STATE OF NEW YORK

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2021-2022 Regular Sessions

IN SENATE

(Prefiled)

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Introduced by Sen. KAMINSKY -- read twice and ordered printed, and when printed to be committed to the Committee on Finance

AN ACT to amend the state finance law and the tax law, in relation to implementing "The New York State Low Embodied Carbon Concrete Leadership Act"

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

Section 1. This act shall be known and may be cited as "The New York State Low Embodied Carbon Concrete Leadership Act".

§ 2. Section 165 of the state finance law is amended by adding a new subdivision 9 to read as follows:

9. Special provisions for purchase of concrete.

a. For the purposes of this section, the following terms shall have the following meanings:

(i) "Concrete" shall mean structural and non-structural masonry, precast and ready-mix concrete building products.

(ii) "Concrete mix" shall mean a specific combination of components, including water, cement, aggregate and other materials which are used to produce concrete products. The structural properties of concrete mixes vary by strength, durability, curing time and other performance characteristics as a result of the defined proportions of their components and the methods used in their production.

(iii) "Portland cement" shall mean hydraulic cement produced by pulverizing clinkers in combination with one or more of the forms of calcium sulfate.

(iv) "Embodied carbon emissions" shall mean carbon emissions generated as a result of a material's production, including mining, refining, and shipping.

(v) "Global warming potential" (GWP) shall mean a numeric value that measures the total contribution to global warming from the emission of

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

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greenhouse gases, or the elimination of greenhouse gas sinks, that results from the production and/or utilization of a specific product or service.

(vi) "Carbon dioxide equivalent" (CO2e) shall mean a measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

(vii) "Low embodied carbon concrete" shall mean concrete that has been verified to embody lower carbon emissions, as measured by a GWP metric, compared to the baseline embodied carbon emissions of conventional concrete made with portland cement. Low embodied carbon emissions can be achieved through diverse methods and processes including, but not limited to: (A) higher energy efficiency at the level of the concrete and/or cement plant; (B) low carbon fuel substitution at the level of the concrete and/or cement plant; (C) local production resulting in reduced emissions from transportation; (D) the reduction of clinker content in the cement component of concrete, or the substitution of clinker content with lower carbon-intensive alternative materials like supplementary cementitious materials (SCMs) such as ground granulated blast furnace slag, fly ash, and recycled ground-glass pozzolan; (E) the capture and storage of point source CO2 emissions during the cement and concrete production process; or (F) the utilization and mineralization of carbon in concrete materials.

(viii) "Environmental product declaration" (EPD) shall mean product specific Type III EPDs that conform to ISO Standard 14025 and enable the numeric GWP and environmental impact comparisons between concrete mixes fulfilling the same functions.

(ix) "Carbon capture, utilization and/or storage" (CCUS) shall mean methods and technologies to remove CO2 from the flue gas and from the atmosphere, followed by recycling the CO2 for utilization and/or determining safe and permanent storage options for captured CO2.

(x) "Concrete delivery miles" (CDM) shall mean the distance in miles concrete mixer trucks travel from the production facility to the job site plus return travel.

(xi) "Low embodied carbon discount rate" shall mean a rate, set by the commissioner, applied to one or more of the bids for supply of concrete and based on the GWP derived from certified EPD analysis of each bid relative to all competitive bids. Estimated CO2e resulting from project CDM shall be assessed in addition to GWP derived from EPD analysis and factored into the discount rate.

(xii) "Low embodied carbon concrete breakthrough" shall mean any technology, method, or product, including but not limited to one that incorporates qualified carbon capture utilization and storage, that once fully commercialized and implemented has the potential to significantly reduce the GWP of concrete.

(xiii) "Low embodied carbon concrete breakthrough discount rate" shall mean a discount, set by the commissioner, applied to one or more of the bids for supply of concrete and based on the incorporation of qualified low embodied carbon concrete breakthroughs.

(xiv) "Net zero CO2 emissions" shall mean a state whereby the total amount of CO2 utilized and/or captured during the concrete production process and/or mineralized in concrete materials are equal to the amount of CO2 emissions released during the production and utilization of that concrete.

(xv) "Net negative CO2 emissions" shall mean a state whereby the amount of CO2 utilized and/or captured during the concrete production process and/or mineralized in concrete materials are greater than the

amount of CO_2 emissions released during the production and utilization of that concrete.

b. When letting contracts for the purchase of fifty cubic yards or more of concrete on behalf of facilities, transportation authorities and institutions of the state, solicitation specifications of the office of general services and any other agency, department, office, board or commission shall apply a low embodied carbon concrete price discount rate to offerer bids for the purposes of bid assessment and selection. Discount rates will be applied to offerer bid prices on the basis of the GWP values for concrete products specified in offerer bids. GWP values shall be submitted by offerers in the form of certified EPDs. In addition to GWP values quantified in EPD submissions, the effect of CDM and the fuel usage/emissions factor thereof shall be considered. The CO_2e emissions quantified for CDM shall be incorporated into the GWP values quantified in EPD. A price discount not exceeding five percent shall be applied to top performing bids that certify the lowest GWP values via EPD submission. The commissioner shall establish rules and guidelines whereby specific price discount rates shall be determined and applied to bids based on GWP performance.

