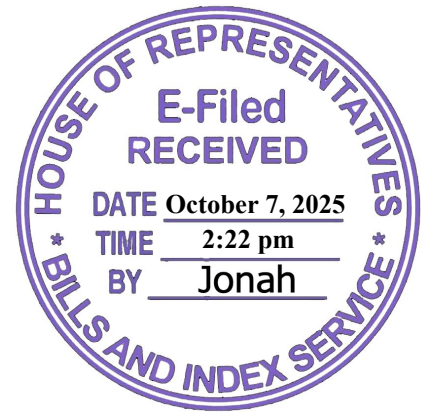


Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City, Metro Manila

TWENTIETH CONGRESS
First Regular Session

HOUSE BILL NO. 5234



Introduced by **Representative AGATHA PAULA "AGAY" A. CRUZ**

EXPLANATORY NOTE

The Philippines stands at the intersection of two urgent challenges: (1) climate crisis, and (2) need for sustained, inclusive economic growth. As one of the most climate-vulnerable nations in the world, we must build safer and more resilient communities. At the same time, as a developing economy, we must reduce dependence on costly imports and generate sustainable livelihoods at home. This bill proposes a material solution that addresses both of these challenges: the humble bamboo.

Bamboo is a versatile, sustainable, and resilient material. In the Philippines, it grows abundantly and regenerates rapidly, making it a viable alternative to conventional construction resources. At the same time, demand for engineered bamboo is rising in the global market due to its sustainability, cost-effectiveness, and enhanced durability.¹ With an abundant raw material base and a rich cultural heritage in bamboo craftsmanship, the Philippines is uniquely positioned to demonstrate global leadership in this emerging market.

Harnessing engineered bamboo can significantly reduce our reliance on imported construction materials, generate both rural and urban jobs, and stimulate the growth of micro and small enterprises. It can also open new export opportunities within the expanding global green economy. In this sense, bamboo is both a climate-smart and economy-smart choice, a solid proof that environmental responsibility and economic growth can complement each other.

The proposed Kawayan Build Act mainstreams bamboo use in the built environment through the adoption of referral codes on architecture and structures, ensuring that bamboo construction adheres to modern standards of safety, aesthetics, and sustainability. It strengthens research and development, builds a comprehensive product database, and promotes bamboo cultivation and processing through incentives for farmer cooperatives and enterprises.

¹ *Bamboos Market Report Scope & Overview*, STRATEGY AND STATS, 2025, available at <https://www.snsinsider.com/reports/bamboos-market-8626>

The bill also establishes phased adoption of bamboo in government infrastructure, aligning public procurement with green practices and providing a stable demand base for local producers. It integrates bamboo utilization into higher education and continuing professional development, ensuring that future architects and engineers are equipped to innovate with bamboo as confidently as with steel or concrete.

By bending toward bamboo utilization, we bend our policies toward resilience, self-reliance, and opportunity while pushing our commitment to sustainability. It addresses not only the urgent demands of climate adaptation and ecological balance but also the long-term need for a more competitive and self-reliant national economy.

In view of the foregoing, the immediate enactment of this bill is earnestly sought.


AGATHA PAULA "AGAY" AGUILAR CRUZ
Representative, Fifth Legislative District of Bulacan



Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

TWENTIETH CONGRESS
First Regular Session

HOUSE BILL NO. 5234

Introduced by **Representative AGATHA PAULA “AGAY” A. CRUZ**

AN ACT
MAINSTREAMING THE USE OF BAMBOO AS A SUSTAINABLE MATERIAL FOR
THE BUILT ENVIRONMENT

Be it enacted by the Senate and the House of Representatives of the Philippines in Congress assembled:

1 **Section 1. Short Title.** – This Act shall be known as the “Kawayan Build Act.”
2

3 **Section 2. Declaration of Policy.** – It is hereby declared the policy of the State to
4 promote a sustainable, inclusive, and resilient built environment by encouraging the
5 propagation and utilization of bamboo as an ecologically sound, economically viable, and
6 culturally significant material. Toward this end, the State shall promote the propagation
7 and mainstream use of bamboo as a sustainable material for the built environment,
8 recognizing its role in:
9

- 10 (a) Advancing climate change mitigation and adaptation by reducing carbon
11 emissions and enhancing resilience against disasters;
12 (b) Strengthening rural livelihoods and creating green, inclusive, and productive
13 employment opportunities;
14 (c) Reducing dependence on imported construction materials and developing
15 globally competitive local industries; and
16 (d) Fostering innovation, research, and education to position the Philippines as a
17 leader in bamboo-based sustainable design and construction.
18

