

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

TWENTIETH CONGRESS

HOUSE BILL NO. 315



Introduced by **REP. JAVIER MIGUEL L. BENITEZ**

EXPLANATORY NOTE

The world is facing triple environmental crises that could end human civilization as we know it: climate change, biodiversity loss, and pollution.

In 2021, the Intergovernmental Panel on Climate Change (IPCC) released the first component report of its Sixth Assessment Report. The report presented the scientific consensus: human activities are driving global warming, and rising temperatures are causing unprecedented and irreversible changes to the global climate system. Experts warned that without fast and deep cuts in greenhouse gas (GHG) emissions, increase in global temperatures will exceed 1.5°C before 2100, the limit established under the Paris Agreement.

United Nations Secretary-General Antonio Guterres called the IPCC Working Group I report “code red for humanity” and appealed on governments and the private sector to accelerate the transition to a net-zero global economy. “There is no time for delay and no room for excuses,” he said.¹

That was in 2021. In 2023, the 1.5°C limit had been breached.

On the other hand, human activities are driving mass extinction. In 2022, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) published its full Global Assessment Report, the most comprehensive assessment of changes in biodiversity by far. The findings are ominous.

One million species, out of 8 million species in total, are in danger of extinction. Agricultural expansion is denuding our forests. 500 hectares of forest land had been transformed into farms and plantations. Fish stocks are threatened. 33% of marine fish stocks were overharvested in 2015. Plastic pollution had increased tenfold since 1980, and fertilizers leaking into the sea have caused 245,000 kilometers of coastal “dead zones”.²

“We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide,” IPBES chair Sir Robert Watson lamented in 2019 during the release of the summary of the Report. He stressed the need for transformative change to restore nature. “By transformative change, we mean a fundamental, system-wide

¹ <https://press.un.org/en/2021/sgsm20847.doc.htm>

² <https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/>

reorganization across technological, economic and social factors, including paradigms, goals and values,” he said.³

Assessment of land, air and plastic pollution pile on the bad news. According to the 2022 UN Global Land Outlook, 40 percent of Earth’s land surfaces are considered degraded. Meanwhile, according to the World Health Organization, 9 out of 10 people worldwide breathe polluted air, with 7 million dying every year due to air pollution.⁴ Plastic pollution is also threatening natural habitats and processes. The UN estimates that the world is producing 430 million tons of plastic every year,⁵ with up to 23 million tons leaking to rivers and seas.⁶

It is code red for the planet. An international team of scientists has assessed the status of planetary boundaries, or indicators of life-supporting systems. In September 2023, the team reported that six of the nine tipping points have been crossed, which means the stability of the earth system is at risk.⁷

Why should we Filipinos care?

Access to a clean, healthy and sustainable environment is a human right.⁸ The 1987 Constitution guarantees this and mandates the State to “protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature.”⁹

Without interventions to limit raw material extraction, prevent pollution and reduce carbon emissions, we fail in upholding this fundamental right. In a business-as-usual scenario, where there will be no significant change in public attitudes, government priorities and corporate behavior, the Philippines will be one of the most affected countries by climate change.

Based on the Global Climate Risk Index 2021, the Philippines is fourth in the world in terms of extreme weather events in the period of 2000-2019. We are located in the typhoon belt of the Pacific which makes us highly vulnerable to extreme weather events.

But we are not entirely a victim, we too are an offender.

The Philippines lags in terms of environmental sustainability. In the 2022 Environmental Performance Index ranking, the Philippines placed 158th out of 180, which ranks countries on performance indicators on ecosystem vitality (e.g., biodiversity, water resources), environmental health (e.g., air quality, waste management), and climate change.

³ Ibid.

⁴ <https://www.who.int/news/item/02-05-2018-9-out-of-10-people-worldwide-breathe-polluted-air-but-more-countries-are-taking-action>

⁵ <https://www.un.org/sustainabledevelopment/blog/2023/08/explainer-what-is-plastic-pollution/>

⁶ <https://www.unep.org/plastic-pollution>

⁷ <https://www.stockholmresilience.org/research/research-news/2023-09-13-all-planetary-boundaries-mapped-out-for-the-first-time-six-of-nine-crossed.html>

⁸ <https://www.unep.org/news-and-stories/story/historic-move-un-declares-healthy-environment-human-right>

⁹ 1987 Constitution, Article II, Section 16

We are the leading contributor to plastic pollution in the oceans, according to a study by a British organization.¹⁰ We are generating 61 billion metric tons of waste daily, 24% of which is plastic waste, according to the Department of Environment and Natural Resources.¹¹

The Philippines is also among the world's top biodiversity hotspots, or areas that have rich biodiversity but experience habitat loss due to human activity.¹² Between 2001 and 2022, the Philippines lost 1.42 million hectares of tree cover.¹³ Due to destruction of natural habitats, we are among the top ten countries with the largest number of species threatened with extinction.¹⁴

The government concedes that “progress in environmental and climate action in the last six years has been modest.”¹⁵ But there is hope.

Circularity: looping in ecology and economy

Addressing the triple environmental crises requires an economic paradigm shift. We cannot continue with a linear economy and its “take, make, waste” practices that depletes finite resources and damages the environment.

We must find a sustainable balance between the needs of the environment and the economy – and one path to sustainable development is the transition to circular economy.

Embracing circularity means reimagining how we design, produce, and consume goods. It involves creating products that are durable, repairable, and ultimately recyclable, to minimize waste, reduce raw material extraction, and foster regeneration in both natural and human-made ecosystems.

