IN SENATE -- Introduced by Sens. KAMINSKY, HOYLMAN, ADDABBO, BAILEY, BENJAMIN, BIAGGI, BRESLIN, BROOKS, CARLUCCI, COMRIE, GAUGHAN, GIANARIS, GOUMANDES, HARCKHAM, JACKSON, KAPLAN, KAVANAGH, KENNEDY, KRUEGER, LIU, MARTINEZ, MAY, MAYER, METZGER, MONTGOMERY, MYRIE, PARKER, PERSAUD, RAMOS, RIVERA, SALAZAR, SANDERS, SEPULVEDA, SERRANO, SKOUFIS, STAVISKY, STEWART-COUSINS, THOMAS -- (at request of the Governor) -- read twice and ordered printed, and when printed to be committed to the Committee on Rules

IN ASSEMBLY -- Introduced by M. of A. ENGLEBRIGHT, LIFTON, FAHY, ORTIZ, CAHILL, WALKER, CARROLL, L. ROSENTHAL, THIELE, JAFFEE, SIMON, OTIS, DINOWITZ, WILLIAMS, ROZIC, ABINANTI, MOSLEY, BARRETT, STECK, GALEF, GOTTFRIED, LUPARDO, PHEFFER AMATO, DE LA ROSA, JEAN-PIERRE, COLTON, CUSICK, PEOPLES-STOKES, SEAWRIGHT, PICHARDO, WEPRIN, SIMOTAS, GLICK, FERNANDEZ, D'URSO, Q'DONNELL, GRIFFIN, REYES, BURKE, SOLAGES, ROMEO, STIRPE, MAGNARELLI, EPSTEIN, TAYLOR, FALL, CRUZ, STERN, SANTABARBARA, BRONSON, BARNWELL, DAVILA, HEVESI, NIOU, HUNTER, M. G. MILLER, BENEDETTO, RODRIGUEZ, QUART, WRIGHT, HYNDMAN, CRESPO, FRONTUS, RYAN, SAYEGH, BARRON, PRETLOW, GUNThER, RICHARDSON, RAYNOR, KIM, McMahanON, DICKENS, JACOBSON, WEINSTEIN -- Multi-Sponsored by -- M. of A. DenDEKKER, LENTOL, NOLAN, PAULIN, RAMOS -- (at request of the Governor) -- read once and referred to the Committee on Ways and Means

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 leadership and community protection act

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

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

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

LBD12037-01-9
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, tourism, 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.

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.

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.

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.

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 40 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.

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.

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.

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.

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.

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.

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 cumula-
tive economic and environmental burdens on communities mean that there
is a strong state interest in setting a floor statewide for labor stand-
ards, but allowing and encouraging individual agencies and local govern-
ments to raise standards.

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

\( \text{a. executive order no. 24 (2009), establishing a goal to reduce green-} \)
house gas emissions 80% by the year 2050, creating a climate action
\( \text{b. chapter 433 of the laws of 2009, establishing a state energy plan-} \)
\( \text{c. chapter 388 of the laws of 2011, directing the department of envi-} \)
\( \text{d. the adoption of a state energy plan establishing clean energy goals} \)
\( \text{for the year 2030 aimed at reducing greenhouse gas emission levels by} \)
\( \text{e. collaboration with other states on the Regional Greenhouse Gas} \)
\( \text{f. creation of new offices and task forces to address climate change,} \)
\( \text{g. the enactment of the Community Risk and Resiliency Act (CRRA),} \)

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. Promulgation of regulations to achieve statewide green-
house gas emissions reductions.
75-0111. Climate justice working group.
75-0113. Value of carbon.
75-0115. Community air monitoring program.
75-0117. Investment of funds.
75-0119. 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.


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, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to section 75-0111 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 the maximum allowable level of statewide greenhouse gas emissions, in a specified year, expressed in tons of carbon dioxide equivalent, as determined by the department pursuant to this article.

9. "Greenhouse gas emission offset" means a deduction representing one metric ton of carbon dioxide equivalent emissions, reduced, avoided, or sequestered by a greenhouse gas emission offset project from a measured baseline of emissions pursuant to the statewide greenhouse gas emissions report.

