AN ACT
TO PROMOTE CIRCULAR ECONOMY AND A WHOLE-OF-NATION TRANSITION
TOWARD A SUSTAINABLE FUTURE

Explanatory Note

Amid the multiple shocks of climate change and the coronavirus disease 2019 (COVID-19) pandemic, the country is facing unprecedented challenges to achieve resilience and meet the 2030 Sustainable Development Agenda. The pandemic caused socio-economic stresses which impinge on the sustainable development goals.

Akin to the climate crisis, the COVID-19 pandemic not only exposed the vulnerability of economies and communities but also brought out opportunities for a green recovery through the adoption of a sustainable, inclusive, resilient, low-carbon, low-polluting, nature positive and circular economy-based pathway for society, one that can withstand future shocks coming from climate change, natural and manmade disasters, and other global challenges.¹ Our economy must leapfrog to a cleaner future, merging environmental sustainability with the long-time objective of socio-economic development without following the trajectories of developed countries that resulted in massive environmental degradation.

Toward this goal, the principles and strategies on circular economy and sustainable consumption and production (SCP) serve as guideposts for policy and decision-makers. Circular economy implies using and reusing resources already in the economy more efficiently to minimize losses and to rely less on the extraction of natural resources.

¹ GEF’s Response to COVID-19, 16 May 2020.
The National Economic and Development Authority (NEDA) is developing the National Action Plan for SCP, with the goal for Filipinos to "produce and consume green goods and services to accelerate the shift towards sustainable and climate-smart practices and lifestyles" and the expected outcome of internalized and integrated social and environmental impacts of economic activities in the market system.

This bill seeks to, among others: 1) pave the way for the development of green markets by instituting measures that promote circular economy and sustainable consumption and production by improving reuse and recycling and reducing plastic consumption; 2) promote the use of permaculture as a design tool for urban and rural development; and, 3) foster a just, inclusive, and sustainable green recovery from the pandemic.

The activities contemplated in this Act cover the interplay between the public and private sectors, as well as national, subnational, regional, and global stakeholders, taking into consideration the trajectories under the better normal or green recovery directions consistent with national economy and planet-people-nature nexus.

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

LOREN LEGARDA

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AN ACT
TO PROMOTE CIRCULAR ECONOMY AND A WHOLE-OF-NATION TRANSITION TOWARD A SUSTAINABLE FUTURE

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

SECTION 1. Title.— This Act shall be known as the "Philippine Circular Economy Act of 2020."

SEC. 2. Declaration of Policy — It is the policy of 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, and promote sustainable development. As a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement, the State adopts the objective of the Paris Agreement to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, on the basis of equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

In line with the 2030 Sustainable Development Agenda, the Philippines adopts the goals of making cities and human settlements inclusive, resilient, and sustainable,
ensuring sustainable production and consumption patterns, and taking urgent action
to combat climate change and its impacts, among others, in line with national
development priorities and capacities.

Towards this end, the State shall adopt and uphold the following guiding principles in
the implementation of this Act:

1. There is a need to mainstream circular economy and promote sustainable
   consumption and production (SCP) strategies through these policy pillars:
   research, innovation and technology development, advocacy, market
   promotion and regulation, and local-level applications and infrastructure as a
   means to align industrial, technological, and behavioral dimensions of
   production and consumption of public goods and delivery of services
   consistent with harmonious coexistence among the planet, people, and nature
   towards sustainable development;

2. The State shall pursue a just transition to a low emissions, resource-efficient
   and circular economy through a systemic change in the accounting, use and
   recovery of resources in the economy. It shall promote innovation and
   investment in climate-resilient technologies, practices, regulations, and
   standards, through a whole-of-government-and-society approach;

3. The State shall adopt Zero Waste concepts and emphasize waste prevention
   and minimization as the top priorities within the waste hierarchy. Our circular
   economy should be a "Zero Waste circular economy;"

4. In the pursuit of a Zero Waste Circular Economy, the State must ensure that
   workers' health is protected and public health is guaranteed;

5. The State shall pursue a just transition plan action for workers from industries
   that may be affected by this Act, and to continue the pursuit of green jobs by
providing market and non-market mechanisms to businesses and companies adhering to circular economy.

6. Recognizing the benefits of designing sustainable ecological human habitats and food production systems, the State shall promote the use of permaculture as a design tool for inclusive, resilient, and sustainable urban and rural development; and

7. The State shall enjoin the participation of national and local governments, businesses, non-government organizations, local communities and the public in the transition toward a resource-efficient and circular economy, including capacity development.

