

# STATE OF NEW YORK

8965

## IN SENATE

September 4, 2020

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

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:

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

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

5 9. Special provisions for purchase of concrete.

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

8 (i) "Concrete" shall mean structural and non-structural masonry, pre-  
9 cast and ready-mix concrete building products.

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

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

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

22 (v) "Global warming potential" (GWP) shall mean a numeric value that  
23 measures the total contribution to global warming from the emission of  
24 greenhouse gases, or the elimination of greenhouse gas sinks, that  
25 results from the production and/or utilization of a specific product or  
26 service.

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

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(vi) "Carbon dioxide equivalent" (CO<sub>2</sub>e) 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 CO<sub>2</sub> 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 CO<sub>2</sub> from the flue gas and from the atmosphere, followed by recycling the CO<sub>2</sub> for utilization and/or determining safe and permanent storage options for captured CO<sub>2</sub>.

(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 CO<sub>2</sub>e resulting from project CDM shall be assessed in addition to GWP derived from EPD analysis and factored into the discount rate.

(xii) "CCUS 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 CO<sub>2</sub> capture and CO<sub>2</sub> utilization methods employed by each respective bid.

(xiii) "Net zero CO<sub>2</sub> emissions" shall mean a state whereby the total amount of CO<sub>2</sub> utilized and/or captured during the concrete production process and/or mineralized in concrete materials are equal to the amount of CO<sub>2</sub> emissions released during the production and utilization of that concrete.

(xiv) "Net negative CO<sub>2</sub> emissions" shall mean a state whereby the amount of CO<sub>2</sub> utilized and/or captured during the concrete production process and/or mineralized in concrete materials are greater than the amount of CO<sub>2</sub> 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.

1 Discount rates will be applied to offerer bid prices on the basis of the  
2 GWP values for concrete products specified in offerer bids. GWP values  
3 shall be submitted by offerers in the form of certified EPDs. In addi-  
4 tion to GWP values quantified in EPD submissions, the effect of CDM and  
5 the fuel usage/emissions factor thereof shall be considered. The CO2e  
6 emissions quantified for CDM shall be incorporated into the GWP values  
7 quantified in EPD. A price discount not exceeding five percent shall be  
8 applied to top performing bids that certify the lowest GWP values via  
9 EPD submission. The commissioner shall establish rules and guidelines  
10 whereby specific price discount rates shall be determined and applied to  
11 bids based on GWP performance.

12 c. For bids that have been certified by the commissioner to incorpo-  
13 rate products and technologies that involve CCUS, the commissioner shall  
14 establish a supplemental price discount rate to be applied in addition  
15 to the low embodied carbon concrete discount rate defined in paragraph b  
16 of this subdivision. Bids that receive price discounts based on GWP  
17 performance and which incorporate certified CCUS products and technolo-  
18 gies will be granted a supplemental price discount for bid assessment  
19 and selection purposes that shall not exceed three percent. The CCUS  
20 discount rate shall be added to the low embodied carbon discount rate  
21 and applied to the base bid price.

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

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

34 f. The commissioner shall issue regulations for the implementation of  
35 this subdivision, including but not limited to: (i) establishing guide-  
36 lines that will assist agencies in determining which contracts meet the  
37 requirements in paragraph b of this subdivision; (ii) publishing such  
38 purchasing guidelines on the office of general services' website,  
39 disseminating such guidelines to agencies and training contracting  
40 personnel on implementing such guidelines; and (iii) providing for moni-  
41 toring of implementation.

42 g. The commissioner shall complete and submit to the legislature an  
43 annual cost-benefit analysis of the low embodied carbon concrete  
44 procurement standard, once implemented, in order to quantify the budget-  
45 ary impact of the program relative to the latter's carbon reduction  
46 impact.

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

49 (kkk) The environmental product declaration tax credit. (a) Defi-  
50 nitions. For the purposes of this section:

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

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

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

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

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

34 § 4. This act shall take effect on the first of January next succeed-  
35 ing the date on which it shall have become a law and shall apply to  
36 taxable years commencing on and after such date. Effective immediately,  
37 the addition, amendment and/or repeal of any rule or regulation neces-  
38 sary for the implementation of this act on its effective date are  
39 authorized to be made and completed on or before such effective date.