Regenerative production closes the loop of supply chains. Waste from one part of the production process becomes a valuable resource for another, creating a self-sustaining cycle of materials and energy. This approach not only reduces the environmental impact of businesses but also fosters eco-innovation.

Eco-innovation is the linchpin of circular economy transition, and the Philippines must increase investment in the development of innovative technologies to enable economic transformation towards sustainability. While we have improved on our ranking in the latest Global Innovation Index, from 59th in 2022 to 56th in 2023, we must spend more in research and development, and leverage science, technology and innovation to achieve interlinked economic and environmental goals, considering the return of investment.

Circular economy as pillar of sustainable development and climate action

¹⁰ <https://www.rappler.com/nation/philippines-dominates-global-ocean-plastic-pollution-chart-at-36-shows-study/>

¹¹ <https://www.philstar.com/headlines/2023/08/06/2286595/philippines-produces-61000-million-metric-tons-waste-daily>

¹² The Philippines 6th National Report for the Convention on Biological Diversity

¹³ Global Forest Watch. <https://www.globalforestwatch.org/dashboards/country/PHL/?category=forest-change>

¹⁴ The Philippines 6th National Report for the Convention on Biological Diversity

¹⁵ Philippine Development Plan 2023-2028, Chapter 15, p. 346

President Ferdinand Marcos Jr. himself, in his second State of the Nation Address, promoted our transition to a circular economy, to mitigate climate change and protect the environment.

“The building blocks of progressive, livable and sustainable communities will never be complete without appropriate and responsible action to mitigate and to adapt to the effects of climate change. We can never lose sight of our responsibility to the future. The economic agenda cannot and will not ever be incompatible with our climate change agenda... We have adopted the concept of the ‘circular economy’, using nature as our model. The aim is to keep raw materials in a closed loop. In our world with scarce resources, the circular economy allows us to fully use these resources, minimize waste and reduce the need for new resources—just as it is in nature,” President Marcos said.

Indeed, transitioning to circular economy does not only contribute to mitigate climate change and reduce our carbon footprint, it also strengthens climate change adaptation. As climate change disrupts global supply chains, a closed loop of locally sourced materials can hopefully satisfy domestic demand.

Accordingly, the government has integrated circular economy transition objectives in its strategic plans. The Philippine Development Plan 2023-2028 aims, among others, to promote circular economy to improve environmental quality and build livable communities¹⁶, and leverage private sector investments in circular business models to foster transition to low-carbon economy, as part of the larger strategy to build climate resilience.¹⁷ Meanwhile, the National Climate Change Action Plan also stresses the need to adjust economic activity to reduce vulnerability, and to maintain a healthy and stable ecosystem and natural resource base to sustain livelihoods and the local economy.

Furthermore, the Philippine Action Plan for Sustainable Consumption and Production (PAP4SC) outlines specific action points to facilitate our transition to circular economy. Circular economy is also among the identified enabling mechanisms to achieve “zero waste to Philippine waters by 2040”, under the National Plan of Action for the Prevention, Reduction and Management of Marine Litter. In PAGTANAW 2050, the country’s most imminent scientists across diverse bodies of knowledge also promoted our transition to a circular economy, highlighting the importance of science, technology and innovation to redesign production systems across key economic sectors.

This bill builds on these strategies and introduces other mechanisms. This bill establishes, inter alia, parameters to identify industries that should rethink their supply chains, redesign their products and restructure their business operations.

Our transition to circular economy must be guided by principles of just transition. Just transition guarantees that the redesign or restructuring of production processes will not economically displace workers. Just transition embeds the imperatives of social inclusion in circular economy policies. Accordingly, this bill adopts the principles of just transition as elaborated in the “Guidelines for just transition towards environmentally sustainable economies and societies for all” of the International Labour Organization.

¹⁶ Philippine Development Plan 2023-2028, Chapter 2, Subchapter 2.3, Outcome 2, p. 61

¹⁷ Ibid., Chapter 15, Outcome 3, p. 353

This bill also benchmarks on UN Environment Programme circularity approach and the Framework for Circular Economy for the ASEAN Economic Community, and other global best practices in circular economy transition.

Our environmental legacy

In 1972, governments and experts congregated in Stockholm to explicate the interaction between the environment, the economy and human well-being. This was the first-ever world conference that placed environmental protection front and center of global political discussion. The Stockholm Declaration became the foundation of global cooperation to protect the environment.

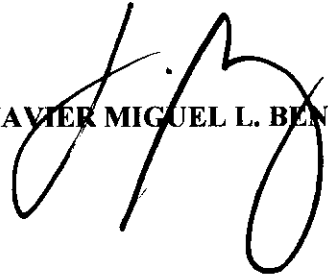
In that conference, the Philippines played an active role.

Senator Helena Benitez headed the Philippine delegation to that conference – and there, she chaired the committee that deliberated on the planning and management of human settlements based on standards of environmental quality.

Five decades since the Stockholm Conference, the responsibility to exercise leadership and fulfill our environmental commitment passes on to us the younger generation. As a grandnephew of Senator Helena Benitez, this humble representation takes this responsibility deeply personal. Hence, this bill.

We stand at the crossroads of history. Earth, our home, and life as we know it are under threat. The need to act to avert ecological disaster has never been more urgent. We must transform our economy to help Nature to recuperate so that we, and future generations too, can continue benefiting from its abundance. We need to act before it's too late.

In view of the foregoing, the immediate approval of this bill is earnestly requested.