SEC. 3. **Definition of Terms.**— For purposes of this Act, the following shall have the corresponding meanings:

a) “Alternative delivery systems” shall refer to sustainable eco-friendly apparatuses or processes for storing and dispensing different retail items, goods, and consumer products;

b) “Assimilating capacity assessment” shall refer to an assessment of the assimilative capacity of a certain ecosystem, which is the ability to accommodate a particular activity or rate of an activity (usually pertaining to waste and residuals-producing activities such as the discharge of contaminants), without unacceptable impact;

c) “Biocapacity assessment” shall refer to an assessment of the biocapacity which is the ability of biologically productive ecosystems to provide the resources and services used by humanity;
d) "Business enterprises" shall refer to establishments engaged in the production, manufacturing, processing, repacking, assembly, or sale of goods and/or services, including service-oriented enterprises. It shall include self-employed or own-account workers, micro, small, and medium enterprises (MSMEs) and community-based business enterprises;

e) "Capacity assessment" shall refer to the generic term for the following sub-classifications: carrying capacity assessment, biocapacity assessment and assimilating capacity assessment. The assessments shall focus on ecosystem and environment-related systems of interest;

f) "Carrying capacity assessment" shall refer 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;

g) "Circular economy" shall refer to a system approach wherein products are designed for durability, reuse and recyclability, and materials for new products come from old products. It minimizes waste and maximizes the use of natural resources;

h) "Collection" shall refer to the act of gathering and/or removal of solid waste from a source or from a communal storage point and/or facility;

i) "Consumer" shall refer 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;
j) "Ecological footprint" shall refer to human demand/activity 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.

k) "Incentives" shall refer to incentives provided for under RA No. 9520 otherwise known as the Philippine Cooperative Code of 2008, RA No. 9178 otherwise known as the Barangay Micro-Business Enterprise Act of 2002, RA No. 9501 otherwise known as the Magna Carta for Micro, Small, and Medium Enterprises, Executive Order No. 226 otherwise known as the Omnibus Investment Code of 1987, RA No. 10771 otherwise known as the Green Jobs Act of 2016 or incentives as defined by the local government unit through an ordinance specifically for the purpose of this Act, where applicable;

l) "Life Cycle Assessment" shall refer to the compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its life cycle;

m) "Natural Capital Accounting and Valuation or Environment and Natural Resource Accounting and Valuation" shall refer to a process that provides a systematic way to measure and report on stocks and flows of natural capital, recognizing the environment as an asset that must be maintained and managed;

n) "Permaculture" shall refer to an innovative framework for creating sustainable ways of living. It is a practical method of developing ecologically harmonious, efficient and productive systems. The application of permaculture principles enable households, communities, and businesses to creatively re-design their environment with less energy and resources;
o) “Producer” shall also refer to a manufacturer which has been defined under RA No. 7394 as “any person who manufactures, assembles or processes consumer products, except that if the goods are manufactured, assembled or processed for another person who attaches his own brand name to the consumer products, the latter shall be deemed the manufacturer. In case of imported products, the manufacturer’s representative or, in his absence, the importer, shall be deemed the manufacturer”;

p) “Recovery or Resources recovery” shall refer 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;

q) “Recycling” shall refer 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;

r) “Single-use plastics” shall refer to plastic products which are not conceived, designed and placed on the market to accomplish, within its life span/cycle, multiple usage or rotations such as being returned to the producer for refill or reused for the same purpose for which it was conceived. These include, but are not limited to, items such as grocery bags, food packaging films and bags, straws, stirrers, containers, styrofoam/styros, cups, sachets and plastic cutlery;
s) "Sustainable Consumption and Production (SCP)" shall refer to the use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of further generations.

t) "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 re-use and packaging restrictions.

SEC. 4. Scope. — This Act shall apply to producers and consumers involved in value chains of all goods, products, services and processes contributing to the Philippine economy, and to the mechanisms facilitating the policy, regulatory, and advocacy measures to promote, implement, monitor and evaluate the strategies on circular economy, complementing thereby the goals and targets of sustainable consumption and production.

The activities contemplated in this Act cover the interplay between the public and private sectors, as well as national, subnational, regional, and global stakeholders, taking into consideration the trajectories under the better normal or green recovery directions consistent with national economy and planet-people-nature nexus.

