# SENATE, No. 3732 **STATE OF NEW JERSEY** 219th LEGISLATURE

INTRODUCED MAY 11, 2021

Sponsored by: Senator LINDA R. GREENSTEIN District 14 (Mercer and Middlesex)

Co-Sponsored by: Senators Codey, Diegnan, Cunningham, Gopal and Stack

### SYNOPSIS

Establishes State purchasing preference for low embodied carbon concrete; provides CBT tax credit for costs of conducting environmental product declaration analysis.

## **CURRENT VERSION OF TEXT**

As introduced.



(Sponsorship Updated As Of: 11/8/2021)

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AN ACT concerning the purchase and use of low embodied carbon
 concrete and supplementing Titles 52 and 54 of the Revised
 Statutes.

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- 5 BE IT ENACTED by the Senate and General Assembly of the State
  6 of New Jersey:
- 8 1. a. (1) Notwithstanding the provisions of any law, or rule or 9 regulation adopted pursuant thereto, to the contrary, the Director of 10 the Division of Purchase and Property and the Director of the 11 Division of Property Management and Construction in the 12 Department of the Treasury, and any State agency having authority to contract for the purchase of goods or services, shall, when 13 14 entering into a contract for the purchase of 50 cubic yards or more 15 of concrete, or for any construction or improvement project that 16 requires the use of concrete, apply a low embodied carbon discount 17 rate to the price of bids for the purpose of bid assessment and 18 selection. The low embodied carbon discount rate shall be 19 established by the State Treasurer in consultation with the 20 Commissioner of Environmental Protection and shall be applied to bid prices on the basis of the global warming potential values for 21 22 the concrete specified in the bids, and shall not exceed five percent 23 Bidders shall submit global warming of the total bid price. 24 potential values for the concrete specified in their bids in the form 25 of certified environmental product declarations. The State 26 Treasurer shall establish the specific price discount rates to be 27 applied to bids based on global warming potential values.

28 (2) For bids that are certified to use concrete that incorporates 29 carbon capture, utilization, and storage technology, the Director of 30 the Division of Purchase and Property, the Director of the Division 31 of Property Management and Construction, and any State agency 32 having authority to contract for the purchase of goods or services 33 shall apply a supplemental discount rate to the price of bids for the 34 purpose of bid assessment and selection. The carbon capture, 35 utilization, and storage discount rate, to be established by the State Treasurer in consultation with the Commissioner of Environmental 36 37 Protection, shall be added to the low embodied carbon discount rate 38 applied pursuant to paragraph (1) of this subsection and shall not 39 exceed three percent of the total bid price. The State Treasurer 40 shall establish the specific price discount rates to be applied to bids 41 based on the amount of carbon dioxide captured and stored by the 42 concrete.

(3) For State-funded construction projects that will be completed
by a private contracting firm that has been contracted by the State,
and for which concrete will be procured by the contractor for the
project, the contractor shall comply with the selection standards and
rules established pursuant to this section when subcontracting
products or services from concrete providers. The State Treasurer

1 shall establish policies and procedures for private contracting firms 2 to comply with the requirements of this section. 3 (4) For bids that include multiple concrete mixes, the global 4 warming potential of all the mixes shall be proportionally weighted 5 into a single global warming potential score that will serve as the basis for assessment and selection of the bid. 6 7 b. The State Treasurer, in consultation with the Commissioner 8 of Environmental Protection, shall adopt, pursuant to the 9 "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et 10 seq.), rules and regulations necessary to implement the price 11 discount rates established pursuant to subsection a. of this section. 12 The rules and regulations shall include, but need not be limited to: (1) a uniform process for contractors to certify that concrete is 13 14 low embodied carbon concrete, or that it utilizes carbon capture, 15 utilization, and storage technology, and for determining the global 16 warming potential value of concrete; 17 (2) guidelines to assist State agencies in determining which 18 contracts meet the requirements of this section, and the rules and 19 regulations adopted pursuant thereto; 20 (3) guidelines for training contracting personnel to implement 21 the requirements of this section; and 22 (4) a mechanism for monitoring contractor compliance with the 23 requirements of this section, and penalties for noncompliance. 24 Whenever any agency or department of State government 25 purchases concrete, or undertakes any construction or improvement 26 project that requires the use of concrete, the agency or department 27 shall follow the rules, regulations, and guidelines therefor 28 established by State Treasurer. 29 In preparing the specifications for any contract for the c. 30 purchase of 50 cubic yards or more of concrete, or for any 31 construction or improvement project that requires the use of 32 concrete, the Director of the Division of Purchase and Property, the 33 Director of the Division of Property Management and Construction, 34 and any State agency having authority to contract for the purchase 35 of goods or services shall include in the invitation to bid, where 36 relevant, a statement that any response to the invitation that 37 proposes or calls for the use low embodied carbon concrete or that 38 utilizes carbon capture, utilization, and storage technology shall 39 receive the price discount rate established pursuant to subsection a. 40 of this section. 41 d. The provisions of this section shall not apply to: 42 (1) any binding contractual obligations for the purchase of 43 goods or services entered into prior to the effective date of P.L. 44 )(pending before the Legislature as this bill); c. (C. (2) bid packages advertised and made available to the public, or

45 46 to any competitive and sealed bids received by the State, prior to 47 the effective date of P.L. , c. (C. )(pending before the 48 Legislature as this bill); or

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1 (3) any amendment, modification, or renewal of a contract 2 entered into prior to the effective date of P.L. ,

c. (C. )(pending before the Legislature as this bill) where the
application would delay timely completion of a project or involve
an increase in the total moneys to be paid by the State under that
contract.