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Introduced by **REP. JAVIER MIGUEL L. BENITEZ**

AN ACT
PROVIDING FOR A FRAMEWORK FOR CIRCULAR ECONOMY TO PROMOTE
SUSTAINABLE PRODUCTION AND CONSUMPTION, AND NATIONAL
ECONOMIC SECURITY

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

CHAPTER I
GENERAL PROVISIONS

SECTION 1. Title. - This Act shall be known as the “Circular Economy Act.”

SEC. 2. Declaration of Policy. – It is the policy of the State to promote sustainable development as catalyst of economic self-sufficiency and human development, and as foundation of economic security. The State recognizes the imperative for economic transformation to fulfill the needs of present and future generations without compromising ecological balance and violating planetary boundaries. Accordingly, the State shall foster innovation to build circularity, promote decarbonization, enhance resource efficiency, prevent waste and pollution, improve waste management, reduce ecological and material footprint across industries, avert the depletion of natural resources and the destruction of natural ecosystems, and strengthen economic, social and ecological resilience. The State shall promote behavior modification of individuals towards sustainable consumption, and change in mindset to strengthen environmental responsibility.

SEC. 3. Principles. – The State shall catalyze transition to inclusive, sustainable, self-sufficient, resilient, low-carbon, circular economy, guided by the following principles:

- (a) Every person has the right to a clean, healthy and sustainable environment;
- (b) Ecological integrity contributes to human well-being and the full enjoyment of all human rights, for present and future generations;

- (c) Every person has the responsibility for environmental quality and conservation of nature;
- (d) The capacity of nature to replenish and regenerate renewable resources must be maintained, and where this capacity is disrupted, it must be restored or improved;
- (e) Human activities are impacting the climate system, and circular economy strategies are integral to decarbonization and climate change mitigation and adaptation;
- (f) Local and indigenous knowledge, systems thinking, futures thinking, design thinking, and science, technology and innovation are vital to achieving sustainable development;
- (g) Promotion of circular economy shall take into account technological feasibility and industrial capacity;
- (h) Transition to circular economy must take into account the imperatives of just transition and environmental justice, and ensure that it contributes to providing decent work for all, promoting participatory environmental governance and social inclusion, and eradicating poverty;

SEC. 4. Definition of Terms. - For purposes of this Act, the following terms are defined:

- a) Baseline scenario refers to the description of the state of society and the environment in which no new environmental policies are implemented apart from those already in the pipeline today; or in which these policies do not have a discernable influence regarding the questions being analysed;
- b) Business operations refer to the activities, processes, and systems that an enterprise undertakes to produce goods or services and generate revenue, from procurement and production to sales.
- c) Carrying capacity assessment refers to an assessment of the carrying capacity of a certain ecosystem, which is the maximum number of people, or individuals of a particular species, that a given area of the environment can sustain without causing environmental, economic or socio-cultural stress or damage;
- d) Choice-editing refers to process of influencing consumer choice by removing products that may have a negative impact on the environment;
- e) Circular economy shall refer to an economic model of creating value by extending product lifespan through improved design and servicing, and relocating ways from the end of the supply chain to the beginning. This intends to efficiently utilize resources by its continual use, and aims to retain the highest utility and value of products,

components and materials at all times, through sharing, leasing, reuse, repair, refurbishment, and recycling in an almost closed loop;

- f) Circular agriculture refers to a method of producing food that safeguards agro-ecosystems, prevents losses and waste of biomass and nutrients, reuses and recycles unavoidable residual streams in an efficient way and minimizes the use of energy using minimal amounts of external inputs, closing nutrients loops, regenerating soils, and minimizing the impact on the environment;
- g) Circular infrastructure refers to infrastructure that enables re-use, recycling, or recovery of waste, or minimizes or eliminates the amount of virgin raw materials used across the infrastructure lifecycle or supply chain, thereby reducing the embodied carbon of infrastructure assets, and helping maintain the security of the supply of critical raw materials;
- h) Circular procurement refers to the process by which public authorities purchase works, goods or services that seek to contribute to closed energy and material loops within supply chains, to minimize, and in the best case avoid, negative environmental impacts and waste creation across their whole life-cycle;
- i) Circular production refers to a production process designed to close the loop of materials, components, and products through multiple lifecycles;
- j) Consumer refers to a natural person who is a purchaser, lessee, recipient or prospective purchaser, lessor or recipient of consumer products, services or credit, pursuant to the defined terms under Republic Act No. 7394 or the Consumer Act of the Philippines;
- k) Critical raw materials refer to raw materials for which there are no viable substitutes with current technologies, and which have high supply risks;
- l) Decarbonization refers to the process of significantly reducing or eliminating carbon dioxide (CO₂) and other greenhouse gas (GHG) emissions from the atmosphere;
- m) Dematerialization refers to the reduction of the quantities of materials needed to serve an economic function, or the decline over time in the mass of materials used in industrial end products;
- n) Ecological footprint refers to human demand on the biosphere, the extent to which the regenerative capacity of the planet is being used by human activities, and related methods of assessing or computing the same;
- o) Eco-design refers to an approach to integrating environmental considerations in the product development process or system to make the lowest possible environmental impact throughout the product life cycle, from the extraction of raw materials to production, distribution, use to recycling, repair, and disposal;
- p) Eco-Innovation refers to any innovation, including the development and use of new technologies and organization changes, that reduces impacts on the environment,

increases resilience to environmental pressures or uses natural resources more efficiently;