In pursuing the circular economy, the following value creation principles, which underpin the transition from a value chain to a value circle perspective, shall be adhered to:¹

a. The "inner circle" refers to minimizing comparative materials use vis-à-vis the linear production system. The tighter the circle, i.e. the less a product has

to be changed in reuse, refurbishment and remanufacturing and the faster it returns to use, the higher the potential savings on the shares of material, labor, energy and capital still embedded in the product, and the associated externalities (such as greenhouse gas (GHG) emissions, water and toxicity);

b. The "circling longer" refers to maximizing the number of consecutive cycles (be it repair, reuse, or full remanufacturing) and/or the time in each cycle. Each prolonged cycle avoids the material, energy and labor of creating a new product or component;

c. The "cascaded use" refers to diversifying reuse across the value chain or transforming materials across product categories to offset the need for virgin material inputs;

d. The "pure inputs" postulates that uncontaminated material streams increase collection and redistribution efficiency while maintaining quality, particularly of technical materials, which in turn extends product longevity and thus increases material productivity.

e. The utmost need to remove the use of toxic chemicals and hazardous substances in the production of goods and products. The elimination of toxicity in the production line will protect workers' health and guarantee safe and clean recycling processes throughout the product’s lifecycle; and

f. All products are designed to avoid waste leakage into the oceans and environment and must meet the guaranteed minimum number of recycling cycles per material.

**SEC. 5. Role of National Government Agencies and Stakeholders.**

a. The National Economic and Development Authority (NEDA) shall formulate and regularly update the Philippine National Action Plan for Sustainable
Consumption and Production (PNAPSCP). It shall be the anchor plan to mainstream the circular economy in the development activities of various stakeholders in the country and ensure its impact on sustainable development. As such, the NEDA shall lead in the implementation of this Act.

b. The Department of Environment and Natural Resources (DENR) and Philippine Statistics Authority (PSA) shall formulate the National Natural Capital Accounting or Environment and Natural Resource Accounting and Capacity Assessment Plan (NCACAP). The Plan will institutionalize a comprehensive system for accounting, valuing, and assessing the quality and integrity of the rich natural capital of the country, and shall serve as a basis for the policy, technical and technological, administrative, market-based interventions promoting the principles of circular economy, complementing the PNAPSCP.

The NCACAP shall enable the following programs and activities, among others:

1. Development of localized methodology for accounting and valuation of capital resources covered in the value chain of goods and services contemplated in this Act;

2. Development of implementing guidelines & methodology on capacity assessments;

3. Development of standards and indicators for calculating ecological footprints;

4. Development of circularity indicators and adequate metrics to assess performance in the context of a circular economy

5. Development of guidelines on damage compensation;
6. Design of finance modalities for payment for ecosystem services (PES) and user-fee system;
7. Implementing actual NCA and capacity assessment interventions;
8. Conduct of valuation of losses and damages for ecosystems;
9. Development of Data Transparency Arrangements and Reporting Systems;
10. Development of Information and Communications Technology (ICT) infrastructure/system/platform to support the implementation of the NCA and capacity assessment programs.

The DENR and the PSA shall lead the formulation and implementation of the NCACAP within one (1) year upon effectivity of this Act, in consultation with national government agencies concerned, including the Department of Information and Communications Technology (DICT), Philippine Council for Sustainable Development (PCSD), National Economic and Development Authority (NEDA), Department of Finance (DOF), Department of Tourism, (DOT) and Department of Agriculture (DA), Office of Civil Defense (OCD), Climate Change Commission (CCC), and relevant stakeholders.

c. The DOF shall identify incentives and market interventions to promote and facilitate the mainstreaming of the circular economy principles and practices consistent with the harmonization of incentives under existing laws.

d. The DTI, in coordination with the DILG, shall facilitate the cascading of circular economy systems and innovations, especially the opportunities for investments and development interventions, that may accelerate green economy at the local level, consistent with the framework and strategies under the PNAPSCP.
e. Non-government organizations, civil society organizations, and academe actively working in the fields of marine ecosystems, healthcare, forests conservation, mining and sustainable ecological agriculture, among others, shall be consulted by the NEDA, DENR, and PSA in the formulation of the PNAPSCP and NCACAP.

f. The academe, business sector, non-government organizations, and other stakeholders may be tapped to support the advocacy, capacity building, and other technical cooperation to assist the local government units concerned in the mainstreaming of circular economy in their operations, especially in institutional, resource, and citizen mobilization. As appropriate, they may be mobilized, subject to existing laws, policies, rules and regulations, to assist the local government units in crafting project proposals/feasibility studies for grants/blended financial packages for investment purposes as aligned with circular economy and its allied systems under this Act.