19 In pursuance of these objectives, the State shall adopt policies, standards, and
20 programs that encourage bamboo utilization in building and infrastructure, ensure the
21 growth of resilient and sustainable supply chains, and integrate bamboo into national
22 strategies for ecological balance, climate action, and economic competitiveness.
23

24 **Section 3. Definition of Terms.** – As used in this Act:
25

- 1 (a) *Bamboo* refers to any species within the subfamily Bambusoideae of the family
2 Poaceae, defined as a tropical, subtropical, or temperate fast-growing grass
3 with lignocellulosic matrix, usually having hollow culms, recognized by the
4 relevant government agencies as a suitable material for a bamboo structure or
5 the built environment;
6
7 (b) *Bamboo Architectural Code (BAC)* refers to the set of regulations and standards
8 governing the design, construction, inspection, and maintenance of bamboo
9 used as architectural building materials. In accordance with Section 4 of this
10 Act, the BAC shall be incorporated in the Architectural Code of the Philippines;
11
12 (c) *Bamboo Structural Code (BSC)* refers to the set of regulations and standards
13 governing the design, construction, inspection, and maintenance of a bamboo
14 structure. In accordance with Section 4 of this Act, the BSC shall be
15 incorporated in the Structural Code of the Philippines;
16
17 (d) *Bamboo structure* refers to any building or structure in which bamboo is used as
18 primary load-bearing material;
19
20 (e) *Built environment* refers to the external and internal environments and any
21 element, component, or fitting that is commissioned, designed, constructed
22 and managed for use by people;
23
24 (f) *Engineered bamboo* refers to composite products manufactured by binding
25 together either veneers, strands, particles, fibers, strips, or slats of bamboo with
26 a suitable adhesive designed to meet specific uses and compliant in accordance
27 with Sec. 5 (b) and Sec. 10 hereof;
28
29 (g) *Structural bamboo* refers to bamboo in a type or form utilized for structure,
30 construction, and load-bearing purposes; and
31
32 (h) *Structural engineered bamboo* refers to engineered bamboo utilized as a load-
33 bearing material.
34

35 **Section 4. Development of the Bamboo Referral Codes.** – To mainstream the use of
36 bamboo in the built environment for reduced environmental impact throughout its
37 lifecycle, integrate and implement green practices, promote the development of a green
38 local market for bamboo, and ensure adherence to the framework of minimum standards
39 and requirements governing buildings and structures, the following are hereby
40 mandated:
41

- 42 (a) *Development of the BAC.* The Professional Regulatory Board of Architecture, in
43 consultation with the Board of Environmental Planning, the Board of Interior
44 Design, the Board of Landscape Architecture, and relevant stakeholders, shall

1 develop the BAC. The BAC shall include guidelines and standards taking into
2 account best practices for the sustainable use of bamboo, aesthetics, safety,
3 environmental impact, and cultural considerations. The Board of Architects
4 shall incorporate the BAC in the current and subsequent amendments to the
5 Architectural Code of the Philippines.
6

7 (b) *Development of the BSC.* The Professional Regulatory Board of Civil Engineers,
8 in consultation with the Board of Chemistry, the Board of Structural Engineers,
9 the Institute of Civil Engineers, the Department of Human Settlements and
10 Urban Development, and other relevant stakeholders, shall develop the BSC.
11 The BSC shall include guidelines and standards ensuring structural integrity
12 and safety. The Board of Civil Engineers shall incorporate the BSC in the
13 current and subsequent amendments to the Structural Code of the Philippines.
14

15 (c) *Research and Development.* The Department of Science and Technology – Forest
16 Products Research and Development Institute (DOST-FPRDI) shall:

- 17 i. Develop research and development programs on bamboo and its uses in
18 the built environment;
- 19 ii. Innovate and create new products and uses of bamboo in the built
20 environment;
- 21 iii. Maintain a comprehensive database on bamboo research, engineered
22 bamboo, and structural bamboo products and services, for the use of
23 relevant government agencies, the private sector and the Department of
24 Trade and Industry (DTI) in the development of a green local market and
25 to facilitate sustainable public procurement; and
- 26 iv. Coordinate with the BAC and BSC stakeholders, relevant government
27 agencies, and the private sector to incorporate technological advancements
28 and best practices in bamboo engineering and construction.
29

30 **Section 5. *Implementation of the Bamboo Referral Codes.* –**

31
32 (a) All construction projects that incorporate bamboo as a primary load-bearing
33 material shall comply with the provisions of both the BSC and BAC.
34

35 (b) The Philippine Bamboo Industry Development Council (PBIDC) shall enforce
36 compliance with the BSC and BAC during construction inspections, work with
37 the DTI for the cost-efficiency validation and certification of green products,
38 and issue certificates of compliance in accordance with applicable certification
39 rules for green products under the governing regulatory framework. The Board
40 of Architecture and Board of Engineering, in coordination with the Department
41 of Public Works and Highways (DPWH), shall incorporate the BSC into the
42 existing building code, referral codes and permit application procedures.
43