- q) Economic security refers to the ability of people to meet and cover their basic needs consistently and sustainably;
- r) Economic self-sufficiency refers to the ability to produce goods and services for domestic consumption without dependence on external resources;
- s) Environmental risk refers to the likelihood of a project or activity causing harm to natural ecosystems;
- t) Enterprise refers to an establishment engaged in the production, manufacturing, processing, repacking, assembly, or sale of goods or services. It shall include self-employed or own-account workers, micro, small and medium enterprises (MSMEs) and community-based business enterprises;
- u) Fast-moving consumer goods refer to nondurable products that need to be sold, usually at a low cost, and consumed within a set duration;
- v) Green design refers to an approach to building that minimizes the harmful effects of construction projects on human health and the environment;
- w) Green financing refers to the process of increasing level of financial flows from the public, private and non-profit sectors to sustainable development priorities, primarily developing financial products and services, and investment vehicles to support enterprises that produce goods and services, or develops technologies that are aimed at reducing greenhouse gas emissions and achieving environmental-friendly performance levels over time;
- x) Green infrastructure refers to a network of natural and semi-natural areas with other environmental features, designed and managed to deliver a wide range of ecosystem services, such as water purification, improving air quality, providing space for recreation and enhancing biodiversity;
- y) Green technology refers to technology that is used to make industrial processes and business operations more environment-friendly, less resource-intensive, less carbon-intensive, and less polluting;
- z) Green premiums refer to the additional cost a consumer pays for choosing to buy a more sustainably made product or service compared to conventionally-made alternatives;
- aa) High climate impact sectors refer to sectors with significant contributions to greenhouse gas emissions and environmental impact which play a key role to the low-carbon transition;
- bb) Infrastructure needs assessment refers to the assessment of present and prospective conditions, needs and costs with regards to water, sewerage, transportation, broadband and solid waste facilities that are required to transition to circular economy;

- cc) Intervention scenario refers to the description of the future state of society and the environment under influence of directed environmental policies;
- dd) Life cycle analysis refers to a systematic analysis of environmental impact over the course of the entire life cycle of a product, material, service or process;
- ee) Major capital project refers to a program costing at least PhP500 million and involves investments in physical and human capital through expenditures or transfers by the National Government;
- ff) Material flow analysis refers to the systematic assessment of the flows and stocks of materials and substances within a system in a defined space during a defined period, including volumes, costs, and risks of safe disposal;
- gg) Material footprint refers to total amount of raw materials extracted to manufacture or provide the goods and services to meet consumption demands;
- hh) Mono-material refers to a product composed of a single material or fibre, and are typically easier to recycle;
- ii) Non-wood forest products refer to goods for human and industrial consumption derived from renewable forest resources and biomass, including plants used for food, fuel, medicine, fiber and biochemicals;
- jj) Permaculture shall refer to an innovative framework for creating sustainable ways of living. It is a practical method of developing ecologically harmonious, efficient, add productive systems. The application of permaculture principles enables households, communities, and businesses to creatively re-design their environment with less energy and resources;
- kk) Product stewardship refers to an environmental management strategy that means whoever designs, produces, sells, or uses a product takes responsibility for minimizing the product's environmental impact throughout all stages of the products' life cycle, including end-of-life management;
- ll) Recovery refers to the collection, extraction or recovery of recyclable materials from the waste stream for the purpose of recycling, generating energy or producing a product suitable for beneficial use;
- mm) Recycling refers to the treatment of used or waste materials through a process of making them suitable for beneficial use and for other purposes, and includes any process by which solid waste materials are transformed into new products in such a manner that the original product may lose their identity, and which may be used as raw materials for the production of other goods or services;
- nn) Renewable resources refer to natural resources that, after exploitation, can return to their previous stock levels by natural processes of growth or replenishment;

- oo) Resource intensity refers to the measure of the resources, such as water, energy and materials, required to produce, process, or dispose of a unit of goods or services, or to complete a process or activity;
- pp) Single-use plastic product refers to a product that is made wholly or partly from plastic and that is not conceived, designed or placed on the market to accomplish, within its life span, multiple trips or rotations by being returned to the producer for refill or reused for the same purpose for which it was conceived;
- qq) Secondary raw materials refer to recycled materials or recyclates that can be used in manufacturing processes instead of or alongside virgin raw materials;
- rr) Strategic environmental assessment refers to the systematic process for evaluating the environmental implications of a proposed policy, plan or programme and provides means for looking at cumulative effects and appropriately address them at the earliest stage of decision making alongside economic and social considerations;
- ss) Supply chain traceability refers to the identification and tracking of the movement of a product throughout the supply chain, from the origins of the raw materials to end-use and end-of-life disposal;
- tt) Sustainable materials management refers to a systematic approach to using and reusing materials more productively over their entire life cycles;
- uu) Source reduction refers to the reduction of solid waste before it enters the solid waste stream by methods such as product design, materials substitution, materials reuse, and packaging restrictions;
- vv) Technology needs assessment refers to a systematic method of analyzing current technology, and future technology requirements to achieve circular economy goals, to identify gaps and technological solutions needed to address the identified gaps or constraints;
- ww) Virgin raw materials refer to anything extracted directly from nature without processing;
- xx) Waste analysis and characterization refers to the process of identifying the quantity or volume, and composition of solid wastes generated from various sources.

CHAPTER II

CIRCULAR ECONOMY STRATEGY FRAMEWORK

SEC. 5. Circular Economy Strategy Framework. – There shall be a Circular Economy Strategy Framework (CESF), to be formulated within one (1) year from the effectivity of this Act, by the National Economic and Development Authority.