SEC 6. Innovation in products and services. The adoption of product and services standards aligned with circular economy principles shall be facilitated by DTI, DA, DENR, DICT, and Department of Public Works and Highways (DPWH), to be supported by research, development and demonstration for innovation led by the Department of Science and Technology (DOST). The DOST shall also lead in the capacitation of scientific and academic institutions, both public and private. Innovation contemplated in this Act shall include the following, among others²:

a. **Mobile technology** which enables universal and low-cost access to data and applications and reduces the need for physical resources;

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b. **Machine-to-Machine (M2M) Communication** being used in factory control systems and vehicle telematics enabling critical mass to mainstream M2M use as wireless network coverage expands worldwide;

c. **Cloud Computing/Dematerialization** which enables the replacement of "something physical" with a digital alternative transforming data and service industries and services;

d. **Social technology** which reduces the cost of setting up sharing platforms as it allows tapping into existing networks and receiving consumer feedback;

e. **Big Data Analytics** that, consistent with circular economy, enables organizations to generate revenues from product use instead of sales;

f. **Modular Design Technology** which revolutionizes not only how products function but also the length and nature of customers’ relationships with those products such that when a modularly designed product breaks, only the defective part is replaced or repaired extending its overall product lifecycle;

g. **Advanced Recycling Technology** which recognizes that recycling has benefited from innovation and returns on circular economy investments;

h. **Life and Material Sciences Technology** which leads to new circular material input options at scale and enables altering of outputs so they can be used as inputs;

i. **Trace and Return Systems** which supports circular business models by making it more cost-effective to collect used products in order to service, repair, recover, reuse, refurbish, or recycle them; and

j. **3-D Printing** which facilitates repairing and creates opportunities for circular inputs that are biodegradable or infinitely recyclable.
SEC. 7. Single-use Plastic Phase-Out and Source Reduction and Waste Minimization through Polluters Pay Principle/Extended Producer Responsibility Schemes. — The phase-out of single-use plastics by all business enterprises to consumers shall be in full force and in effect three (3) years from the effectivity of the Act. A phase-out and transition plan shall be formulated within one (1) year from the effectivity of this Act, and shall be led by the DENR thru the National Solid Waste Management Commission (NSWMC), in coordination with DTI, DOST, DILG, DOF, NEDA, Department of Labor and Employment (DOLE), and other government agencies concerned, and non-government stakeholders, as may be necessary.

The phase-out and transition plan shall include, but not limited to, the following components:

a. Single-use Plastic Production and Consumption Reduction Program, including phase-out;

b. Extended Producer Responsibility Schemes for business enterprises and plastic producers;

c. Greener Plastic Product Standards for plastic products that are made of compostable materials, and do not produce microplastics and can degrade naturally in the environment;

d. Research and Technology Development for Alternatives to Single-use Plastics Products;

e. Regulatory Instruments and Fiscal and Non-Fiscal Rewards and Incentives for Producers and Consumers;

f. Collection, Recovery and Recycling Plan for local governments and business enterprises;
g. Just transition plan for displaced workers in affected industries and ensure their access to livelihood support programs and other available green job opportunities;

h. Support to business enterprises adopting Zero Waste business models, refills and alternative delivery systems, and producing sustainably-sourced alternatives to SUP products;

i. Awareness-raising and other Information, Education and Communication Strategies for business enterprises, producers and consumers.

The Plan shall adopt a phased-transition approach towards phasing out plastic, recognizing the rippling effects of the phase-out to the economy, including the shift of business models of plastic producers and the livelihood opportunities for workers of plastic producers.

SEC. 8. **Life Cycle Assessment (LCA) Program.**—To ensure that the processes within the life cycle of goods, products and services circulating in the market are ecologically-responsive, a comprehensive life cycle assessment program shall be designed. The program shall implement the following activities, among others:

a. Extensive research and development that will inform the formulation of Product National Standards;

b. Formulation of a regulatory mechanism for business enterprises and corresponding institutional arrangements to safeguard and implement the regulations;

c. Establishment of thresholds for inclusion in Product National Standards;

d. Creation of LCA laboratories in partnership with academic institutions; and
e. Provision of incentives to business enterprises conducting life cycle assessments within their operations.

The DTI and DOST shall lead the implementation of the Program one (1) year after the effectivity of this Act, in consultation with national government agencies concerned, such as DENR, DOF, and Securities and Exchange Commission (SEC), academic institutions and industry stakeholders. The Program shall further strengthen the implementation of the Environmental Management System (EMS) Standards and National Eco-Labeling Programme (NELP) – Green Choice Philippines (GCP) under the DTI.