10. "Greenhouse gas emission offset projects" means one or more projects, including:

a. Natural carbon sinks including but not limited to afforestation, reforestation, or wetlands restoration;

b. Greening infrastructure;

c. Restoration and sustainable management of natural and urban forests or working lands, grasslands, coastal wetlands and sub-tidal habitats;

d. Efforts to reduce hydrofluorocarbon refrigerant, sulfur hexafluoride, and other ozone depleting substance releases;

e. Anaerobic digesters, where energy produced is directed toward localized use;

f. Carbon capture and sequestration;

g. Ecosystem restoration; and

h. Other types of projects recommended by the council in consultation with the climate justice working group that provide public health and environmental benefits, and do not create burdens in disadvantaged communities.

11. "Greenhouse gas emission source" or "source" means any anthropogenic source or category of anthropogenic sources of greenhouse gas emissions, determined by the department:

a. whose participation in the program will enable the department to effectively reduce greenhouse gas emissions; and,
b. that are capable of being monitored for compliance.

12. "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.

13. "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.

14. "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.

15. "Environmental justice advisory group" shall mean the permanent environmental justice advisory group established by a chapter of the laws of two thousand nineteen 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. 2385 and A. 1564.

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

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

   a. the commissioners of transportation, health, economic development, agriculture and markets, housing and community renewal, environmental conservation, labor, the chairperson of the public service commission, the presidents of the New York state energy research and development authority; New York power authority; Long Island power authority; the secretary of state, or their designees.

   b. two non-agency expert members appointed by the governor;

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

   d. three 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 co-chairpersons of the council shall be the commissioner of environmental conservation and the president of the New York state energy research and development authority or their designee.

5. Each member of the council shall be entitled to one vote. The council’s approval and adoption of the final scoping plan pursuant to this section, and any subsequent interim updates thereto, shall require a supermajority of the council. No action may be taken by the council unless there is a quorum, which shall at all times be a majority of the members of the council.

6. Any vacancies on the council shall be filled in the manner provided for the initial appointment.
7. The council shall convene advisory panels requiring special expertise and, at a minimum, shall establish advisory panels on transportation, energy intensive and trade-exposed industries, land-use and local government, energy efficiency and housing, power generation, and agriculture and forestry. The purpose of the advisory panels shall be to provide recommendations to the council on specific topics, in its preparation of the scoping plan, and interim updates to the scoping plan, and in fulfilling the council's ongoing duties.

a. Each advisory panel shall be chaired by the relevant agency head or his or her designee. The council may convene and dissolve additional advisory panels, in its sole discretion, and pursuant to the requirements herein.

b. Advisory panels shall be comprised of no more than five voting members. The council shall elect advisory panel members, and such membership shall at all times represent individuals with direct involvement or expertise in matters to be addressed by the advisory panels pursuant to this section.

c. Advisory panels shall work directly with the council on the preparation of the scoping plan pursuant to this section. Each advisory panel shall coordinate with the environmental justice advisory group and climate justice working group.

d. All agencies of the state or subdivisions thereof may, at the request of any such advisory panel or the council, provide the advisory panel with such facilities, assistance, and data as will enable advisory panels to carry out their powers and duties.

8. The council shall convene a just transition working group. The working group shall be chaired by the commissioner of labor and the president of the New York state energy research and development authority and shall consist of no less than thirteen, but no more than seventeen members and shall include the commissioners of housing and community renewal, the chair of the department of public service, representatives of environmental justice communities and representatives of labor organizations, clean energy developers and at least five representatives of distinct energy-intensive industries. The just transition working group shall:

a. advise the council on issues and opportunities for workforce development and training related to energy efficiency measures, renewable energy and other clean energy technologies, with specific focus on training and workforce opportunities for disadvantaged communities, and segments of the population that may be underrepresented in the clean energy workforce such as veterans, women and formerly incarcerated persons;

b. identify energy-intensive industries and related trades and identify sector specific impacts of the state's current workforce and avenues to maximize the skills and expertise of New York state workers in the new energy economy;

c. identify sites of electric generating facilities that may be closed as a result of a transition to a clean energy sector and the issues and opportunities presented by reuse of those sites;