The CESF shall include the following components:

- (a) Circular economy as an anchor of government policies, procedures and plans to promote economic security;
- (b) Model for circular economy that identifies sources of value creation, value streams, and cascading use of resources to determine points of intervention;
- (c) National baseline scenario, including baseline values of natural capital accounts and greenhouse gas (GHG) inventories;
- (d) Carrying capacity assessment of natural ecosystems, including GHG emission cap-setting approaches;
- (e) Domestic regulatory framework for environmental protection;
- (f) Commitment to international environmental law, including GHG emission reduction and avoidance commitments in Nationally Determined Contributions;
- (g) Range of potential outcomes of different economic, demographic and policy scenarios;
- (h) Tiered approach to environmental impact and risk assessment of economic processes, sectors and activities;
- (i) Strategies for resource efficiency, product stewardship, waste management, GHG emission reduction and avoidance;
- (j) Choice-editing strategies, including regulation of production, importation, sale, distribution, and use of single-use plastic products, to promote sustainable consumption;
- (k) Infrastructure and technology needs assessments;
- (l) Research and development priorities to foster eco-innovation towards circular production;
- (m) Strategies for just transition;
- (n) Monitoring mechanism to track the progress towards full transition to circular economy, including baselines, performance indicators, caps, targets and timeframe;
- (o) Status of green financing, and strategies to close investment gaps;
- (p) Integration in development planning at different levels of government;

SEC. 6. Priority Circular Economy Investment Plan. – The Department of Trade and Industry shall formulate the Priority Circular Economy Investment Plan (PCEIP), in accordance with the CESF. The PCEIP shall identify priority activities for transition to circular economy, hereinafter referred to as Covered Activities. Covered Activities shall include projects or activities in the supply chain of high climate impact sectors or resource-intensive

and high-environmental risk industries that shall be prioritized for transition to circular economy. Production of single-use plastic products and other non-environmentally acceptable products, as defined under Republic Act No. 9003, otherwise known as the “Ecological Solid Waste Management Act of 2000”, shall be included in Covered Activities.

SEC. 7. Inclusion in the PCEIP. – The DTI shall formulate a list of Covered Activities for inclusion in the PCEIP, and evaluate projects and activities, based on a tiered assessment process to determine their environmental impact and risk in terms of the following:

- (a) Resource consumption, including water withdrawal;
- (b) Waste generation;
- (c) GHG emission;
- (d) Job creation;
- (e) Industry value added; and,
- (f) Green technology adoption.

To transition to circular economy, enterprises engaging in Covered Activities, hereinafter referred to as Covered Enterprises, shall undertake measures, within a defined timeframe, to integrate eco-design and sustainable materials management in business operations, exercise product stewardship and improve waste management to prevent waste, reduce GHG emission and limit resource extraction insofar that it shall not exceed the carrying capacity of natural ecosystems. Micro, small and medium enterprises (MSMEs), as defined under Republic Act No. 9501, shall not be covered; *Provided*, That MSMEs may undertake, on a voluntary basis, activities to mitigate their environmental impact.

SEC. 8. Assessment Process. – The Department of Environment and Natural Resources shall establish parameters for tiered and multi-scale assessment of the resource intensity, supply chain traceability, environmental impact and environmental risk of economic processes, sectors, and activities, which shall guide the formulation of the PCEIP, as provided under Section 5 of this Act:

- (a) Industry-wide strategic environmental assessment;
- (b) Project-specific environmental impact assessment;
- (c) Site-specific waste analysis and characterization;
- (d) Product-specific material flow analysis, and supply chain traceability assessment; and
- (e) Product-specific life cycle assessment.

SEC. 9. Baseline scenario. – The following agencies shall lead strategic environmental assessment of different sectors and industries, including GHG inventories, which shall be the basis of environmental targets under this Act and the formulation of the PCEIP:

- (a) DENR for the forest, mining, water and waste management industries;
- (b) Department of Agriculture for agriculture;
- (c) DTI for the fast-moving consumer goods (FMCG) industry and creative industries;
- (d) Department of Science and Technology for the electronics and textile industries;
- (e) Department of Public Works and Highways for the construction sector;
- (f) Department of Energy for the energy sector;
- (g) Department of Transportation for the transport sector;
- (h) Department of Tourism for the tourism industry; and,
- (i) Department of Human Settlements and Urban Development for the real estate industry.

CHAPTER III ECO-INNOVATION

SEC. 10. Product Stewardship. – Covered Enterprises shall exercise product stewardship throughout all stages of product life cycle. Product stewardship shall entail Covered Enterprises to:

- (a) Promote eco-design and eco-innovation to change the design, specifications, materials, packaging, and manufacturing process of their existing products to minimize environmental impact;
- (b) Develop, produce, use and market mono-materials and circular products that are resource-efficient, reusable, repairable, and suitable, after use, for recovery and environmentally-compatible disposal;
- (c) Prioritize use of renewable resources, and recycles or secondary raw materials in the production of products to reduce use of non-renewable virgin raw materials;
- (d) Efficiently use critical raw materials, and label critical raw materials contained in the products in order to prevent these products becoming waste, as well as to ensure that the critical raw materials can be recovered from the products or from the waste generated after the products have been used;
- (e) Support re-use and repair systems;

- (f) Reduce hazardous substance content, and label products containing pollutants in order to ensure environmentally-compatible recovery or disposal of the waste generated after their use;
- (g) Provide information on mechanisms for return, re-use, recovery and disposal, including deposit payment arrangements, through product labelling;
- (h) Accept returned products and the waste generated after their use, as well as the subsequent environmentally-compatible recovery or disposal of such products and waste

SEC. 11. Eco-Design. – Covered Enterprises, in designing and developing products and services, shall prioritize using materials that are easy to be recovered, dismantled, and degraded, nontoxic and harmless or with low toxic or harm, in addition to complying to the mandatory requirements as prescribed in relevant industry standards; *Provided*, That in designing sustainable, circular products, Covered Enterprises shall prioritize use of renewable resources and take into account local and indigenous knowledge and locally sourced materials; *Provided, further*, That Covered Enterprises shall take into account modular design and dematerialization strategies in developing products; *Provided*, finally, That the use of toxic substances in products, including electrical and electronic equipment, shall be regulated, in accordance to Republic Act No. 6969, otherwise known as the “Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990.”

