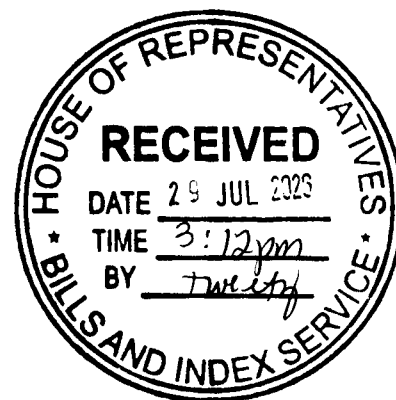




Republic of the Philippines
House of Representatives



20th CONGRESS
Second Regular Session

HOUSE BILL NO. 10373

Introduced by Hon. Charisse Anne C. Hernandez

EXPLANATORY NOTE

The Philippines is endowed with one of the richest bamboo resources in the world, with more than sixty (60) indigenous bamboo species naturally thriving across its forests, watersheds, and agricultural landscapes. For generations, bamboo has been an integral part of Filipino life, providing materials for housing, furniture, handicrafts, and various livelihood opportunities. Today, bamboo is increasingly recognized worldwide as one of the most sustainable and versatile renewable resources, offering significant opportunities for economic development, environmental protection, climate resilience, and green industrialization.

Despite this natural advantage, the Philippine bamboo industry remains largely underdeveloped and continues to be concentrated on low-value products. As a result, the country has yet to fully harness bamboo's potential to generate quality employment, attract investments, increase exports, strengthen local manufacturing, and improve the livelihoods of farming and rural communities.

Recent technological advancements have transformed bamboo into a high-performance engineered material capable of competing with conventional construction materials such as timber, steel, and concrete. Engineered bamboo products—including laminated bamboo lumber, glued laminated bamboo (glulam), bamboo scrimber, cross-laminated bamboo panels, structural bamboo boards, and other composite products—possess excellent structural strength, durability, seismic performance, and sustainability. These innovations have enabled bamboo to be used in residential, commercial, institutional, and infrastructure projects around the world.

As countries pursue climate-resilient development and net-zero emission goals, engineered bamboo has emerged as a preferred renewable construction material because of its rapid renewability, carbon sequestration capacity, and significantly lower environmental footprint compared to many conventional building materials. Its wider adoption contributes to sustainable forest management, the circular economy, responsible resource utilization, and the development of greener and more resilient communities.

This measure seeks to establish a comprehensive national policy for the development of the Philippine bamboo industry by promoting investments across the entire bamboo value chain—from

sustainable plantation development and resource management to processing, manufacturing, research, innovation, standards development, financing, skills development, and market promotion. It likewise institutionalizes the use of engineered bamboo in government infrastructure and public construction through green public procurement policies that encourage the adoption of low-carbon and sustainable construction materials whenever technically feasible and economically advantageous.

By transforming bamboo into a strategic green industry, this measure seeks to generate quality employment, increase rural incomes, promote innovation, strengthen the country's manufacturing sector, enhance climate resilience, and position the Philippines as a regional leader in engineered bamboo technology and sustainable construction. More importantly, it lays the foundation for a greener, more competitive, and more sustainable economy that benefits both present and future generations of Filipinos.

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



CHARISSE ANNE C. HERNANDEZ
Representative
Lone District, Calamba City

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

TWENTIETH CONGRESS
Second Regular Session

House Bill No. 10373

Introduced by Honorable Charisse Anne C. Hernandez

AN ACT
DEVELOPING THE PHILIPPINE BAMBOO INDUSTRY, PROMOTING ENGINEERED
BAMBOO AS A SUSTAINABLE MATERIAL FOR THE BUILT ENVIRONMENT,
ESTABLISHING THE PHILIPPINE BAMBOO DEVELOPMENT PROGRAM,
PROVIDING FUNDS THEREFOR, AND FOR OTHER PURPOSES

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

SECTION. 1. Short Title. This Act shall be known as the "**Kawayan Act.**"

SEC. 2. Declaration of Policy. It is hereby declared the policy of the State to:

- (a) Develop a globally competitive, inclusive, and sustainable bamboo industry;
- (b) Promote bamboo as a strategic renewable natural resource;
- (c) Encourage the production and utilization of engineered bamboo products as sustainable construction materials;
- (d) Reduce greenhouse gas emissions from the construction sector through the use of renewable bio-based materials;
- (e) Promote climate resilience, environmental protection, biodiversity conservation, and carbon sequestration;
- (f) Generate employment and livelihood opportunities in rural communities;
- (g) Strengthen research, innovation, technology transfer, and investments in bamboo processing and manufacturing; and
- (h) Integrate bamboo into national infrastructure, housing, disaster resilience, and green building initiatives.