SEC. 9. Circular Public Procurement Program. — All departments, bureaus, offices, and agencies of the government shall establish their respective Circular Public Procurement Programs, which shall take into account circular economy standards. The Programs shall look into a phased-transition approach wherein annual target accomplishments are set within agencies. All agencies shall submit their respective Circular Public Procurement Program (GPPB) to the Government Procurement Policy Board within six (6) months from the effectivity of this Act. The GPPB shall in turn submit an annual report to the Congress of the Philippines on the compliance of agencies with this Act.

The GPPB, in coordination with the DBM, DTI, and Commission on Audit (COA), within thirty (30) days from the effectivity of this Act, shall issue the necessary guidelines to accelerate the optimal use of government resources through the procurement of public goods and services adhering to circular economy and sustainable consumption and production, subject to development and accountability
measures as may be appropriate and promulgated under the said joint implementing rules.

The GPPB shall develop and provide a capacity-building program for agencies to develop circular public procurement professionals and experts.

The Public-Private Partnership Center and the Bureau of Product Standards of the DTI, among others, shall ensure that the procurement for vital government infrastructure and enforcement of standards in the sale of products in the Philippines shall adhere to the principles under this Act.

SEC. 9. Integration of Permaculture Principles and Practices in Government Operations. - National government agencies (NGAs), government-owned and controlled corporations (GOCCs), state universities and colleges (SUCs) and local government units (LGUs) shall integrate permaculture principles and practices in their respective programs, services, projects, and operations.

The Department of Education (DepED) shall integrate permaculture education into the primary and secondary education curricula, which shall include basic permaculture concepts and principles, sustainable mobility, agrobiodiversity, saving seeds, establishing home, school and community food gardens, and ecological solid waste management, among others.

The Department of the Interior and Local Government (DILG) - Local Government Academy shall facilitate the development and provision of a training program for LGUs on implementing permaculture practices.

The Technical Education and Skills Development Authority (TESDA) shall offer technical-vocational skills training programs and certificate courses on permaculture design and practices geared toward the acquisition of practical skills and
employment and entrepreneurship opportunities, in line with Republic Act 10771 or the Green Jobs Act.

SEC 10. **Incentives and Rewards for the Public Sector.** – The DBM, in coordination with national government agencies concerned, shall institute an incentives and rewards system for NGAs, GOCCs, SUCs, and LGUs for choices in products, services, operations, and public works that adhere to the circular economy standards. The incentives and rewards system shall include the utilization of 25% of the savings generated from such measures for the payment of additional performance incentives.

SEC. 11. **Capacity-building for Government and Sectors.** - National government agencies shall promote and invest in capacity building for their institutions and stakeholders to enhance their technical, institutional, and implementation capacities to design, implement, and monitor circular economy programs and projects, including circular public procurement.

The DOLE, TESDA, DICT, and DENR, among other NGAs, shall extend technical assistance to their respective sectors and stakeholders in building their capacities to contribute to the implementation of this Act.

SEC. 12. **Strategic Communications Plan.**— The Philippine Information Agency (PIA) shall formulate and implement a strategic communications plan for sustainable consumption and production.

This Plan shall build on the existing plans and programs of the government, including among others, RA No. 9512 or the “National Environmental Awareness and Education Act of 2008”.

SEC. 13. **Mainstreaming Circular Economy in the National Government Budget.** - The DBM shall undertake the formulation of the annual national budget in
a way that ensures the alignment of the allocation of funds with circular economy and sustainable consumption and production standards and practices.

SEC. 14. Monitoring — The PCSD shall oversee the implementation of this Act and ensure that all provisions, plans and programs are formulated and implemented within the timelines set forth in this Act. It shall convene regularly, enjoin other relevant stakeholders, as it deems necessary, and establish a monitoring and evaluation system to track the progress of the implementation of this Act. The PCSD shall determine whether existing regulations hamper circular economic activities or resource efficiency and propose interventions such as lifting existing restrictions or setting positive legal frameworks.

SEC. 15. 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 to local government units (LGUs) to localize and inform communities on the strategies.

SEC. 16. Appropriations.— The amount necessary for initial implementation of this Act shall be taken from existing allocations of the 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.

SEC. 17. Implementing Rules and Regulations.— The NEDA, in coordination with the DENR, DTI, DOST, DICT, DOF, and PCSD, among other government agencies, shall issue implementing rules and regulations, within six (6) months after its approval. Failure to issue rules and regulations shall not in any manner affect the executory nature of the provisions Act.
SEC. 18. Separability Clause. — If for any reason any section or provision of this Act is declared by the Court as unconstitutional or invalid, the other sections or provisions thereof shall not be affected thereby.

SEC. 19. Effectivity. — This Act shall take effect fifteen (15) days after its publication in the Official Gazette or in at least two (2) national newspapers of general circulation.

Approved,