44 **Section 6. *Promoting Bamboo as a Sustainable Building Material.* – The PBIDC**

shall:

- (a) In coordination with the DOST and other relevant agencies, conduct research and promote innovations in bamboo engineering, construction techniques, and the utilization of bamboo composites to ensure sustainability for construction and form resilient supply chains;
- (b) Conduct public campaigns, educations programs, and awareness initiatives on the benefits of bamboo as a sustainable building material; and
- (c) Develop programs, projects, and initiatives to promote the cultivation, commercialization, and utilization of bamboo nationwide.

Section 7. *Phased Utilization of Bamboo for Building Construction.* – Within three (3) years from the enactment of this Act, government agencies shall adopt measures for the construction of government infrastructure utilizing bamboo for the built environment pursuant to applicable laws, rules and regulations on sustainable, green, and inclusive public procurement.

- (a) For all new building construction, a phased baseline shall apply: at least thirty percent (30%) of the total wood-based structural requirements shall use bamboo within the first three (3) years, and fifty percent (50%) within five (5) years, subject to the availability of supply in the certified green local market and the procuring entity's inclusive procurement program.
- (b) For identified priority structures as determined by the Philippine Bamboo Industry Development Council (PBIDC) in consultation with the Department of Trade and Industry (DTI), the total wood-based volume requirement shall utilize structural bamboo.

Within five (5) years from the enactment of this Act, the private sector shall be encouraged to adopt similar phased measures utilizing bamboo for the built environment in new construction.

Section 8. *Education.* – The Commission on Higher Education (CHED), in consultation with the Board of Architecture and the Board of Engineering, shall immediately integrate bamboo utilization into the existing curricula for architecture, engineering, and related disciplines.

Specialization courses or elective subjects may be offered to architecture and engineering undergraduate students on bamboo utilization for the built environment, including model-making classes.

Section 9. *Continuing Professional Development (CPD) and Professional*

1 ***Licensure Examinations.*** – Within five (5) years from the enactment of this Act, the
2 Professional Regulation Commission (PRC) shall require the Professional Regulatory
3 Boards for Architecture, Interior Design, and Engineering disciplines to include practical
4 education on bamboo utilization in the built environment as part of the expected learning
5 competency outcomes for licensure examination takers.

6
7 Moreover, the PRC shall encourage and prioritize continuing professional
8 education providers who can develop and offer practical education on bamboo utilization
9 in the built environment in the form of hands-on workshops for architects, interior
10 designers, and engineers.

11
12 The CPD of concerned professionals shall have a seminar of at least five (5) CPD
13 units on “Introduction to Structural Engineered Bamboo,” which shall include model-
14 making.

15
16 **Section 10. *Certification of Bamboo for Construction.*** – Bamboo products, by-
17 products, and their derivatives used for construction shall comply with the Philippine
18 National Standards, the National Building Code, and other applicable referral codes.

19
20 The Technical Education and Skills Development Authority, shall offer bamboo
21 training programs to farmer cooperatives and Barangay Micro Business Enterprises
22 (BMBEs) to encourage bamboo farming and production and enhance knowledge in
23 proper planting and propagation of bamboo, including the bamboo species used as
24 structural elements in construction.

25
26 The Department of Environment and Natural Resources (DENR) and the
27 Department of Agriculture (DA) shall provide bamboo saplings for free to farmer
28 cooperatives and MSMEs.

29
30 **Section 11. *Incentives.*** – For the purpose of encouraging registered farmer
31 cooperatives and BMBEs in the bamboo value chain, they shall enjoy the applicable fiscal
32 and non-fiscal incentives provided under existing laws, orders, issuances, and
33 regulations, and Title XII of the National Internal Revenue Code of 1997, as amended by
34 Republic Act No. 12066, otherwise known as the Corporate Recovery and Tax Incentives
35 for Enterprises to Maximize Opportunities for Reinvigorating the Economy (CREATE
36 MORE) Act, Republic Act No. 11321 or the “Sagip Saka Act”, and Republic Act No. 7900,
37 otherwise known as High Value Crops Development Act of 1995.

38
39 Moreover, the farmer cooperatives and business enterprises shall enjoy tax and
40 duty-free importation of capital equipment that are actually, directly, and exclusively
41 used in the planting, propagation, production, and manufacture of bamboo, engineered
42 bamboo, structural bamboo, structural engineered bamboo as well as the construction of
43 bamboo structure.