SEC. 12. Research and development. – The Department of Science and Technology shall support research in material sciences and the development of green technology and innovative solutions, including dematerialization, application of artificial intelligence in computer-aided design, nanotechnology, 3D printing, Internet-of-things, machine-to-machine technology, tracking technologies, and waste treatment technologies, and facilitate the transfer of such technologies and systems to Covered Enterprises to catalyze full transition to circular economy, in accordance with Republic Act No. 10055, otherwise known as the “Philippine Technology Transfer Act of 2009.”

SEC. 13. Ecolabelling. – The Department of Trade and Industry shall establish standards for Philippine circular products based on international standards, and integrate such standards in the Philippine National Standards, and promulgate rules and regulations on ecolabelling of products, which must include information on repairability of the product, to encourage sustainable consumption, in accordance with Section 27 of Republic Act No. 9003, otherwise known as the “Ecological Solid Waste Management Act of 2000”. Accordingly, DTI shall strengthen post-market surveillance of products and enforce accurate labeling.

CHAPTER IV

SOURCE REDUCTION AND WASTE MANAGEMENT

SEC. 14. Classification of Waste. - For purposes of this Act, waste shall include:

- (a) all substances or objects resulting from a production process, the primary aim of which is not the production of such substance or object;
- (b) all substances or objects that a person discards when these are no longer used according to their original purpose, or end-of-use materials; and,

- (c) all substances or objects that a person discards, and when discarded, could endanger, due to their state, either in the present or the future, human health and the environment.

SEC. 15. End-of-Waste and End-of-Life Pathways. – For purposes of waste analysis and characterization, a waste, as defined under the previous section, shall cease to be waste when:

- (a) it has undergone recycling or other recovery process;
- (b) its original purpose ceases to exist or is renounced, and it is used for a new specific purpose;
- (c) a market or demand exists for it; or
- (d) its use does not lead to detrimental environmental or human health impacts.

The DENR shall determine the conditions under which specific substances and objects achieve end-of-waste status, and identify permissible processes and methods of treatment and disposal of end-of-life waste, in accordance with Republic Act No. 9003, otherwise known as the “Ecological Solid Waste Management Act of 2000”.

SEC. 16. Obligations of Enterprises. – Covered Enterprises shall undertake measures for source reduction and waste management, in the following order of priority, taking into account the precautionary principle, and extended producer responsibility, in accordance with Republic Act No. 11898, otherwise known as the “Extended Producer Responsibility Act of 2022”:

- (a) Prevention, or source reduction;
- (b) Re-use;
- (c) Repair;
- (d) Recycling;
- (e) Other recovery, including energy recovery;
- (f) Disposal.

SEC. 17. Waste Hierarchy. – The entire life cycle of the waste shall be taken as the basis for the order of priority. For purposes of waste analysis and characterization, the following shall be taken into account in the determination of what waste must be recovered or disposed of:

- (a) the projected emissions;
- (b) the degree of the conservation of natural resources;

(c) the energy to be input or generated;

(d) the accumulation of harmful substances in products, in waste for recovery, or in products made from such waste.

SEC. 18. Waste Recovery. – Covered Enterprises shall be obliged to recover their waste insofar that waste recovery is technologically feasible and economically reasonable; *Provided*, That waste recovery shall be deemed to be technologically feasible if methods to safely recover waste will be available for commercial application in the year for which a standard is being enforced; *Provided, further*, that waste recovery shall be deemed to be economically reasonable if the cost of recovery is not disproportionate to the cost of disposal, and the cost is within the capacity of the enterprise; *Provided, finally*, That to share the cost of recovery, Covered Enterprises shall organize themselves into a Producer Responsibility Organization, in accordance with Republic Act No. 11898, otherwise known as the “Extended Producer Responsibility Act of 2022”.

CHAPTER V SUSTAINABLE CONSUMPTION

SEC. 19. Regulation of single-use plastic products. – As part of efforts to achieve plastic-neutrality, as defined under the Extended Producer Responsibility Act of 2022, the National Solid Waste Management Commission shall establish a single-use plastic production and consumption reduction schedule, in accordance with Sections 29 and 30 of Republic Act No. 9003, otherwise known as the “Ecological Solid Waste Management Act of 2000.”

SEC. 20. Sustainable Pricing. – To enhance competitiveness of circular products and encourage sustainable consumption, DTI shall regulate green premiums from sustainable pricing to improve affordability of circular products.

SEC. 21. Individual Environmental Responsibility. – The DTI shall formulate and implement a strategic communications plan to raise consumer environmental awareness to promote sustainable consumption, develop individual environmental responsibility and promote adoption of permaculture as a way of life. Consumer environmental awareness and principles of permaculture shall be integrated in programs under Republic Act No. 9512, otherwise known as the “National Environmental Awareness and Education Act of 2008.”

SEC. 22. Circular Procurement. – To support Covered Establishments, all government agencies, including local government units (LGUs), shall integrate circular procurement in their respective Annual Procurement Plans, in accordance with the Green Public Procurement Roadmap. Circular products shall take priority in the acquisition of goods without prejudice to the provisions of Republic Act No. 9184, otherwise known as the “Government Procurement Reform Act”; *Provided*, That the Government Procurement Policy Board shall identify common-use supplies and equipment (CSE) and non-CSE under mandatory circular procurement; *Provided, further*, That the GPPB, in consultation with implementing agencies of Republic Act No. 7394, otherwise known as the “Consumer Act of the Philippines”, shall establish green criteria to evaluate goods under mandatory circular procurement.