c. For bids that have been certified by the commissioner to incorporate low embodied carbon concrete breakthrough products and technologies, the commissioner shall establish a supplemental price discount rate to be applied in addition to the low embodied carbon concrete discount rate defined in paragraph b of this subdivision. Bids that receive price discounts based on GWP performance and which incorporate qualified low embodied carbon concrete breakthrough products and technologies will be granted a supplemental price discount for bid assessment and selection purposes that shall not exceed three percent. The low embodied carbon concrete breakthrough discount rate shall be added to the low embodied carbon discount rate and applied to the base bid price.

d. The New York state energy research and development authority is directed to establish criteria for qualifying a technology, method, or product as a low embodied carbon concrete breakthrough, including: (i) the minimum threshold for what constitutes a significant concrete GWP reduction, relative to net emissions reduction targets established in chapter one hundred six of the laws of two thousand nineteen; and (ii) appropriate stage of market adoption and penetration. The commissioner shall evaluate potential new low carbon concrete breakthrough technologies, methods, and products and maintain an annually updated directory of qualified low embodied carbon concrete breakthrough technologies, methods, and products.

e. For bid opportunities that include multiple concrete mixes the GWP of all mixes will be proportionally weighted into a single GWP score that will serve as the basis for assessment and selection.

f. For state-funded construction projects that will be completed by private contracting firms that have been contracted by the state, and for which concrete will be procured for the project, such contractors shall comply with the selection standards and rules stipulated in this paragraph when subcontracting services from concrete providers. Such contractors shall report EPD documentation included in subcontract bids that demonstrate compliance with the standards and rules. The commissioner shall institute and issue guidelines pertaining to penalties for non-compliance by such contractors.

g. The commissioner shall issue regulations for the implementation of this subdivision, including but not limited to: (i) establishing guide-

lines that will assist agencies in determining which contracts meet the requirements in paragraph b of this subdivision; (ii) publishing such purchasing guidelines on the office of general services' website, disseminating such guidelines to agencies and training contracting personnel on implementing such guidelines; and (iii) providing for monitoring of implementation.

h. The commissioner shall complete and submit to the legislature an annual cost-benefit analysis of the low embodied carbon concrete procurement standard, in order to quantify the budgetary impact of the program relative to the latter's carbon reduction impact and recommend any additional incentives or requirements that may be necessary to help the state meet its clean energy goals established in chapter one hundred six of the laws of two thousand nineteen.

§ 3. Section 606 of the tax law is amended by adding a new subsection (kkk) to read as follows:

(kkk) The environmental product declaration tax credit. (a) Definitions. For the purposes of this section:

(i) "low embodied carbon concrete" shall mean concrete that has been verified by environmental product declaration to embody lower carbon emissions, as measured by a Global Warming Potential (GWP) metric, compared to the baseline embodied carbon emissions of conventional concrete.

(ii) "environmental product declaration (EPD) analysis" shall mean product specific Type III EPDs that conform to ISO Standard 14025 and enable global warming potential (GWP) and environmental impact comparisons between products fulfilling the same functions.

(b) Allowance of credit. Producers of concrete, as well as the producers of the major concrete components, cement and aggregate, that are taxpayers shall be allowed a credit, to be computed as provided in this subsection, against the tax imposed by this article, to compensate for financial burdens incurred as a result of EPD analyses undertaken to determine the product-based embodied carbon emissions of one or multiple concrete products produced at one or multiple plants that such taxpayer owns and operates.

(c) Amount of credit. The credit authorized by this subsection shall not exceed the lessor of: (i) the full costs incurred for an EPD analysis of a single concrete, cement, supplementary cementitious materials, and/or aggregate production facility; or (ii) three thousand dollars, and may be claimed for the costs of completing EPD analyses at up to eight facilities owned by the same producer in a single tax year by a single taxpaying entity in tax years two thousand twenty-two and two thousand twenty-three. Tax credit eligibility will expire at the end of two thousand twenty-three.

(d) Application of credit. The credit allowed under this subsection for any taxable year shall not reduce the tax due for such year to less than the fixed dollar minimum amount prescribed in paragraph (d) of subdivision one of section two hundred ten of this chapter. However, if the amount of the credit allowed under this subsection for any taxable year reduces the tax to such amount or if the taxpayer otherwise pays tax based on the fixed dollar minimum amount, any amount of credit thus not deductible in such taxable year shall be treated as an overpayment of tax to be credited or refunded in accordance with the provisions of section one thousand eighty-six of this chapter. Provided, however, the provisions of subsection (c) of section one thousand eighty-eight of this chapter notwithstanding, no interest shall be paid thereon.

§ 4. This act shall take effect on the first of January next succeeding the date on which it shall have become a law and shall apply to taxable years commencing on and after such date. Effective immediately, the addition, amendment and/or repeal of any rule or regulation necessary for the implementation of this act on its effective date are authorized to be made and completed on or before such effective date.