

This document has been prepared as part of the implementation project of Legal Pathways to Deep Decarbonization (Michael B. Gerrard and John C. Dernbach, eds. Environmental Law Institute [2019]) (LPDD). For background information on the project, see <https://lpdd.org>

MODEL CLIMATE AND CLEAN ENERGY WORKFORCE DEVELOPMENT AND ASSISTANCE LAW

Introductory Memorandum

Below is a model law to assist states that have adopted comprehensive, economy-wide decarbonization laws in assessing the education, development and training needs for the workforce needed to meet the state's climate and clean energy goals. The model law is equally applicable to those states that may not have adopted comprehensive climate legislation, but instead have adopted decarbonization or clean energy targets that can inform the workforce impact analysis the model law contemplates. The model legislation assembles a Working Group and charges it with (i) studying and assessing the size and skills of the future workforce needed in the state to achieve the state's goals, and (ii) ensuring sufficient resources are mobilized and available to the state's agencies, educational institutions, labor organizations and other institutions to develop the workforce needed for the changing economy. The study and mobilization of resources should include a focus on minority, historically underserved, and economically disadvantaged populations in the state. The model law also addresses the resulting displacement of the workforce in fossil-fuel related and other high-emissions technology industries, using the same approach of studying the expected displacement and addressing it through mobilization of state resources (including retraining).

Background:

Some states have adopted comprehensive laws to decarbonize all or many sectors of their economies. Among the more recent and ambitious is New York's Climate Leadership and Community Protection Act, Senate Bill 6599, signed into law, July 18, 2019 ("CLCPA"). The CLCPA aims to reduce New York State's economy-wide greenhouse gas emissions 40 percent by 2030 and no less than 85 percent by 2050 from 1990 levels. It does so by replacing fossil-fuel generated electricity with renewable generation -- solar, wind, hydroelectric, and other zero-emission resources -- combined with energy storage; decarbonizing buildings through electrification of HVAC systems, including heat pumps; transitioning to zero-emission vehicles to replace internal combustion vehicles; encouraging energy efficiency; among other actions. As the effects of climate change become more evident and as the public demands action from its legislators, other states will likely follow New York's lead and adopt laws with similar goals.

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While many states have not gone so far as New York in legislating economy-wide emissions reductions, there are numerous examples of states with significant emissions reduction targets included in policy statements and executive orders that could be used for the purposes of informing the analysis called for by this model law. For these states, understanding the impacts of decarbonization on their workforce may be politically important before the legislature considers more comprehensive decarbonization legislation.

Although states may take different approaches to decarbonizing their economies, nearly all decarbonization approaches will require some development of a workforce capable of making possible the transition to a low-carbon economy. Nearly all economy-wide approaches will dramatically increase the need for electricians, HVAC technicians, energy efficiency experts, solar panel and wind turbine technicians, among other skilled workers. At the same time, jobs and revenues associated with fossil-fuel related and other high-emissions technology industries will decline, resulting in workforce displacement in those industries.

Prudence suggests that in the process of formulating -- or even after adopting -- economy-wide decarbonization laws, a state should (i) study and assess the needs of a future workforce necessary to achieve the legislation's goals as well as the resulting workforce displacement in fossil-fuel related and other high-emissions technology industries ; and (ii) develop and implement a strategy to ensure sufficient guidance is provided, and sufficient resources are marshalled and made available, to the state's agencies, educational institutions, businesses and labor organizations to develop a workforce in size and skill necessary for the transition to a clean-energy economy, and ensure support (including retraining) for those displaced in fossil-fuel related and other high-emissions technology industries.

The model law below is designed to assist a state in achieving these objectives.

Summary of Model Law Provisions:

Section III of the model law establishes a Climate Education and Clean Energy Careers Working Group. The Working Group would include representatives from relevant state agencies and be informed by interested stakeholders (including business) and the general public.

Section IV requires the Working Group to conduct a Climate and Clean Energy Education and Careers Study ("Study") to assess and determine the education, development and training needs for a workforce sufficient to meet in a timely, efficient and effective manner the requirements and goals of the state's climate policies.

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Sections III (b) (ii) & (iii) authorize the Working Group, as informed by the results, findings and recommendations of the Study, to develop and implement a Climate and Clean Energy Workforce Development and Assistance Program (“Program”) to educate, recruit, train and develop the climate and clean energy workforce necessary to meet the requirements and goals of the state’s climate policies. The Program should include a focus on minority, historically underserved, and economically disadvantaged populations in the state. The Program should also ensure sufficient resources (including retraining) are marshalled and made available to address and support the workforce expected to be displaced in fossil-fuel related and other high-emissions technology industries.

