



MEMORANDUM

FOR : **The Undersecretaries**
Finance, Information Systems and Climate Change
Integrated Environmental Science

The Directors
Legal Affairs Service
Policy and Planning Service
Climate Change Service
Knowledge and Information Systems Service

All Bureau Directors

The Administrator
National Mapping and Resource Information Authority

The Executive Directors
Manila Bay Coordinating Office
River Basin Control Office
National Water Resources Board
Palawan Council for Sustainable Development

All Regional Executive Directors

The Officer-in-Charge
Mines and Geosciences Bureau

General Manager
Laguna Lake Development Authority

FROM : **The Director**
Legislative Liaison Office

SUBJECT : **INVITATION AND REQUEST FOR
COMMENTS/RECOMMENDATIONS TO THE PUBLIC
HEARING ON PHILIPPINE ECOSYSTEM AND NATURAL
CAPITAL ACCOUNTING SYSTEM (PENCAS) LAW AND BLUE
ECONOMY FROM THE SENATE COMMITTEE ON ECONOMIC
AFFAIRS**

DATE : 24 May 2023

The Committee on Economic Affairs Subcommittee on PENCAS Law and Blue Economy will hold a Hybrid Public Hearing on **29 May 2023, Monday, 09:00 AM** at the **Sen. Padilla Room, 2nd Floor, Senate of the Philippines** and via **Cisco Webex Videoconference** to discuss the following legislative measures:

A. Philippine Ecosystem and Natural Capital Accounting System (PENCAS) Law

- Senate Bill No. 9, “AN ACT INSTITUTIONALIZING THE PHILIPPINE ECOSYSTEM AND NATURAL CAPITAL ACCOUNTING SYSTEM (PENCAS), MANDATING ITS USE IN POLICY AND DECISION-MAKING, DESIGNATING THE AGENCIES RESPONSIBLE FOR ITS IMPLEMENTATION, PROVIDING INSTITUTIONAL ARRANGEMENTS AMONG RESPONSIBLE AGENCIES, APPROPRIATING FUNDS THEREFOR AND FOR OTHER PURPOSES” (Introduced by Sen. Loren B. Legarda)
- Senate Bill No. 1914, “AN ACT INSTITUTIONALIZING THE PHILIPPINE ECOSYSTEM AND NATURAL CAPITAL ACCOUNTING SYSTEM (PENCAS), APPROPRIATING FUNDS THEREFOR AND FOR OTHER PURPOSES” (Introduced by Sen. Ramon Bong Revilla Jr.)
- Senate Bill No. 2041, “ACT INSTITUTIONALIZING THE PHILIPPINE ECOSYSTEM AND NATURAL CAPITAL ACCOUNTING SYSTEM (PENCAS), APPROPRIATING FUNDS THEREFOR AND FOR OTHER PURPOSES” (Introduced by Sen. Joel Villanueva)

B. Blue Economy

- Senate Bill No. 1993, “AN ACT ESTABLISHING A FRAMEWORK FOR BLUE ECONOMY, PROMOTING STEWARDSHIP AND SUSTAINABLE DEVELOPMENT OF COASTAL AND MARINE ECOSYSTEMS AND RESOURCES” (Introduced by Sen. Loren B. Legarda)
- Senate Resolution No. 81, “RESOLUTION URGING THE SENATE COMMITTEE ON ECONOMIC AFFAIRS TO CONDUCT AN INQUIRY, IN AID OF LEGISLATION, ON THE ENORMOUS UNTAPPED POTENTIAL OF THE PHILIPPINE 'BLUE ECONOMY', AND TO REVIEW THE EFFECTIVENESS OF EXISTING LAWS IN BOOSTING ITS DEVELOPMENT” (Introduced by Sen. Grace Poe)

In this regard, we would like to invite you or your representative to attend the hearing and to submit your comments, in preparation for the upcoming public hearing, as requested by the Committee. Kindly submit your comments **on or before 26 May 2023, 5:00 PM** via email at denrilo@denr.gov.ph. Further, kindly inform us of the name/s of the representative/s from your office who will participate in the meeting so we may include him/her/them **as resource person/s**.

Attached herewith are the Letter Invitation and a copy of the Senate Bills for your reference.