d. with respect to potential for greenhouse gas emission limits developed by the department of environmental conservation pursuant to this article, advise the council on the potential impacts of carbon leakage risk on New York state industries and local host communities, including the impact of any potential carbon reduction measures on the competitiveness of New York state business and industry;
e. advise the council and conduct stakeholder outreach on any other workforce matters directed by the council; and
f. at a time frame determined by the council, prepare and publish recommendations to the council on how to address: issues and opportunities related to the energy-intensive and trade-exposed entities; workforce development for trade-exposed entities, disadvantaged communities and underrepresented segments of the population; measures to minimize the carbon leakage risk and minimize anti-competitiveness impacts of any potential carbon policies and energy sector mandates.
g. The just transition working group is hereby authorized and directed to conduct a study of and report on:
   i. The number of jobs created to counter climate change, which shall include but not be limited to the energy sector, building sector, transportation sector, and working lands sector;
   ii. The projection of the inventory of jobs needed and the skills and training required to meet the demand of jobs to counter climate change; and
   iii. Workforce disruption due to community transitions from a low carbon economy.

9. The department and the New York state energy research and development authority 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 co-chairpersons, provide the council with such facilities, assistance, and data as will enable the council to carry out its powers and duties.

10. The council shall consult with the climate justice working group established in section 75-0111 of this article, the department of state utility intervention unit, and the federally designated electric bulk system operator.

11. The council shall on or before two years of the effective date of this article, prepare and approve a scoping plan outlining the recommendations for attaining the statewide greenhouse gas emissions limits in accordance with the schedule established in section 75-0107 of this article, and for the reduction of emissions beyond eighty-five percent, net zero emissions in all sectors of the economy, which shall inform the state energy planning board's adoption of a state energy plan in accordance with section 6-104 of the energy law. The first state energy plan issued subsequent to completion of the scoping plan required by this section shall incorporate the recommendations of the council.

12. The draft scoping plan shall be developed in consultation with the environmental justice advisory group, and the climate justice working group established pursuant to section 75-0111 of this article and other stakeholders.
   a. 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 council shall provide meaningful opportunities for public comment from all segments of the population that will be impacted by the plan, including persons living in disadvantaged communities as identified pursuant to section 75-0111 of this article.
   c. On or before three years of the effective date of this article, the council 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.
13. 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. Measures to reduce emissions from the electricity sector by displacing fossil-fuel fired electricity with renewable electricity or energy efficiency.
   c. Land-use and transportation planning measures aimed at reducing greenhouse gas emissions from motor vehicles.
   d. Measures to achieve long-term carbon sequestration and/or promote best management practices in land use, agriculture and forestry.
   e. Measures to achieve six gigawatts of distributed solar energy capacity installed in the state by two thousand twenty-five, nine gigawatts of offshore wind capacity installed by two thousand thirty-five, a statewide energy efficiency goal of one hundred eighty-five trillion British thermal units energy reduction from the two thousand twenty-five forecast; and three gigawatts of statewide energy storage capacity by two thousand thirty.
   f. Measures to promote the beneficial electrification of personal and freight transport and other strategies to reduce greenhouse gas emissions from the transportation sector.
   g. Measures to achieve reductions in energy use in existing residential or commercial buildings, including the beneficial electrification of water and space heating in buildings, establishing appliance efficiency standards, strengthening building energy codes, requiring annual building energy benchmarking, disclosing energy efficiency in home sales, and expanding the ability of state facilities to utilize performance contracting.
   h. Recommendations to aid in the transition of the state workforce and the rapidly emerging clean energy industry.
   i. Measures to achieve healthy forests that support clean air and water, biodiversity, and sequester carbon.
   j. Measures to limit the use of chemicals, substances or products that contribute to global climate change when released to the atmosphere, but are not intended for end-use combustion.
   k. Mechanisms to limit emission leakage as defined in subdivision eleven of section 75-0101 of this article.
   1. Verifiable, enforceable and voluntary emissions reduction measures.
14. In developing such plan the council shall:
   a. Consider all relevant information pertaining to greenhouse gas emissions reduction programs in states in the United States Climate Alliance, as well as 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 council shall quantify:
   i. The economic and social benefits of greenhouse gas emissions reductions, taking into account the value of carbon, established by the department pursuant to section 75-0113 of this article, any other tools that the council deems useful and pertinent for this analysis, and any environmental, economic and public health co-benefits (such as the
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 council 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 75-0111 of this article.

15. The council 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.

16. 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.