A state may decide to first conduct the Study and, as a second, separate legislative step, develop the Program to address the workforce needs. Under this alternative approach, the results of the Study would inform the state as to whether a Program is needed. Still other states may decide a Program is needed, but may wish to authorize a state agency or other organization (as opposed to the Working Group) to develop and implement the Program. Accordingly, the model law provides the development and implementation of the Program as “Optional”, thus allowing a state to choose whether to include the Program development and implementation in the same legislation as the Study, or instead to provide separate legislation for the Study and for the Program. And, a state can decide whether the Working Group should develop and implement the Program, or instead have a separate agency responsible for that task.

Section V addresses the appropriation of sufficient funds for the Study and for the establishment, functioning and operation of the Climate Education and Clean Energy Careers Working Group. Consistent with the rest of the model law, the funding section includes an option for funding the Program.

Model Law

I. PURPOSE AND INTENT

(a). Meeting requirements and decarbonization goals of the State's [Insert name of State's economy-wide decarbonization law, or other source of a relevant decarbonization policy target (hereinafter, "State's Climate Law")] will require the development of a sizable and adequate workforce, including the scaling up of climate and clean energy workforce education, development and training in the State of [Insert State name]. Achieving those goals will also likely result in the decline of jobs and revenues associated with fossil-fuel related and other high-emissions technology industries, resulting in workforce displacement in those industries. [Optional: The scope of the State's education, development and training needs for such a workforce and the resulting decline in other sectors of the workforce has not been fully assessed and is not yet fully understood.]

(b). To more fully understand, assess and address (i) the education, development and training needs for such a workforce, and (ii) the expected decline of jobs and revenues associated with fossil-fuel related and other high-emissions technology industries, the State should undertake and fund a comprehensive study of those education, development and training needs.

(c). Meeting the requirements and decarbonization goals of the Climate Law in a timely and effective manner will also require the State to develop and implement a strategy to educate, recruit, train and develop a climate and clean energy workforce.

(d). The purpose of this Act is to:

(i). Establish a Climate Education and Clean Energy Careers Working Group, which shall include representatives from relevant State Agencies and be informed by interested stakeholders (including business) and the general public;

(ii). Require the Climate Education and Clean Energy Careers Working Group to conduct a study – a Climate and Clean Energy Education and Careers Study -- to assess and determine:

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- a. the education, development and training needs for a workforce sufficient to meet in a timely, efficient and effective manner the requirements and decarbonization goals of the State's Climate Law, including with a focus on minority, historically underserved, and economically disadvantaged populations in the State; and
- b. the expected resulting workforce displacement in fossil-fuel related and other high-emissions technology industries

(iii). *[Optional: Authorize the Climate Education and Clean Energy Careers Working Group, as informed by the results, findings and recommendations of the Climate and Clean Energy Education and Careers Study, to develop and implement a Climate and Clean Energy Workforce Development and Assistance Program to educate, recruit, train and develop the climate and clean energy workforce necessary to meet the requirements and decarbonization goals of the Climate Law (including with a focus on minority, historically underserved, and economically disadvantaged populations in the State), and ensure support for those displaced in fossil-fuel related and other high-emissions technology industries; and*

(iv). Appropriate sufficient funds for the study and for the establishment, functioning and operation of the Climate Education and Clean Energy Careers Working Group *[Optional: and the Climate and Clean Energy Workforce Development and Assistance Program]*.

II. DEFINITIONS

For purposes of this Act, the following term has the following meaning:

(a). "Climate Law" shall mean **[Insert citation/definition of State's Climate Law] If reference is to the State's relevant decarbonization policy targets (as opposed to a comprehensive decarbonization law) cite to those policies]**.

III. ESTABLISHMENT AND FUNCTIONING OF A CLIMATE EDUCATION AND CLEAN ENERGY CAREERS WORKING GROUP

(a). A Climate Education and Clean Energy Careers Working Group is hereby established.

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(b). The purpose of the Climate Education and Clean Energy Careers Working Group shall be to:

(i). develop the scope of, contract for and oversee the Climate and Clean Energy Education and Careers Study described in Section IV of the Act;

[*Optional:* (ii). develop a Climate and Clean Energy Workforce Development and Assistance Program to ensure that (a) the clean energy workforce, sufficient in number and skills, needed to meet the requirements and decarbonization goals of the Climate Law, is developed, educated, recruited and trained, including with a focus on minority, historically underserved, and economically disadvantaged populations in the State; and (b) sufficient resources (including retraining) are marshalled and made available to address and support the workforce expected to be displaced in fossil-fuel related and other high-emissions technology industries; and

(iii). implement, oversee and monitor the functioning and operation of the Climate and Clean Energy Workforce Development and Assistance Program to ensure (a) the education, training and development of a workforce (including with a focus on minority, historically underserved, and economically disadvantaged populations in the State) sufficient to meet in a timely, efficient and effective manner the requirements and decarbonization goals of the Climate Law, and (b) sufficient resources (including retraining) are marshalled and made available to address and support the workforce expected to be displaced in fossil-fuel related and other high-emissions technology industries.]