ROMIROSE B. PADIN



Republic of the Philippines
CONGRESS OF THE PHILIPPINES

Senate
Pasay City

COMMITTEE ON ECONOMIC AFFAIRS
SUB-COMMITTEE ON PENCAS LAW AND BLUE ECONOMY
JOINT WITH THE COMMITTEES ON ENVIRONMENT, NATURAL RESOURCES AND CLIMATE CHANGE;
AND FINANCE

23 May 2023

HON. MARIA ANTONIA LOYZAGA

Secretary
Department of Environment and Natural Resources

Dear **Secretary Loyzaga**:

Please be informed that the **Committee on Economic Affairs** Sub-Committee on PENCAS Law and Blue Economy will conduct a **Hybrid Public Hearing on Monday, 29 May 2023, 9:00 a.m.** at the **Sen. Padilla Room, 2nd Floor, Senate of the Philippines** and via Cisco Webex Videoconference. The Committee will discuss and deliberate the following legislative measures:

A. PHILIPPINE ECOSYSTEM AND NATURAL CAPITAL ACCOUNTING SYSTEM (PENCAS) LAW

- **Senate Bill No. 9**, "AN ACT INSTITUTIONALIZING THE PHILIPPINE ECOSYSTEM AND NATURAL CAPITAL ACCOUNTING SYSTEM (PENCAS), MANDATING ITS USE IN POLICY AND DECISION-MAKING, DESIGNATING THE AGENCIES RESPONSIBLE FOR ITS IMPLEMENTATION, PROVIDING INSTITUTIONAL ARRANGEMENTS AMONG RESPONSIBLE AGENCIES, APPROPRIATING FUNDS THEREFOR AND FOR OTHER PURPOSES" *(Introduced by Sen. Loren B. Legarda)*
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B. BLUE ECONOMY

- **Senate Bill No. 1993**, "AN ACT ESTABLISHING A FRAMEWORK FOR BLUE ECONOMY, PROMOTING STEWARDSHIP AND SUSTAINABLE DEVELOPMENT OF COASTAL AND MARINE ECOSYSTEMS AND RESOURCES" *(Introduced by Sen. Loren B. Legarda)*
- **Senate Resolution No. 81**, "RESOLUTION URGING THE SENATE COMMITTEE ON ECONOMIC AFFAIRS TO CONDUCT AN INQUIRY, IN AID OF LEGISLATION, ON THE ENORMOUS UNTAPPED POTENTIAL OF THE PHILIPPINE 'BLUE

ECONOMY', AND TO REVIEW THE EFFECTIVENESS OF EXISTING LAWS IN BOOSTING ITS DEVELOPMENT" (*Introduced by Sen. Grace Poe*)

In this regard, may we invite you as a **Resource Person** to this meeting. Your **physical presence** is earnestly requested. The Committee would like to hear about your office's informed opinion on the aforementioned bills. Furthermore, may we request your confirmation as well as the email address/es of officers and staff who will be joining this meeting.

Kindly note of the health protocols that are currently enforced for Senate Resource Persons and guests (*please see attached*).

We would also appreciate if you could provide us a copy of your **position paper** on or before **Monday, 29 May 2023**.

Moreover, the Committee respectfully requests that you send in advance a soft copy of your presentation/briefing materials to the Committee Secretariat. Please note that a presentation during the public hearing shall be allowed only after its review and approval by the Office of the Chairperson.

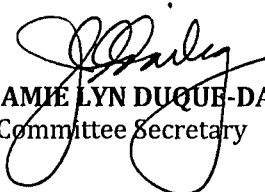
For any clarification on the matter, please feel free to contact the undersigned Committee Secretary at (02) 8552-6820, (02) 8552-6601 locals 3303, 3305 and 3306; Viber/WhatsApp (+63) 927 833 1222; or thru senateeconaffairs.19thcongress@gmail.com and econaffairs.senate@gmail.com.

Thank you very much.

For the Chairperson:

SEN. LOREN B. LEGARDA

Sub-Committee on PENCAS Law and Blue Economy


(MS.) JAMIE LYN DUQUE-DAILEG
Committee Secretary

AGENDA

Committee on Ways and Means
May 30, 2023 (Tuesday) at 8:30 A.M.

ZOOM MEETING

ZOOM LINK - Meeting ID: 981 4871 4191
Passcode: 866717

- I. CALL TO ORDER
- II. CHAIRMAN'S MESSAGE
- III. AUTOMATIC REFERRAL

From the Committee on Energy

FIRST DELIBERATION on the Unnumbered Substitute Bill to House Bills No. 17, 29, 173, 3015, 4097, 4267, 4615, 5811, 6235, 6247, and 7329, entitled "AN ACT PROMOTING THE DEVELOPMENT OF THE PHILIPPINE DOWNSTREAM NATURAL GAS INDUSTRY, CONSOLIDATING FOR THE PURPOSE ALL LAWS RELATING TO THE TRANSMISSION, DISTRIBUTION AND SUPPLY OF NATURAL GAS, AND APPROPRIATING FUNDS THEREFOR," authored by Reps. Romualdez, Velasco, et al.