7 e. No later than two years after the effective date of this act, 8 the State Treasurer, in consultation with the Commissioner of 9 Environmental Protection, shall prepare and submit a report to the 10 Governor and, pursuant to section 2 of P.L.1991, c.164 (C.52:14-11 19.1), the Legislature, containing a cost-benefit analysis of the low 12 embodied carbon concrete procurement preference established 13 pursuant to this section, in order to quantify the budgetary impact of 14 the program relative to the preference's carbon reduction impact. 15 The report shall recommend whether the preference should be 16 continued, modified, or repealed, and include any recommendations 17 for legislative or regulatory action to improve the preference.

18 f. For the purposes of this section:

19 "Carbon capture, utilization, and storage technology" means 20 technologies or methods to remove carbon dioxide generated by the 21 concrete manufacturing process from the flue gas or the 22 atmosphere, and to recycle the carbon dioxide either through 23 utilization of the captured carbon dioxide in the concrete 24 manufacturing process, or through safe and permanent storage of 25 the captured carbon dioxide.

26 "Concrete" means structural and non-structural masonry, and27 pre-cast and ready-mix concrete building products.

28 "Embodied carbon emissions" means carbon emissions generated
29 as a result of a material's production, including mining, refining,
30 manufacturing, and shipping.

31 "Environmental product declaration" means a product-specific
32 Type III environmental product declaration that conforms to ISO
33 Standard 14025, assesses the numeric global warming potential of
34 the product, and allows for environmental impact comparisons
35 between concrete mixes fulfilling the same functions.

36 "Global warming potential" means a numeric value that 37 measures the total contribution to global warming from the 38 emission of greenhouse gases, or the elimination of greenhouse gas 39 sinks, that results from the production or utilization of concrete.

40 "Low embodied carbon concrete" means concrete that has been 41 certified to embody lower carbon emissions, as measured by a global warming potential metric, than the baseline embodied carbon 42 43 emissions of conventional concrete made with Portland cement. 44 Low embodied carbon emissions may be achieved through any 45 combination of: (1) higher energy efficiency at the level of the 46 concrete or cement plant; (2) low carbon fuel substitution at the 47 level of the concrete or cement plant; (3) local production of the 48 concrete, resulting in reduced concrete delivery miles and reduced

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1 emissions from transportation; (4) the reduction of clinker content 2 in the cement component of concrete, or the substitution of clinker 3 content with lower carbon-intensive alternative materials such as 4 ground, granulated blast furnace slag, fly ash, or recycled ground-5 glass pozzolan; (5) the capture and storage of point source carbon dioxide emissions during the cement or concrete production 6 7 process; or (6) the utilization and storage of carbon in concrete 8 materials.

9 "Portland cement" means hydraulic cement produced by 10 pulverizing clinkers in combination with one or more of the forms 11 of calcium sulfate.

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13 2. a. (1) A taxpayer that is a producer of concrete, or a 14 producer of a major component of concrete including cement or 15 aggregate, shall be allowed a credit against the tax imposed 16 pursuant to section 5 of P.L.1945, c.162 (C.54:10A-5), to be 17 calculated as provided in paragraph (2) of this subsection, to 18 compensate the taxpayer for costs incurred as a result of conducting 19 an environmental product declaration analysis to determine the 20 product-based embodied carbon emissions of concrete produced at a 21 production facility that the taxpayer owns or operates.

22 (2) The amount of the credit authorized pursuant to this section 23 shall not exceed the lesser of: (a) the full cost incurred for an 24 environmental product declaration analysis of a single concrete, 25 cement, aggregate, or related production facility, or (b) \$3,000. A 26 taxpayer may claim the credit authorized pursuant to this section for 27 the cost of completing environmental product declaration analyses 28 at up to eight production facilities owned or operated by the same 29 taxpayer in a single privilege period.

30 b. The order of priority of the application of the tax credit 31 allowed pursuant to this section, and any other credits allowed 32 against the tax imposed pursuant to section 5 of P.L.1945, c.162 33 (C.54:10A-5) for a privilege period, shall be as prescribed by the 34 director. The amount of the credit applied pursuant to this section 35 against the tax imposed pursuant to section 5 of P.L.1945, c.162 36 (C.54:10A-5) shall not reduce a taxpayer's tax liability to an amount 37 less than the statutory minimum provided in subsection (e) of section 5 of P.L.1945, c.162 (C.54:10A-5). The amount of the tax 38 39 credit otherwise allowable under this section which cannot be 40 applied for the privilege period due to the limitations of this 41 subsection or under other provisions of P.L.1945, c.162 (C.54:10A-42 1 et seq.) may be carried forward, if necessary, to the seven 43 privilege periods following the privilege period for which the tax 44 credit was allowed.

c. The director, in consultation with the Department of
Environmental Protection, shall adopt, pursuant to the
"Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et
seq.), rules and regulations as are necessary to implement the

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provisions of this section. The director may require the
 submission of any information the director deems necessary to
 award a tax credit pursuant to this section.