CHAPTER VI JUST TRANSITION

SEC. 23. Whole-of-Government Approach. – The whole-of-government approach is hereby adopted to facilitate just transition to circular economy. All government agencies shall develop and implement programs to create decent work opportunities based on ex ante employment impact assessment of the transition to circular economy, and address environmental, economic and social objectives simultaneously, in terms of:

- (a) Support to enterprises;
- (b) Skills development;
- (c) Occupational safety and health (OSH);
- (d) Social protection; and,
- (e) Social dialogue.

SEC. 24. Support to MSMEs. – The DTI shall develop and implement programs to enhance the resilience of MSMEs to avoid or minimize disruption of economic activity and loss of assets, jobs and incomes, as they transition to circular economy.

The DTI, in partnership with the Department of Science and Technology, shall facilitate technology transfers to MSMEs, based on technology needs assessment, provide financial and technical assistance to green technology start-ups, support cluster development, research and development, and incubation.

SEC. 25. Skills Development. – The Technical Education and Skills Development Authority shall develop and implement programs for upskilling and reskilling for workers affected by the transition to circular economy, based on skills needs assessments and labor market information, to match supply and demand for skills for green jobs. TESDA shall promote equal access to opportunities for skills acquisition, and recognition or certification.

SEC. 26. Occupation Safety and Health. – The Occupational Safety and Health Center shall conduct research to better understand the range of OSH risks throughout the life cycle of products and from new technologies and green jobs, and use this knowledge to improve prevention and safety in the workplace.

SEC. 27. Social Protection. – All concerned government agencies shall promote, establish, develop, and implement social protection systems social innovation solutions to safeguard workers from negative impacts of structural changes in business operations, and employment guarantee schemes in public works projects to construct and maintain priority circular infrastructure and green infrastructure, based on infrastructure needs assessment, to support circular economy.

SEC. 28. Social Dialogue. – The Department of Labor and Employment shall actively promote and engage in social dialogue to forge tripartite consensus on pathways towards environmental sustainability with decent work. For this purpose, DOLE shall create, develop and formalize social dialogue mechanisms and structures at all levels to discuss the equitable means to achieve the objectives of this Act.

CHAPTER VII

CIRCULAR ECONOMY INVESTMENT

SEC. 29. Inter-Agency Task Force on Sustainable Finance. – The Inter-Agency Task Force on Sustainable Finance is hereby institutionalized to primarily develop and implement an action plan to promote green financing, including utilizing external funding sources, to channel capital into Covered Enterprises and support circular and green infrastructure development to accelerate the transition to circular economy.

SEC. 30. Incentives for Covered Enterprises. – The NEDA shall submit the PCEIP to the Board of Investments for inclusion of Covered Activities in the Strategic Investment Priority Plan (SIPP). The grant, administration, and monitoring of fiscal incentives to Covered Enterprises under this Act shall be governed by Title XIII of the NIRC, as amended: *Provided*, That no enterprise, project or activity shall be allowed to avail of fiscal incentives unless such enterprise or activity is included in the SIPP; *Provided*, further, That Covered Enterprises may avail incentives provided for under Republic Act No. 9520, otherwise known as the Philippine Cooperative Code of 2008, Republic Act No. 9178, otherwise known as the Barangay Micro-Business Enterprise Act of 2002, Republic Act No. 9501, otherwise known as the Magna Carta for Micro, Small and Medium Enterprises, and Republic Act No. otherwise known as the Green Jobs Act of 2016, where applicable.

SEC. 31. Circular and Green Infrastructure Development. – The Department of Public Works and Highways (DPWH) shall accelerate the development of circular infrastructure and green infrastructure. The Bureau of Research and Standards under the DPWH shall establish standards of green design in building standards and implementation of public works to mitigate adverse environmental impact.

The DPWH shall integrate the following parameters for circular infrastructure in building regulations:

- (a) Use of durable products and services made of secondary, non-toxic, sustainably sourced, or renewable, reusable or recyclable material;
- (b) Space efficiency over time, through shared occupancy, flexibility and adaptability;
- (c) Longevity, resilience, durability, easy maintenance and reparability;
- (d) Reduction of mixing materials, layering and focusing on mono-material solutions;
- (e) Disassembly, reuse or recycling of embedded material, components and systems;
- (f) Life-cycle assessment (LCA), life-cycle costing (LCC) and readily available digital information.

SEC. 32. Expenditure Tagging. – All circular procurement, and circular economy programs, activities and projects shall be tagged as climate change expenditures and included in the Climate Change Expenditure Tagging (CCET) system, as established under Joint Memorandum Circular No. 2015-01 of the Department of Budget and Management, Climate Change Commission and Department of Interior and Local Government.

SEC. 33. Incentives and Reward for the Public Sector. – The Department of Budget and Management shall institute an incentives and rewards system for government agencies, including LGUs, for circular procurement, and circular and green infrastructure development. The incentives and rewards system shall include the utilization of twenty-five percent of the savings generated from such measures for the payment of additional performance incentives.