17. 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 two years 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 report-
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. 2030: 60% of 1990 emissions.
   b. 2050: 15% 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.

4. In order to comply with the statewide greenhouse gas emissions limits promulgated pursuant to this section, a source may utilize the alternative compliance mechanism established pursuant to subdivision four of section 75-0109 of this article. The use of such mechanism shall be in accordance with the provisions of that subdivision.

§ 75-0109. Promulgation of regulations to achieve statewide greenhouse gas emissions reductions.

1. No later than four 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 75-0111 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 and work with other state agencies and authorities to promulgate regulations required
by section eight of the chapter of the laws of two thousand nineteen that added this article.

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, with the exception of agricultural emissions from livestock.
   c. Reflect, in substantial part, the findings of the scoping plan prepared pursuant to section 75-0103 of this article.
   d. 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 75-0111 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 75-0111 of this article and encourage early action to reduce greenhouse gas emissions and co-pollutants.
   e. Incorporate measures to minimize leakage.

4. a. The department may establish an alternative compliance mechanism to be used by sources subject to greenhouse gas emissions limits to achieve net zero emissions.
   b. The use of such mechanism shall account for not greater than fifteen percent of statewide greenhouse gas emissions estimated as a percentage of nineteen ninety emissions pursuant to section 75-0105 of this article, provided that the use of this mechanism must offset a quantity greater than or equal to the greenhouse gases emitted. The offset of greenhouse gas emissions shall not result in disadvantaged communities having to bear a disproportionate burden of environmental impacts.
   c. The department shall verify that greenhouse gas emission offset projects authorized pursuant to this subdivision represent greenhouse gas equivalent emission reductions or carbon sequestration that are real, additional, verifiable, enforceable, and permanent.
   d. Any greenhouse gas emissions offset project shall comply with all of the requirements of this subdivision.
   e. The department shall establish an application process that, at a minimum, requires a source to sufficiently demonstrate that compliance with the greenhouse gas emissions limits is not technologically feasible, and that the source has reduced emissions to the maximum extent practicable. After an initial four year period, the department shall review the participation of a source in this mechanism, and make a
determination as to the source's continued need for an alternative compliance, considering the extent to which the source is utilizing the best available technology standards.

f. Sources in the electric generation sector shall not be eligible to participate in such mechanism.

g. The following types of projects shall be prohibited:

i. waste-to-energy projects, including incineration and pyrolysis; and

ii. biofuels used for energy or transportation purposes.

h. Any greenhouse gas emission offset project approved by the department shall:

i. be designed to provide a discernable benefit to the environment rather than to the source;

ii. be located in the same county, and within twenty-five linear miles, of the source of emissions, to the extent practicable;

iii. enhance the conditions of the ecosystem or geographic area adversely affected; and

iv. substantially reduce or prevent the generation or release of pollutants through source reduction.

i. A greenhouse gas emission offset project shall not be approved by the department where the project:

i. is required pursuant to any local, state or federal law, regulation, or administrative or judicial order;

ii. contains measures which the source would have undertaken anyway within the next five years;

iii. contributes to environmental research at a college or university; or

iv. is a study or assessment without a commitment to implement the results.

j. In approving greenhouse gas emission offset projects, the department shall prioritize projects that maximize public health and environmental benefits within the state and especially localized benefits in disadvantaged communities, defined pursuant to section 75-0111 of this article.

k. The department shall establish a public registry of greenhouse gas emission offset projects approved pursuant to this subdivision.

l. Prior to the inclusion of any alternative 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. consult with the council, the environmental justice advisory group, and the climate justice working group;

ii. consider the potential for direct, indirect, and cumulative emission impacts from this mechanism, including localized impacts in disadvantaged communities as identified pursuant to section 75-0111 of this article;

iii. design the alternative compliance mechanism to prevent any increase in the emissions of co-pollutants; and

iv. maximize additional environmental, public health, and economic benefits for the state and for disadvantaged communities identified pursuant to section 75-0111 of this article, as appropriate.

§ 75-0111. 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 depart-
ments of health and labor, the New York state energy and research devel-
opment 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 invest-
ments 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 commu-
nities 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 avail-
able on its website.

a. The council shall hold at least six regional public hearings on the
draft criteria and the draft list of disadvantaged communities, includ-
ing three meetings in the upstate region and three meetings in the down-
state region, and shall allow at least one hundred twenty days for the
submission of public comment.

b. The council shall also ensure that there are meaningful opportu-
nities for public comment for all segments of the population that 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.