(c). The Climate Education and Clean Energy Careers Working Group shall include senior representatives from the following agencies:

(i). [Insert relevant State Department of Education];

(ii). [Insert relevant State University System];

(iii). [Insert relevant State Energy Agency]

(v). [Insert relevant State Department of Labor]; and

(vi). [Insert relevant State Agencies on Economic Development, Buildings, Transportation, Public Utilities, Commerce or others as appropriate]

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(d). The Climate Education and Clean Energy Careers Working Group shall be convened by [insert relevant division of the State Department of Labor, or insert appropriate agency], which shall, with cooperation from the above-named agencies, appoint the appropriate senior representatives to the Climate Education and Clean Energy Careers Working Group, develop the appropriate rules and other documents to govern the functioning of the Working Group and undertake such other actions as are necessary for the Working Group to carry out its responsibilities.

IV. CLIMATE AND CLEAN ENERGY EDUCATION AND CAREERS STUDY

(a). The Climate Education and Clean Energy Careers Working Group established under Section III of this Act shall, within [insert number] days after the effective date of this Act, contract with [the appropriate energy institute, university, or other organization] to conduct an independent study of (i) climate and clean energy education, development, training and workforce needs (including with a focus on minority, historically underserved, and economically disadvantaged populations in the State) for a workforce sufficient to meet in a timely, efficient and effective manner the requirements and decarbonization goals of the Climate Law; and (ii) the expected resulting workforce displacement in fossil-fuel related and other high-emissions technology industries. The study shall be overseen by the Climate Education and Clean Energy Careers Working Group.

(b). The scope of the Climate and Clean Energy Education and Careers Study shall be developed by the Climate Education and Clean Energy Careers Working Group, with opportunity for notice and comment by interested stakeholders (including business) and the general public.

(c). The Climate and Clean Energy Education and Careers Study shall be completed and a final report delivered to the Climate Education and Clean Energy Careers Working Group within [insert number] days following the commencement of the study.

(d). Among other findings, recommendations and conclusions, the study shall include a final report assessing:

- (i) the current status of the State's climate and clean energy education, development, training and workforce, and an assessment of and recommendations for the climate and clean energy education, development, training and workforce needs (including with a focus on minority, historically underserved, and economically disadvantaged populations in the State) for a workforce sufficient to meet in a timely, efficient and effective manner the requirements and decarbonization goals of the Climate Law; and
- (ii) the scope, nature and extent of the workforce expected to be displaced in fossil-fuel related and other high-emissions technology industries as well as the nature, extent and

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amount of the resources (including retraining) needed to be marshalled and made available to address and support the displaced workforce.

(e). The study's final report, including its findings, recommendations and conclusions, shall be made available to the general public.

V. FUNDING

(a). There shall be appropriated out of the [appropriate state agency fund] the sum of [\$...] or so much thereof as may be necessary for fiscal year [20XX-20XX] to establish the Climate Education and Clean Energy Careers Working Group established by Section III of this Act. The sum appropriated shall be expended by the [appropriate state agency] solely for the purposes of this Act. Thereafter, the sum of [\$...] or so much thereof as may be necessary for fiscal years [20XX-20XX] shall be appropriated out of the [appropriate state agency fund] to fund the functioning and operation of the Working Group as required by Section III of this Act.

(b). There shall be appropriated out of the [appropriate state agency fund] the sum of [\$...] or so much thereof as may be necessary for fiscal year [20XX-20XX] to conduct the study required by Section IV of this Act. The sum appropriated shall be expended by the [appropriate state agency] solely for the purposes of this Act.

(c). *[Optional: There shall be appropriated out of the [appropriate state agency fund] the sum of [\$...] or so much thereof as may be necessary for fiscal year [20XX-20XX] to develop and implement the Climate and Clean Energy Workforce Development and Assistance Program under Section III(b)(ii) & (iii) of this Act. The sum appropriated shall be expended by the [appropriate state agency] solely for the purposes of this Act.]*

VI. EFFECTIVE DATE

This Act shall become effective within 30 days after its enactment into law.