

SENATE, No. 3732

STATE OF NEW JERSEY
219th LEGISLATURE

INTRODUCED MAY 11, 2021

Sponsored by:

Senator LINDA R. GREENSTEIN

District 14 (Mercer and Middlesex)

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.



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

4
5 **BE IT ENACTED** *by the Senate and General Assembly of the State*
6 *of New Jersey:*

7
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
13 to contract for the purchase of goods or services, shall, when
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
21 bid prices on the basis of the global warming potential values for
22 the concrete specified in the bids, and shall not exceed five percent
23 of the total bid price. Bidders shall submit global warming
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
36 Treasurer in consultation with the Commissioner of Environmental
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.

43 (3) For State-funded construction projects that will be completed
44 by a private contracting firm that has been contracted by the State,
45 and for which concrete will be procured by the contractor for the
46 project, the contractor shall comply with the selection standards and
47 rules established pursuant to this section when subcontracting
48 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
6 basis for assessment and selection of the bid.

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:

13 (1) a uniform process for contractors to certify that concrete is
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 c. In preparing the specifications for any contract for the
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 c. (C.)(pending before the Legislature as this bill);

45 (2) bid packages advertised and made available to the public, or
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

1 (3) any amendment, modification, or renewal of a contract
2 entered into prior to the effective date of P.L. ,
3 c. (C.)(pending before the Legislature as this bill) where the
4 application would delay timely completion of a project or involve
5 an increase in the total moneys to be paid by the State under that
6 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, and
27 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
42 global warming potential metric, than the baseline embodied carbon
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

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
6 dioxide emissions during the cement or concrete production
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.

12

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
38 section 5 of P.L.1945, c.162 (C.54:10A-5). The amount of the tax
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.

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

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

4 d. As used in this section:

5 “Concrete” means structural and non-structural masonry, and
6 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.

10 “Environmental product declaration” means a product-specific
11 Type III environmental product declaration that conforms to ISO
12 Standard 14025 and enables the numeric global warming potential
13 and environmental impact comparisons between concrete mixes
14 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.

19

20 3. This act shall take effect immediately.

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STATEMENT

24

25 This bill would establish a State purchasing preference for low
26 embodied carbon concrete and concrete that incorporates carbon
27 capture, utilization, and storage technologies, and provide a
28 corporation business tax credit to taxpayers for the costs of
29 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
36 and selection. The low embodied carbon discount rate, which
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.

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

1 selection. The carbon capture, utilization, and storage discount rate
2 would be added to the low embodied carbon discount rate
3 established in the bill, and would not exceed three percent of the
4 total bid price. The State Treasurer would establish the specific
5 price discount rates to be applied to bids based on the amount of
6 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
13 State Treasurer would establish policies and procedures for private
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
36 eight production facilities owned or operated by the same taxpayer
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,

1 or safe and permanent storage of the captured carbon dioxide. An
2 “environmental product declaration” is a product-specific Type III
3 environmental product declaration that conforms to ISO Standard
4 14025 and enables the numeric global warming potential and
5 environmental impact comparisons between concrete mixes
6 fulfilling the same functions.