Revenue Provisions:

Sec. 22. Fees - x x x

Sec. 33. Fiscal Incentives - x x x

Guests/Resource Persons:

- | | |
|-----------------------------------------|----------------------------|
| 1. Rep. Lord Allan Jay Q. Velasco | Author and Chairperson |
| 2. Sec. Benjamin E. Diokno, Ph.D. | Committee on Energy |
| 3. Sec. Raphael P.M. Lotilla | Department of Finance |
| 4. Comr. Romeo D. Lumagui, Jr. | Department of Energy |
| 5. Exec. Dir. Marlene A. Lucero-Calubag | Bureau of Internal Revenue |
| | Natl. Tax Research Center |

- IV. **DELIBERATION** on the Unnumbered Substitute Bill to House Bills No. 373, 2014, 2246, 3888, and 8050, entitled "AN ACT ESTABLISHING THE FISCAL REGIME FOR THE MINING INDUSTRY, AMENDING FOR THE PURPOSE SECTION 34(B), AND CREATING NEW SECTIONS 151-A, 151-B, 151-C, AND 151-D, ALL UNDER REPUBLIC ACT NO. 8424, OTHERWISE KNOWN AS THE NATIONAL INTERNAL REVENUE CODE OF 1997, AS AMENDED," authored by Reps. Salceda, Villafuerte Jr., Villafuerte (M), Horibata, Enciso, Quimbo, Colada, Cua, et al.

Guests/Resource Persons:

- | | |
|-------------------------------------------------|----------------------------------------------------------|
| 1. Rep. Lex Anthony Cris A. Colada | Author |
| 2. Rep. Luis Raymund "LRay" F. Villafuerte, Jr. | Author |
| 3. Rep. Miguel Luis R. Villafuerte | Author |
| 4. Rep. Tsuyoshi Anthony G. Horibata | Author |
| 5. Rep. Nicholas C. Enciso VIII | Author |
| 6. Rep. Stella Luz A. Quimbo | Author |
| 7. Rep. Midy N. Cua | Author |
| 8. Sec. Benjamin E. Diokno | Department of Finance |
| 9. Mr. Eastword Manlises | DOF- Phil. Extractive Industries Transparency Initiative |
| 10. Sec. Maria Antonia Yulo Loyzaga | Dept. of Environment & Natural Resources |

11. Dir. Atty. Danilo U. Uykieng
12. Engr. Romualdo D. Aguilos
13. Comr. Atty. Romeo Lumagui, Jr.
14. Exec. Dir. Marlene A. Lucero-Calubag
15. Mr. Michael T. Toledo
16. Atty. Ronald Rex Recidoro
17. Mr. Filomeno Sta. Ana III
18. Mr. Vincent T. Lazatin
19. Mr. Cirilo Pestano
20. Ms. Angelita I. Lee
21. Mr. Jaybee Garganera
22. Atty. Gus Gatmaitan, Ph.D.
23. Exec. Dir. Charmaine Olea-Capili

DENR - Mines and Geosciences Bureau
DENR - Mines and Geosciences Bureau
Bureau of Internal Revenue
Natl. Tax Research Center
Chamber of Mines
Chamber of Mines
Bantay Kita
Bantay Kita
Cement Manufacturing Assn. of the Phils.
Eastern Rizal Miners Association
Alyansa Tigil Mina (ATM)
Legal Rights and Natural Resources Center
Phil. Nickle Industry Association

V. OTHER MATTERS

VI. ADJOURNMENT

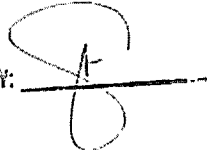
**NINETEENTH CONGRESS OF THE
REPUBLIC OF THE PHILIPPINES**
First Regular Session

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)
)



23 MAR 22 P5:05

SENATE

RECEIVED BY: 

S.B. No. 2041

Introduced by **SENATOR JOEL VILLANUEVA**

**AN ACT
INSTITUTIONALIZING THE PHILIPPINE ECOSYSTEM AND NATURAL
CAPITAL ACCOUNTING SYSTEM (PENCAS), APPROPRIATING
FUNDS THEREFOR AND FOR OTHER PURPOSES**

EXPLANATORY NOTE

National income accounts measure a country's economic activity and economic wellbeing, including the flows from production to consumption, foreign trade, and asset accumulation, which are useful in economic analysis, decision-making, and policy formulation. The broadest and most widely used measure of national income is Gross Domestic Product (GDP). However, this is an incomplete assessment of a country's economic wellbeing as GDP only looks at one part of economic performance, i.e., output, and does not take into account the wealth underpinning this output, including a country's natural capital.