1 Finally, investors in bamboo plantation development shall enjoy the following
2 incentives, which shall be performance-based, time-bound, targeted, and transparent:

- 3
4 (a) Exemption from the payment of rent for the use of government lands for
5 commercial bamboo plantation for the first five (5) years of operation reckoned
6 from the date of the first harvest of the plantation;
7
- 8 (b) In the case of private plantations, exemption from the requirement to secure a
9 cutting permit for the harvesting of bamboo and a transport permit for as long
10 as the plantation is registered with the Community Environment and Natural
11 Resources Office (CENRO) of the DENR: *Provided, That* the plantation owner
12 shall inform the CENRO about the date of harvest, and the estimated volume
13 of the harvest. Inventory of the plantation prior to harvest shall not be required.
14 All CENROs shall approve and enter into a registry, the names of private
15 bamboo plantation investors;
16
- 17 (c) Exemption from the payment of forest charges and other fees for taxes that
18 local government units may impose;
19
- 20 (d) Access to development loans from public financial institutions for plantation
21 developers;
22
- 23 (e) Insurance coverage of plantations and plantation development equipment by
24 the Philippine Crop Insurance Corporation;
25
- 26 (f) Tax-free importation of plantation development equipment, including tree
27 nursery facilities, pursuant to Republic Act No. 10863, otherwise known as the
28 “Customs Modernization and Tariff Act (CMTA)”;
29
- 30 (g) To claim expenses incurred for plantation operations as deductible expenses
31 for income tax purposes, subject to the provisions of the National Internal
32 Revenue Code of 1997, as amended: *Provided, That* the deduction shall only
33 apply to the taxable period when the expenses were incurred;
34
- 35 (h) To claim as ordinary and necessary expenses or as capital expenditure
36 expenses incurred in the development and operation of a bamboo plantation
37 prior to the initial commercial harvest;
38
- 39 (i) Prioritized access for plantation developments to credit assistance from
40 government owned, controlled or supported financial institutions;
41
- 42 (j) Acceptance of plantation as collateral for loans in government-owned or -
43 controlled banks;
44

(k) In the case of a tenured developer, entitlement to fair compensation upon the premature termination of the agreement at no fault of the holder: Provided, That all depreciable permanent and semi-permanent improvements such as roads, building, and nurseries including the planted and standing trees and other forest crops introduced and retained in the area, shall be properly evaluated: Provided, further, That the amount of compensation shall be mutually agreed upon by both the DENR and the tenure holder: Provided, finally, That in case of disagreement between them, the matter shall be submitted to arbitration by a mutually acceptable and impartial third party adjudicator;

(l) No volume restriction in the exportation of bamboo culms from plantation;

(m) Tax-free importation of processing equipment by processors engaged in the bamboo industry, pursuant to Republic Act No. 10863; and

(n) Inclusion in the annual investment program of the Department of Economy, Planning, and Development (DEPDev) of industrial bamboo plantations in forest lands and priority access to funds from external and internal sources.

Section 12. Monitoring and Review. – The PBIDC, DTI and DPWH shall conduct periodic reviews and updates of the BAC and BSC to incorporate technological advancements and best practices in bamboo engineering and construction. An annual report on implementation progress shall be submitted to Congress.

Section 13. Implementing Rules and Regulations. – Within ninety (90) days from the effectivity of this Act, the PBIDC shall, in coordination with the DPWH, DTI, DENR, DA, DOST, Department of the Interior and Local Government, NEDA, CHED, Department of Education, TESDA, and other relevant stakeholders, formulate and promulgate the necessary rules and regulations for the effective implementation of this Act.

Section 14. Appropriations. – The amount necessary to carry out the provisions of this Act shall be charged against the current budget of the implementing agencies. Thereafter, such amounts as may be necessary for its continued implementation shall be included in the annual General Appropriations Act.

The Department of Budget and Management (DBM), in consultation with the PBIDC, DTI, and the Department of Science and Technology (DOST), shall prioritize funding support for:

- (a) Research and development programs on bamboo for the built environment;
- (b) Capacity-building, training, and extension services for farmers, cooperatives, and enterprises;

- 1 (c) Public information campaigns and curriculum development under this Act;
2 and
3 (d) Pilot and demonstration projects showcasing bamboo utilization in
4 government infrastructure.
5

6 **Section 15. *Separability Clause.*** – If any part or provision of this Act is held
7 unconstitutional or invalid, the remainder thereof not otherwise affected shall remain in
8 full force and effect.
9

10 **Section 16. *Repealing Clause.*** – All laws, decrees, executive orders, rules, and
11 regulations, or parts thereof inconsistent with the provisions of this Act are hereby
12 repealed or modified accordingly.
13

14 **Section 17. *Effectivity.*** – This Act shall take effect fifteen (15) days following the
15 completion of its publication in the *Official Gazette* or in a newspaper of general circulation.
16

17 *Approved,*