SEC. 3. Definition of Terms. For purposes of this Act:

- (a) **Bamboo Industry** refers to the entire value chain covering bamboo propagation, plantation development, harvesting, processing, manufacturing, marketing, export, research, and utilization.

(b) **Engineered Bamboo** refers to manufactured structural and non-structural bamboo products produced through mechanical, chemical, thermal, or adhesive bonding processes designed to achieve improved strength, durability, dimensional stability, fire performance, and structural reliability.

Engineered bamboo includes, but is not limited to:

1. Laminated Bamboo Lumber;
2. Glued Laminated Bamboo (Glulam);
3. Bamboo Scrimber;
4. Bamboo Cross-Laminated Panels;
5. Bamboo Composite Boards;
6. Bamboo Structural Panels;
7. Bamboo Flooring;
8. Bamboo Veneer;
9. Bamboo Fiber Composites;
10. Other engineered bamboo products recognized by competent authorities.

(c) **Built Environment** refers to buildings, housing, public infrastructure, transportation facilities, schools, hospitals, bridges, parks, commercial establishments, industrial structures, and other human-made environments.

(d) **Green Building** refers to structures designed, constructed, operated, and maintained in accordance with recognized sustainability principles.

(e) **Sustainable Bamboo Plantation** refers to bamboo plantations managed using environmentally sound and socially responsible practices.

SEC. 4. Philippine Bamboo Development Program. There is hereby established the Philippine Bamboo Development Program which shall serve as the country's comprehensive roadmap for the development of the bamboo industry.

The Program shall include:

1. Bamboo plantation expansion;
2. Sustainable harvesting systems;
3. Nursery accreditation;
4. High-quality planting materials;
5. Mechanized harvesting;
6. Processing facilities;
7. Manufacturing modernization;
8. Engineered bamboo production;
9. Product certification;
10. Market development;
11. Export promotion;
12. Skills development;
13. Research and innovation.

SEC. 5. National Bamboo Development Council. There is hereby created the National Bamboo Development Council (NBDC) to formulate policies, coordinate programs, and oversee the implementation of this Act.

The Council shall be chaired by the Secretary of the Department of Trade and Industry (DTI) and co-chaired by the Secretary of the Department of Environment and Natural Resources (DENR).

Members shall include representatives from:

- Department of Agriculture (DA)
- Department of Science and Technology (DOST)
- Department of Public Works and Highways (DPWH)
- Department of Human Settlements and Urban Development (DHSUD)
- Department of Education (DepEd)
- Commission on Higher Education (CHED)
- Department of Labor and Employment (DOLE)
- Department of Tourism (DOT)
- Department of the Interior and Local Government (DILG)
- National Economic and Development Authority (NEDA)
- Philippine Coconut Authority (PCA)
- Technical Education and Skills Development Authority (TESDA)
- Philippine Bamboo Industry Development Council
- Two representatives from bamboo industry associations
- One representative from academia
- One representative from civil society.

SEC. 6. Bamboo Industry Master Plan. Within one (1) year from the effectivity of this Act, the Council shall formulate a ten-year Philippine Bamboo Industry Master Plan.

SEC. 7. Engineered Bamboo Research and Innovation. The DOST, CHED, and state universities and colleges shall establish national research centers dedicated to:

- Structural engineering;
- Material science;
- Product testing;
- Durability;
- Fire resistance;
- Seismic performance;
- Green construction technologies;
- Carbon accounting;
- Product innovation.

SEC. 8. Integration into the Built Environment. The DPWH, in coordination with the DTI, the DHSUD, the DOST, and other concerned agencies, shall develop and adopt policies, technical guidelines, and standards to facilitate the safe and appropriate use of engineered bamboo in the planning, design, construction, rehabilitation, and maintenance of public and private buildings and infrastructure.

The DPWH shall incorporate engineered bamboo into applicable structural design manuals, standard specifications, and construction guidelines, while the DHSUD shall promote its use in housing developments and human settlements. The concerned agencies shall likewise encourage the adoption of engineered bamboo in green building systems, climate-resilient infrastructure, and disaster-resilient construction, subject to compliance with structural, fire safety, durability, and quality standards.