Natural capital includes resources such as minerals, energy, timber, agricultural land, fisheries, and water. It also includes ecosystem services, whose values are not readily captured in markets, such as air and water filtration, flood protection, carbon storage, and habitats for wildlife. Natural capital is particularly important to many developing countries as it makes up a large share of their total wealth and the livelihoods of several communities depend directly on healthy ecosystems.¹ Incorporating natural capital into national accounts will provide a broader picture of development progress than traditional measures of GDP. It will reveal how natural resources contribute to the economy and how the economy affects natural resources.

According to the Philippine Statistics Authority (PSA), our natural resources composed of mineral, cropland, timber, and coastal and marine resources make up an estimated 19% of the nation's wealth, contributing largely to our economic

¹ Wealth Accounting and Valuation of Ecosystem Services (WAVES). *FAQs on Natural Capital Accounting*. Available at <https://www.wavespartnership.org/en/frequently-asked-questions-natural-capital-accounting-nca>. Accessed on 17 March 2023.

development. However, rapid growth and climate change are adding pressure to our already strained natural resources.²

Thus, this bill seeks to develop a comprehensive information system and accounting framework that will take into consideration our natural capital and its impact on the country's economy, institutionalizing the Philippine Ecosystem and Natural Capital Accounting System (PENCAS). The PENCAS shall follow the international standard approved by the United Nations Statistical Commission called the System of Environmental-Economic Accounting (SEEA). This measure also aims to provide indicators that will facilitate the integration of environmental and natural resource concerns in national development planning and policy making.

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



JOEL VILLANUEVA 

² Philippine Statistics Authority. *Phil-WAVES*. Available at <https://psa.gov.ph/phil-waves>. Accessed on 22 March 2023.

NINETEENTH CONGRESS OF THE
REPUBLIC OF THE PHILIPPINES
First Regular Session



23 MAR 22 P5:05

SENATE

RECEIVED BY:

S.B. No. 2041

Introduced by **SENATOR JOEL VILLANUEVA**

AN ACT
INSTITUTIONALIZING THE PHILIPPINE ECOSYSTEM AND NATURAL
CAPITAL ACCOUNTING SYSTEM (PENCAS), APPROPRIATING
FUNDS THEREFOR AND FOR OTHER PURPOSES

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

1 **SECTION 1. *Short Title.*** – This Act shall be known as the “Philippine Ecosystem
2 and Natural Capital Accounting System (PENCAS) Act.”
3

4 **SEC. 2. *Declaration of Policy.*** – It is hereby declared the policy of the State to:
5

- 6 a) Promote the common good, conserve and develop our patrimony, as provided in
7 the Preamble of the Constitution, natural capital being the bedrock of the national
8 patrimony;
9
- 10 b) Develop a comprehensive information system and accounting framework that
11 will take into consideration the role of our natural capital, consisting of both
12 environmental and natural resources, and its impact on the country’s economy;
13
- 14 c) Include and institutionalize natural capital accounting as part of the national
15 income accounting system, strengthening and building on Republic Act No.
16 10625, otherwise known as the “Philippine Statistical Act of 2013,” on
17 environmental accounts and statistics;
18
- 19 d) Provide indicators that will facilitate the integration of environmental and natural
20 resource concerns in national development planning and policy making, in
21 allocation of budgets, and in designating statistics that will be produced regularly
22 for an identified period of analysis;
23
- 24 e) Establish and improve inter-agency coordination for the purpose of linking
25 economic with environmental and natural resource information and efficient data

1 management among concerned government agencies and their partner
2 institutions, and to establish an office to guide such coordination; and
3

- 4 f) Include nature's pricelessness, its intrinsic value, and its interdependencies in
5 the implementation of the foregoing policies to consider that nature and
6 ecosystems have intrinsic rights to exist, with an end in view of recognizing legal
7 rights that serve to protect endangered ecosystems and applying the
8 precautionary principle, especially when economic values cannot be estimated.
9

10 **SEC. 3. Definition of Terms.** – For purposes of this Act, the following terms are
11 hereby defined as follows:
12