4 d. As used in this section:

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5 "Concrete" means structural and non-structural masonry, and6 pre-cast and ready-mix concrete building products.

7 "Embodied carbon emissions" means carbon emissions generated
8 as a result of a material's production, including mining, refining,
9 manufacturing, and shipping.

"Environmental product declaration" means a product-specific
Type III environmental product declaration that conforms to ISO
Standard 14025 and enables the numeric global warming potential
and environmental impact comparisons between concrete mixes
fulfilling the same functions.

15 "Global warming potential" means a numeric value that 16 measures the total contribution to global warming from the 17 emission of greenhouse gases, or the elimination of greenhouse gas 18 sinks, that results from the production or utilization of concrete.

3. This act shall take effect immediately.

#### STATEMENT

This bill would establish a State purchasing preference for low embodied carbon concrete and concrete that incorporates carbon capture, utilization, and storage technologies, and provide a corporation business tax credit to taxpayers for the costs of conducting environmental production declaration analyses.

30 Specifically, the bill would require any State agency having 31 authority to contract for the purchase of goods and services, when 32 entering into a contract for the purchase of 50 cubic yards or more 33 of concrete, or for any construction or improvement project that 34 requires the use of concrete, to apply a low embodied carbon 35 discount rate to the price of bids for the purpose of bid assessment The low embodied carbon discount rate, which 36 and selection. 37 would be established by the State Treasurer in consultation with the 38 Commissioner of Environmental Protection, would be applied to bid 39 prices on the basis of the global warming potential values for the 40 concrete specified in the bids, and would not exceed five percent of 41 the total bid price. To qualify for the discount, bidders would be 42 required to submit global warming potential values for the concrete 43 specified in their bids in the form of certified environmental product 44 declarations.

Additionally, for bids that are certified to incorporate products
that incorporate carbon capture, utilization, and storage technology,
a State entity would be required to apply a supplemental discount
rate to the price of bids for the purpose of bid assessment and

selection. The carbon capture, utilization, and storage discount rate would be added to the low embodied carbon discount rate established in the bill, and would not exceed three percent of the total bid price. The State Treasurer would establish the specific price discount rates to be applied to bids based on the amount of carbon dioxide captured and stored by the product.

7 For State-funded construction projects that will be completed by 8 a private contracting firm that has been contracted by the State, and 9 for which concrete will be procured by the contractor for the 10 project, the contractor would be required to comply with the 11 selection standards and rules established in the bill when 12 subcontracting products or services from concrete providers. The State Treasurer would establish policies and procedures for private 13 14 contracting firms to comply with the requirements of the bill.

15 In preparing the specifications for any contract for the purchase 16 of 50 cubic yards or more of concrete, or for any construction or 17 improvement project that requires the use of concrete, a State entity 18 would be required to include in the invitation to bid, where relevant, 19 a statement that any response to the invitation that proposes or calls 20 for the use low embodied carbon concrete or that utilizes carbon 21 capture, utilization, and storage technology shall receive the price 22 discount rate established in the bill. The State purchasing 23 preference would not apply to certain contracts as specified in the 24 bill.

25 The bill would also provide a tax credit against the corporation 26 business tax to compensate a taxpayer for costs incurred as a result 27 of conducting an environmental product declaration analysis to 28 determine the product-based embodied carbon emissions of 29 concrete produced at one or more production facilities that the 30 taxpayer owns or operates. The amount of the tax credit would not 31 exceed the lesser of: (1) the full cost incurred for an environmental 32 product declaration analysis of a single concrete, cement, aggregate, 33 or related production facility, or (2) \$3,000. However, a taxpayer 34 may claim the credit authorized under the bill for the cost of 35 completing environmental product declaration analyses at up to eight production facilities owned or operated by the same taxpayer 36 37 in a single privilege period.

38 As used in the bill, "low embodied carbon concrete" means 39 concrete that has been certified to embody lower carbon emissions, 40 as measured by a global warming potential metric, than the baseline 41 embodied carbon emissions of conventional concrete made with 42 Portland cement. Low embodied carbon emissions may be achieved 43 through a variety of methods described in the bill. "Carbon capture, 44 utilization, and storage technology" means technologies or methods 45 to remove carbon dioxide generated from the concrete 46 manufacturing process from the flue gas or from the atmosphere, 47 and the recycling of the carbon dioxide either through utilization of 48 the captured carbon dioxide in the concrete manufacturing process,

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or safe and permanent storage of the captured carbon dioxide. An
 "environmental product declaration" is a product-specific Type III
 environmental product declaration that conforms to ISO Standard
 14025 and enables the numeric global warming potential and
 environmental impact comparisons between concrete mixes
 fulfilling the same functions.