cost reductions, environmental remediation costs, write-downs in the market value of buildings or land, or the cost of capital improvements related to real property for which the state would not pay absent the development project, and includes both discretionary and as of right assistance. The provisions of this section shall only apply to projects receiving more than one hundred thousand dollars in total financial assistance, or to projects with a total project value of more than ten million dollars.

5. The commissioner shall evaluate whether there are additional standards that could be applied to increase wage and benefit standards or to encourage a safe, well-trained, and adequately compensated workforce.

6. Nothing set forth in this section shall be construed to impede, infringe, or diminish the rights and benefits which accrue to employees through bona fide collective bargaining agreements, or otherwise diminish the integrity of the existing collective bargaining relationship.

7. Nothing set forth in this section shall preclude a local government from setting additional standards that expand on these state-wide standards.

§ 8. Report on barriers to, and opportunities for, community ownership of services and commodities in disadvantaged communities. 1. On or before two years of the effective date of this act, the department of environmental conservation, with input from relevant state agencies, the environmental justice advisory group as defined in section 75-0101 of the environmental conservation law, the climate justice working group as defined in section 75-0113 of the environmental conservation law and Climate Action Council established in article 75 of the environmental conservation law, and following at least two public hearings, shall prepare a report on barriers to, and opportunities for, access to or community ownership of the following services and commodities in disadvantaged communities as identified in article 75 of the environmental conservation law:

a. Distributed renewable energy generation.

b. Energy efficiency and weatherization investments.

c. Zero-emission and low-emission transportation options.

d. Adaptation measures to improve the resilience of homes and local infrastructure to the impacts of climate change including but not limited to microgrids.

e. Other services and infrastructure that can reduce the risks associated with climate-related hazards, including but not limited to:

i. Shelters and cool rooms during extreme heat events;

ii. Shelters during flooding events; and

iii. Medical treatment for asthma and other conditions that could be exacerbated by climate-related events.

2. The report, which shall be submitted to the governor, the speaker of the assembly and the temporary president of the senate and posted on the department of environmental conservation website, shall include recommendations on how to increase access to the services and commodities.

3. The department of environmental conservation shall amend the scoping plan for statewide greenhouse gas emissions reductions in accordance with the recommendations included in the report.

§ 9. Climate change actions by state agencies. 1. All state agencies shall assess and implement strategies to reduce their greenhouse gas emissions.

2. In considering and issuing permits, licenses, and other administrative approvals and decisions, including but not limited to the execution of grants, loans, and contracts, all state agencies, offices, authorities, and divisions shall consider whether such decisions are inconsistent with or will interfere with the attainment of the statewide greenhouse gas emissions limits established in article 75 of the environmental conservation law. Where such decisions are deemed to be inconsistent with or will interfere with the attainment of the statewide greenhouse gas emissions limits, each agency, office, authority, or division shall provide a detailed statement of justification as to why

such limits/criteria may not be met, and identify alternatives or greenhouse gas mitigation measures to be required where such project is located.

3. In considering and issuing permits, licenses, and other administrative approvals and decisions, including but not limited to the execution of grants, loans, and contracts, pursuant to article 75 of the environmental conservation law, all state agencies, offices, authorities, and divisions shall not disproportionately burden disadvantaged communities as identified pursuant to subdivision 5 of section 75-0101 of the environmental conservation law. All state agencies, offices, authorities, and divisions shall also prioritize reductions of greenhouse gas emissions and co-pollutants in disadvantaged communities as identified pursuant to such subdivision 5 of section 75-0101 of the environmental conservation law.

§ 10. Authorization for other state agencies to promulgate greenhouse gas emissions regulations. 1. The public service commission, the New York state energy research and development authority, the department of health, the department of transportation, the department of state, the department of economic development, the department of agriculture and markets, the department of financial services, the office of general services, the division of housing and community renewal, the public utility authorities established pursuant to titles 1, 1-A, 1-B, 11, 11-A, 11-B, 11-C and 11-D of article 5 of the public authorities law and any other state agency may promulgate regulations to contribute to achieving the statewide greenhouse gas emissions limits established in article 75 of the environmental conservation law. Provided, however, any such regulations shall not limit the department of environmental conservation's authority to regulate and control greenhouse gas emissions pursuant to article 75 of the environmental conservation law.

§ 11. Chapter 355 of the laws of 2014, constituting the "community risk and resiliency act", is amended by adding two new sections 17-a and 17-b to read as follows:

§ 17-a. The department of environmental conservation shall take actions to promote adaptation and resilience, including:

(a) actions to help state agencies and other entities assess the reasonably foreseeable risks of climate change on any proposed projects, taking into account issues such as: sea level rise, tropical and extra-tropical cyclones, storm surges, flooding, wind, changes in average and peak temperatures, changes in average and peak precipitation, public health impacts, and impacts on species and other natural resources.

(b) identifying the most significant climate-related risks, taking into account the probability of occurrence, the magnitude of the potential harm, and the uncertainty of the risk.

(c) measures that could mitigate significant climate-related risks, as well as a cost-benefit analysis and implementation of such measures.

§ 17-b. Major permits for the regulatory programs of subdivision three of section 70-0107 of the environmental conservation law shall require applicants to demonstrate that future physical climate risk has been considered. In reviewing such information the department may require the applicant to mitigate significant risks to public infrastructure and/or services, private property not owned by the applicant, adverse impacts on disadvantaged communities, and/or natural resources in the vicinity of the project.

§ 12. Nothing in this act shall limit the existing authority of a state entity to adopt and implement greenhouse gas emissions reduction measures.

§ 13. Nothing in this act shall relieve any person, entity, or public agency of compliance with other applicable federal, state, or local laws or regulations, including state air and water quality requirements, and other requirements for protecting public health or the environment.

§ 14. Review under this act may be had in a proceeding under article 78 of the civil practice law and rules at the instance of any person aggrieved.

§ 15. Severability. If any word, phrase, clause, sentence, paragraph, section, or part of this act shall be adjudged by any court of competent jurisdiction to be invalid, such judgement shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the word, phrase, clause, sentence, paragraph, section, or part thereof directly involved in the controversy in which such judgement shall have been rendered.

§ 16. This act shall take effect on the same date and in the same manner as a chapter of the laws of 2018, amending the environmental conservation law, relating to establishing a permanent environmental justice advisory group and an environmental justice interagency coordinating council, as proposed in legislative bills numbers A.2234 and S.3110, takes effect; provided further, the provisions of section seven of this act shall take effect on the one hundred eightieth day after it shall have become a law and shall apply to any grants, loans, and contracts and financial assistance awarded or renewed on or after such effective date.