§ 75-0113. Value of carbon.

1. No later than one year after the effective date of this article,
the department, in consultation with the New York state energy research
and development authority, shall establish a social cost of carbon for
use by state agencies, expressed in terms of dollars per ton of carbon
dioxide equivalent.

2. The social cost of carbon shall serve as a monetary estimate of the
value of not emitting a ton of greenhouse gas emissions. As determined
by the department, the social cost of carbon may be based on marginal
greenhouse gas abatement costs or on the global economic, environmental, and social impacts of emitting a marginal ton of greenhouse gas emissions into the atmosphere, utilizing a range of appropriate discount rates, including a rate of zero.

3. In developing the social cost of carbon, the department shall consider prior or existing estimates of the social cost of carbon issued or adopted by the federal government, appropriate international bodies, or other appropriate and reputable scientific organizations.

§ 75-0115. Community air monitoring program.

1. For purposes of this section, the following definitions and related provisions shall apply:
   a. "Community air monitoring system" means advanced sensing monitoring equipment that measures and records air pollutant concentrations in the ambient air at or near sensitive receptor locations in disadvantaged communities.
   b. "Disadvantaged community" means a community identified as disadvantaged pursuant to the criteria set forth in section 75-0111 of this article.
   c. "Sensitive receptors" includes hospitals, schools and day care centers, and such other locations as the department may determine.

2. a. On or before October first, two thousand twenty-two, the department shall prepare, in consultation with the climate justice working group, a program demonstrating community air monitoring systems.
   b. The program shall identify the highest priority locations in disadvantaged communities around the state to deploy community air monitoring systems, which shall be communities with potentially high exposure burdens for toxic air contaminants and criteria air pollutants. The program shall be undertaken in no less than four communities statewide with regional consideration.
   c. The department shall publish the air quality data produced by the community air monitoring systems deployed pursuant to this section on its website as it becomes available.

3. On or before June first, two thousand twenty-four, the department shall prepare, in consultation with the climate justice working group, a strategy to reduce emissions of toxic air contaminants and criteria air pollutants in disadvantaged communities affected by a high cumulative exposure burden. The strategy shall include criteria for the development of community emission reduction programs. The criteria presented in the strategy shall include, but are not limited to, the following:
   a. an assessment and identification of communities with high cumulative exposure burdens for toxic air contaminants and criteria air pollutants.
   b. a methodology for assessing and identifying the contributing sources or categories of sources, including, but not limited to, stationary and mobile sources, and an estimate of their relative contribution to elevated exposure to air pollution in impacted communities identified pursuant to paragraph a of this subdivision.
   c. an assessment of the existing and available measures for reducing emissions from the contributing sources or categories of sources identified pursuant to paragraph b of this subdivision.

4. a. Based on the assessment and identification of disadvantaged communities with high cumulative exposure burdens for toxic air contaminants and criteria air pollutants completed pursuant to paragraph a of subdivision three of this section, the department shall select disadvantaged communities around the state for preparation of community emis-
sions reduction programs. The department may select additional locations annually thereafter, as appropriate.

b. The department shall have the authority to adopt regulations establishing programs to achieve emissions reductions for the locations selected using the most cost-effective measures identified pursuant to paragraph c of subdivision three of this section.

§ 75-0117. Investment of funds.

State agencies, authorities and entities, in consultation with the environmental justice working group and the climate action council, shall, to the extent practicable, invest or direct available and relevant programmatic resources in a manner designed to achieve a goal for disadvantaged communities to receive forty percent of overall benefits of spending on clean energy and energy efficiency programs, projects or investments in the areas of housing, workforce development, pollution reduction, low income energy assistance, energy, transportation and economic development, provided however, that disadvantaged communities shall receive no less than thirty-five percent of the overall benefits of spending on clean energy and energy efficiency programs, projects or investments and provided further that this section shall not alter funds already contracted or committed as of the effective date of this section.

§ 75-0119. Implementation reporting.

1. The department in consultation with the council 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.

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 75-0111 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 six of the chapter of the laws of two thousand nineteen 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 75-0111 of this article.