SEC. 9. Green Public Procurement Program. There is hereby established a Green Public Procurement Program for Sustainable Construction Materials to institutionalize environmentally sustainable procurement practices in all branches, departments, bureaus, offices, agencies, instrumentalities of the national government, government-owned or controlled corporations, state universities and colleges, and local government units.

In the planning, design, procurement, and implementation of infrastructure projects, public buildings, housing developments, and other government construction works, procuring entities shall, whenever technically feasible, economically advantageous, and consistent with applicable engineering standards, give due consideration to the use of low-carbon, renewable, recycled, recyclable, and environmentally sustainable construction materials, including engineered bamboo.

The Department of Budget and Management (DBM), through the Government Procurement Policy Board (GPPB), in coordination with the DPWH, DTI, DOST, DHSUD, and the National Economic and Development Authority, shall formulate policies and procurement guidelines to integrate life-cycle costing, embodied carbon reduction, resource efficiency, environmental sustainability, and climate resilience into government procurement decisions involving construction materials.

Nothing in this Act shall be construed to require the use of engineered bamboo where such use is inconsistent with structural safety requirements, technical specifications, or project performance standards prescribed by law.

SEC. 10. Philippine Engineered Bamboo Standards. The DTI, through the Bureau of Philippine Standards, in coordination with the DPWH, DOST, DHSUD, the Professional Regulation Commission (PRC), relevant professional organizations, the academe, and industry stakeholders, shall develop, adopt, and periodically update Philippine National Standards, testing methods, certification systems, quality assurance protocols, and structural design standards governing engineered bamboo products. Such standards shall be harmonized, whenever practicable, with internationally accepted engineering, construction, and sustainability standards to ensure the safety, reliability, competitiveness, and export readiness of Philippine engineered bamboo products.

SEC. 11. Government Infrastructure and Housing. National government agencies, government-owned or controlled corporations, and local government units undertaking infrastructure, housing, educational, healthcare, tourism, disaster risk reduction, and other public construction projects shall evaluate the suitability of engineered bamboo and other sustainable materials during project planning and design. Where appropriate and consistent with applicable engineering standards, procuring entities are encouraged to incorporate engineered bamboo into government projects to promote sustainability, climate resilience, and the development of the domestic bamboo industry.

SEC. 13. Incentives. Qualified bamboo enterprises shall be entitled to fiscal and non-fiscal incentives under existing investment laws, including:

- income tax incentives;
- duty-free importation of specialized machinery;
- access to government financing;
- technical assistance;
- export promotion support.

Sec. 14. Financing. Government financial institutions shall establish dedicated financing windows for bamboo plantations, processing facilities, engineered bamboo manufacturing, and technology innovation.

SEC. 15. Skills Development. TESDA shall develop competency standards and training regulations for:

- bamboo processing;
- engineered bamboo manufacturing;
- structural fabrication;
- bamboo construction;
- machine operation;
- quality inspection.

SEC. 16. Local Government Participation. LGUs shall integrate bamboo industry development into their Local Development Plans, Comprehensive Land Use Plans, Climate Change Action Plans, and Local Investment Plans.

SEC. 17. Environmental Sustainability. Bamboo plantation development shall prioritize degraded lands, watershed rehabilitation areas, riverbanks, mined-out areas, and other suitable lands consistent with environmental laws.

SEC. 18. Export Promotion. The DTI shall promote Philippine engineered bamboo products in international markets and assist manufacturers in obtaining internationally recognized certifications.

SEC. 19. Public Awareness. Concerned agencies shall undertake nationwide information campaigns highlighting the economic, environmental, and engineering benefits of bamboo and engineered bamboo.

SEC. 20. Appropriations. The amount necessary for the initial implementation of this Act shall be charged against the current appropriations of the implementing agencies. Thereafter, such sums as may be necessary shall be included in the annual General Appropriations Act.

SEC. 21. Implementing Rules and Regulations. Within one hundred twenty (120) days from the effectivity of this Act, the National Bamboo Development Council shall promulgate the necessary rules and regulations.

SEC. 22. Separability Clause. If any provision of this Act is declared unconstitutional, the remainder shall continue to be in force.

SEC. 23. Repealing Clause. All laws inconsistent with this Act are hereby repealed or modified accordingly.

SEC. 24. Effectivity. This Act shall take effect fifteen (15) days after its publication in the Official Gazette or in two (2) national newspapers of general circulation.

Approved,