CHAPTER VIII INSTITUTIONAL SUPPORT MECHANISMS

Sec. 34. Role of Government Agencies. – The following government agencies shall exercise responsibilities and functions as enumerated hereunder:

- a. The NEDA shall integrate the CESF in the Philippine Development Plan, update the Philippine Action Plan for Sustainable Consumption and Production PAP4SCP to integrate strategies identified in the CESF, lead scenario building and identify range of potential outcomes of intervention scenarios, and take into account circular economy targets in the review and evaluation of major capital projects;
- b. The DENR shall lead natural asset inventory and environmental data collection, which shall contextualize the CESF and form natural capital accounts, and promote use of renewable non-wood forest products (NWFP) and strengthen market linkage between NWFP producers and Covered Enterprises and end-users, as part of the Expanded National Greening Program;
- c. The DTI shall evaluate projects and activities for inclusion in the PCEIP, and develop and implement programs to assist and support green technology start-ups, in accordance with Republic Act No 11337, otherwise known as the “Innovative Startup Act”, and MSMEs in the transition to circular economy;
- d. The DOLE shall conduct labor forecasting to determine labor demand for circular economy transition, and integrate labor demand of circular economy in the National Green Jobs Human Resource Development Plan, in accordance with Republic Act No. 10771, otherwise known as the “Philippine Green Jobs Act of 2016”;
- e. The DPWH shall integrate environmental impact assessment and green design in the infrastructure development cycle;
- f. The DOST shall integrate technology needs, and research and development priorities for circular economy transition in the formulation of the Harmonized National Research and Development Agenda, and foster eco-innovation and facilitate technology transfers to MSMEs, and green technology start-ups, in

accordance with Republic Act No. 11337, otherwise known as the “Innovative Startup Act”;

- g. The Department of Finance shall lead in determining appropriate combination of taxes, subsidies, incentives, and loans, bonds and other debt instruments to stimulate innovation and accelerate the transition towards circular economy, and integrate such financial instruments to close circular economy investment gaps in the Sustainable Finance Framework;
- h. The Department of Agriculture shall develop and implement programs to promote circular agriculture and regenerative food system, in accordance with Republic Act No. 10068, otherwise known as the “Organic Agriculture Act of 2010”;
- i. The Department of Interior and Local Government shall provide training to LGUs to adopt circular procurement, assist MSMEs in the transition to circular economy, and monitor and track circular procurement expenditure as part of CCET. The DILG shall also provide assistance to LGUs to integrate local economic transformation programs towards circular economy in their Local Climate Change Action Plan, in accordance with Republic Act No. 9729, otherwise known as the “Climate Change Act of 2009”;
- j. The TESDA shall integrate skills needs for circular economy transition in the National Technical Education and Skills Development Plan;
- k. The Climate Change Commission shall include circular economy strategies in the National Climate Change Action Plan, in accordance with Republic Act No. 9729, otherwise known as the “Climate Change Act of 2009”, and develop a monitoring and evaluation system, and periodically collect data on indicators to track and report progress of circular economy programs in achieving targets, and integrate the progress report in the National Integrated Climate Change Database and Information Exchange System;
- l. The National Innovation Council shall integrate strategies to promote eco-innovation and its corresponding technology needs, as provided for under Section 12 of this Act, in the National Innovation Agenda and Strategy Document, and develop and implement programs to assist and support green technology start-ups, in accordance with Republic Act No. 11293, otherwise known as the “Philippine Innovation Act”;
- m. The Philippine Statistics Authority shall compile natural asset inventories and environmental data to develop natural capital accounts; and,
- n. The Design Center of the Philippines shall develop and implement programs to embed design thinking in restructuring Covered Activities and eco-design, and assist and support MSMEs in changing product design to promote environmental sustainability, in accordance with Republic Act No. 10557, otherwise known as the “Philippine Design Competitiveness Act of 2013”;

SEC. 35. Capacity-building. - All government agencies shall promote and invest in capacity building of their personnel and stakeholders to enhance their institutional capacity to design, develop, implement, and monitor circular economy programs and projects, including circular procurement.

CHAPTER IX MONITORING MECHANISM

SEC. 36. Monitoring. – The Climate Change Commission (CCC) shall monitor the implementation of this Act. It shall engage relevant stakeholders, as it deems necessary, and establish a monitoring and evaluation system to track the progress of the implementation of this Act within a defined time frame. The CCC shall determine whether existing regulations hamper circular economy programs and recommend lifting restrictions.

CHAPTER X MISCELLANEOUS PROVISIONS

SEC. 37. Citizen Participation and Community Mobilization. - The State shall take measures to enable citizen participation and community mobilization towards the effective implementation of this Act. In all strategies, plans, and programs, citizen participation must be ensured, and massive awareness-building shall be conducted in local government units (LGUs) to localize and inform communities on the strategies.

SEC. 38. Appropriations. - The amount necessary for the initial implementation of this Act shall be taken from existing allocations of the government agencies concerned. Thereafter such sums as shall be necessary to carry out the provisions of this Act shall be included in the annual General Appropriations Act.

CHAPTER XI FINAL PROVISIONS

SEC. 39. Implementing Rules and Regulations. - The NEDA, in coordination with concerned government agencies, shall promulgate implementing rules and regulations, within six (6) months after the effectivity of this Act. Failure to issue rules and regulations shall not in any manner affect the executory provisions of this Act.

SEC. 40. Separability Clause. – If any provision or the application of such provision to any person or circumstances is declared unconstitutional or invalid, the other sections or provisions not affected thereby shall remain in force and effect.

SEC. 41. Repealing Clause. – Any law, decree, order, rule or regulation contrary to and inconsistent with this Act is hereby repealed.

SEC. 42. Effectivity. - This Act shall take effect fifteen (15) days after its publication in the Official Gazette or in a newspaper of general circulation.

Approved,