

The New York City Council

City Hall New York, NY 10007

Legislation Text

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Int. No. 1229

By Council Members Constantinides, Chin, Mendez, Cornegy, Espinal, Levine and Richards

A Local Law to amend the administrative code of the city of New York, in relation to the creation of a pilot program for a district-scale geothermal system

Be it enacted by the Council as follows:

Section 1. Subchapter 2 of chapter 1 of title 3 of the administrative code of the city of New York is amended by adding a new section 3-126 to read as follows:

§ 3-126 District-scale geothermal system. a. Definitions. For purposes of this section, the following terms have the following meanings:

Building. The term "building" means a building as defined in section 28-101.5.

Geothermal energy. The term "geothermal energy" means energy stored in the form of heat beneath the surface of the earth.

Geothermal system. The term "geothermal system" means a system used to exchange geothermal energy between the earth and one or more buildings for the purpose of powering building systems, which may include, but need not be limited to, heating and cooling buildings, heating water and generating electricity.

Pilot district. The term "pilot district" means a portion of the city that includes two or more buildings and is designated for participation in the pilot program.

Pilot program. The term "pilot program" means a pilot program established pursuant to this section for the creation and administration of a district-scale geothermal system.

Power purchase agreement. The term "power purchase agreement" means a contract in which one party generates geothermal energy and another party purchases such energy or another form of energy, such as heat

or electricity, that is developed using geothermal energy.

Third-party developer. The term "third-party developer" means a renewable energy developer that may be selected through competitive bidding to undertake project development for the pilot program, including site assessment and system configuration, installation, financing, operation and maintenance.

- b. Development of pilot program. The director of long-term planning and sustainability, in consultation with the commissioner of environmental protection, shall establish and oversee a pilot program for the creation of a district-scale geothermal system in accordance with this section.
- c. Request for proposals; third-party developer. The director of long-term planning and sustainability may comply with subdivision b of this section by issuing a request for proposals from renewable energy developers for the development of a geothermal system for the pilot district, including site assessment and the configuration, installation, financing, operation and maintenance of a geothermal system. Any such request for proposals may include terms in which a third-party developer selected for the pilot program owns the geothermal system and sells the geothermal energy produced by such system to building owners under power purchase agreements.
- d. Siting of pilot district. 1. The director of long-term planning and sustainability, in consultation with the commissioner of environmental protection and any third-party developer selected pursuant to subdivision c of this section, shall identify potential sites for the pilot district in consideration of all relevant factors, which shall include, but need not be limited to:
 - (a) The site's geologic and hydrologic profile;
- (b) The availability, suitability and accessibility of land for geothermal wells within a suitable distance of the site;
- (c) Whether the city has the property rights necessary to develop geothermal energy at the site and, if not, the cost of obtaining such rights, including the cost of paying fair market value to property owners;
 - (d) The level of interest of property owners in the area in participating in a geothermal system;

- (e) The energy demand profile of buildings in the area that may participate in the geothermal system;
- (f) The capacity of a geothermal system to meet the demand projected for the proposed pilot district;
- (g) Projected fuel cost savings for participating buildings;
- (h) Projected carbon emissions savings measured in terms of the social cost of carbon as provided in paragraphs 3 and 4 of subdivision d of section 3-125, except that a site- or project-specific social-cost-of-carbon value may be developed and used in place of the social-cost-of-carbon value from section 3-125 if such site- or project-specific social cost of carbon is higher than the value provided in such section; and
- (i) Projected costs to build, operate and maintain a geothermal system, including costs to the city, to any contracted private entities including any third-party developer selected pursuant to subdivision c of this section, and to property owners and tenants.
- 2. The site for the pilot district and geothermal system shall be selected from among such potential sites in compliance with sections 197-c and 197-d of the charter.
- e. Construction of geothermal system. The director of long-term planning and sustainability, in consultation with the commissioner of environmental protection and any third-party developer selected pursuant to subdivision c of this section, shall build, install and maintain:
- 1. A geothermal system for the pilot district, including equipment in and around buildings selected for the pilot program; and
 - 2. Other facilities and equipment necessary for the operation of such geothermal system.
- f. Power purchase agreement. 1. Each power purchase agreement entered into pursuant to this section between a property owner and the city or a third-party developer selected pursuant to subdivision c of this section shall provide that title to all geothermal system infrastructure located on such an owner's property shall vest in that owner at the conclusion of the term of such agreement.
- 2. The duration of a power purchase agreement executed pursuant to this section shall not exceed seven years.

- g. Provision of service. 1. Charges for geothermal energy service in the pilot district and procedures for the application for, termination of and reconnection of such service shall be administered in accordance with rules promulgated by the director of long-term planning and sustainability. In promulgating those rules, such director shall select from the following models the model that will be least costly to the average consumer of the geothermal energy being produced:
- (a) A consumption model, in which consumers are charged in proportion to the amount of geothermal energy they consume; or
- (b) An access model, in which consumers are charged a fixed amount for access to energy from the geothermal system, which charge does not vary based on the amount of energy consumed. If the director of long-term planning and sustainability selects the access model, such director may set a maximum amount of energy that each consumer may consume.
- 2. Charges for geothermal energy service in the pilot district shall not exceed the sum of the reasonable cost of system design, installation and maintenance over a 50-year period and a reasonable return on investment for any third-party developer selected pursuant to subdivision c of this section.
- h. Rulemaking. The director of long-term planning and sustainability, in consultation with the commissioner of environmental protection, shall promulgate such rules as are necessary to effectuate this section.
- i. Reporting. 1. Except as provided in paragraph 2 of this subdivision, no later than February 1 of each year the director of long-term planning and sustainability, in consultation with the commissioner of environmental protection and any third-party developer selected pursuant to subdivision c of this section, shall report to the mayor and the council a detailed assessment of the impacts of the pilot program. Such assessment shall include, but need not be limited to:
- (a) Recommendations for improving the pilot program, including the specification of any beneficial new technology for the geothermal system;

File #: Int 1229-2016, Version: *

(b) Recommendations on whether or not to make the pilot program permanent;

(c) Recommendations on whether or not to add similar permanent or pilot programs at other sites and

the locations of any such potential sites;

(d) The costs incurred by the city, by contracted private companies including any third-party developer

selected pursuant to subdivision c of this section, and by property owners and their tenants in implementing the

pilot program up to the date of the report and anticipated future costs per year;

(e) Recommendations regarding the efficient and equitable allocation of geothermal energy among

interested parties in the pilot district; and

(f) Recommendations regarding the administration of the pilot program, including, but not limited to,

whether the pilot program should be administered directly by a city agency, by a third-party developer, by a

public-private partnership, or under a private ownership model with title to the system transferred to property

owners after a set term.

2. The director of long-term planning and sustainability may discontinue reporting to the mayor and the

council after issuing five annual reports as required by paragraph 1 of this subdivision.

§ 2. This local law takes effect 90 days after it becomes law.

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