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

§ 3. Paragraphs f and g of subdivision 1 of section 54-1523 of the environmental conservation law, as added by section 5 of part U of chapter 58 of the laws of 2016, are amended and a new paragraph h is added to read as follows:

f. enabling communities to become certified under the climate smart communities program, including by developing natural resources inventories, right sizing of municipal fleets and developing climate adaptation strategies; [end]

g. climate change adaptation planning and supporting studies, including but not limited to vulnerability assessment and risk analysis of municipal drinking water, wastewater, and transportation infrastructure; [end] and

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

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

2. No later than June thirtieth, two thousand twenty-one, the commission shall establish a program to require that: (a) a minimum of seventy percent of the state wide electric generation secured by jurisdictional 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; and (b) that by the year two thousand forty (collectively, the "targets") the statewide electrical demand system will be zero emissions. In establishing such program, the commission shall consider and where applicable formulate the program to address impacts of the program on safe and adequate electric service in the state under reasonably foreseeable conditions. The commission may, in designing the program, modify the obligations of jurisdictional load serving entities and/or the targets upon consideration of the factors described in this subdivision.

3. No later than July first, two thousand twenty-four 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 targets for deployment of renewable energy systems and zero emission sources, including factors that will or are likely to frustrate progress toward the targets; (b) distribution of systems by size and load zone; and (c) annual funding commitments and expenditures.
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; the program is likely to impair existing obligations and agreements; and/or that there is a significant increase in arrears or service disconnections that the commission determines is related to the program.

5. No later than July first, two thousand twenty-four, the commission shall establish programs to require the procurement by the state's load serving entities of at least nine gigawatts of offshore wind electricity generation by two thousand thirty-five and six gigawatts of photovoltaic solar generation by two thousand twenty-five, and to support three gigawatts of statewide energy storage capacity by two thousand thirty.

6. In any proceeding commenced by the commission with a goal of achieving one hundred eighty-five trillion British thermal units of end-use energy savings below the two thousand twenty-five energy-use forecast, the commission will include mechanisms to ensure that, where practicable, at least twenty percent of investments in residential energy efficiency, including multi-family housing, can be invested in a manner which will benefit disadvantaged communities, as defined in article seventy-five of the environmental conservation law, including low to moderate income consumers.

7. In the implementation of this section, the commission shall design programs in a manner to provide substantial benefits for disadvantaged communities, as defined in article seventy-five of the environmental conservation law, including low to moderate income consumers, at a reasonable cost while ensuring safe and reliable electric service. Specifically, the commission shall:
   (a) To the extent practicable, specify that a minimum percentage of energy storage projects should deliver clean energy benefits into NYISO zones that serve disadvantaged communities, as defined in article seventy-five of the environmental conservation law, including low to moderate income consumers, and that energy storage projects be deployed to reduce the usage of combustion-powered peaking facilities located in or near disadvantaged communities;
   (b) In pursuing the state's solar deployment goals, the New York state energy research and development authority shall consider enhanced incentive payments for solar and community distributed generation projects, focusing in particular but not limited to those serving disadvantaged communities, as defined in article seventy-five of the environmental conservation law, which result in energy cost savings or demonstrate community ownership models; and,
   (c) In the allocation of ratepayer funds for clean energy, direct the New York state energy research and development authority and investor owned utilities to develop and report metrics for energy savings and clean energy market penetration in the low and moderate income market and in disadvantaged communities, as defined in article seventy-five of the environmental conservation law, and post such information on the authority's website.

§ 5. This act shall be subject to current prevailing wage law.

§ 6. 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, in cooperation with the New York state energy research and development authority and the New York power authority, with input from relevant state agencies, the environmental justice advi-
sory group as defined in section 75-0101 of the environmental conservation law, the climate justice working group as defined in section 75-0111 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.

§ 7. 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.
§ 8. 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 shall 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.

§ 9. 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 extratropical 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.

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

§ 11. 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.

§ 12. 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.

§ 13. 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.
§ 14. This act shall take effect on the same date and in the same manner as a chapter of the laws of 2019, 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. 2385 and A. 1564, takes effect; provided further, the provisions of section 75-0115 of the environmental conservation law as added by section two of this act shall take effect October 1, 2022.