- 13 a) *Ecosystem* refers to a complex community of living organisms, their physical
14 environment, and all their interrelationships in a particular unit of space, the biotic
15 and abiotic components of which are linked together through nutrient cycles and
16 energy flows;
17
18 b) *Capital* refers to a stock concept, which yields a periodic income, which is a flow
19 concept;
20
21 c) *Natural Capital* refers to the concept of nature as a stock that provides a flow of
22 benefits to people and the economy, and consists of stocks of natural assets,
23 both biotic and abiotic. It includes air, water, soil, minerals, forests, coral reefs,
24 seagrass beds, and all living things, and from which humans derive a wide range
25 of goods and services, which make human life possible;
26
27 d) *Ecosystem Services* refer to goods and services that natural capital provides,
28 such as food, water, energy or climate regulations;
29
30 e) *United Nations System of Environmental-Economic Accounting (SEEA)* refers to
31 the framework that integrates both economic and environmental data to provide
32 a more comprehensive and multipurpose view of the interrelationships between
33 the economy, the environment, and ecosystems, and the stocks and changes in
34 stocks of natural assets, as they bring benefits to humanity.
35

36 **SEC. 4. Philippine Environmental and Natural Capital Accounting System**
37 **(PENCAS).** – A system of Environmental-Economic Accounting is hereby
38 institutionalized within the government bureaucracy. The Philippine Environmental
39 and Natural Capital Accounting System (PENCAS) shall be based on the existing
40 environmental accounting frameworks that are covered by the UN SEEA and are
41 theoretically correct and accepted as evaluated based on international standards.
42 Among others, the PENCAS framework shall include a list of the officially designated
43 statistics on the depreciation of natural capital, environmental protection expenditures,
44 pollution and quality of land, air and sea, environmental damages, and genuine
45 savings. It shall conform to, and expound, expand and localize the UN SEEA. A
46 roadmap and manual for further development of these indicators for each of the
47 terrestrial (land and freshwater) and blue (marine) economies shall be formulated. The
48 roadmap and international manuals shall be customized to the ecosystems in the
49 Philippine archipelago that support the terrestrial and blue economies. All these data
50 shall constitute the Philippines' natural capital, the conservation of which shall be

1 paramount.

2
3 **SEC. 5. Objectives of the PENCAS.** – The PENCAS shall supplement the
4 current System of National Accounts and shall have the following major functions:

- 5
6 a) To support economic-environmental policy development and decision-making;
7
8 b) To generate the Philippine version of the UN SEEA satellite accounts covering
9 both the Central Framework and the Ecosystem Accounts;
10
11 c) To serve as a comprehensive data framework in the generation of PENCAS
12 statistics; and
13
14 d) To ensure that ecosystems and habitats, especially the ones in critical danger of
15 irreparable damage, are conserved and restored, in line with the objectives and
16 timelines of key Multilateral Environmental Agreements, including the United
17 Nations Decade of Ecological Restoration and the 2030 Agenda for Sustainable
18 Development.

19
20 **SEC. 6. National Economic and Development Authority (NEDA) as the Lead**
21 **Agency.** – The NEDA shall be the lead agency in fulfilling the objectives of this Act. It
22 shall coordinate the performance of the functions of the involved agencies enumerated
23 herein.
24

25 **SEC. 7. Involvement of Government Agencies.** – The following government
26 agencies and the concerned offices and bureaus under or attached to them shall be
27 involved in the establishment and institutionalization of the PENCAS:
28

- 29 a) National Economic and Development Authority (NEDA) as the Lead Agency;
30 b) Philippine Statistics Authority (PSA);
31 c) Department of Environment and Natural Resources (DENR);
32 d) Department of Agriculture (DA);
33 e) Department of Energy (DOE);
34 f) Department of Tourism (DOT);
35 g) Department of Transportation (DOTr);
36 h) Department of Public Works and Highways (DPWH);
37 i) Department of Trade and Industry (DTI);
38 j) Department of Health (DOH);
39 k) Department of the Interior and Local Government (DILG);
40 l) Department of Science and Technology (DOST);
41 m) Department of Human Settlements and Urban Development (DHSUD); and
42 n) Other agencies as necessary.
43

44 **SEC. 8. Creation of the Natural Capital Units.** – Natural Capital Units shall be
45 created within the organizational structure of the NEDA, PSA, DENR, DA, DOE, DOT,
46 DOTr, DPWH, DTI, DOH, DILG, DOST, DHSUD, and other agencies as necessary.
47

48 The head of the Natural Capital Units in the foregoing government agencies shall
49 be a Division Chief or higher. The head of the agency shall designate existing
50 personnel within the agency or hire new ones within its budget to operate its Natural

1 Capital Unit.

2
3 **SEC. 9. *Natural Capital Units at National Agencies.*** – The Natural Capital
4 Units at the NEDA, PSA, DENR, DA, DOE, DOT, DOTr, DPWH, DTI, DOH, DILG,
5 DOST, and DHSUD shall:

- 6
7 a) Develop and apply, with its various offices, attached agencies, GOCCs and
8 beneficiaries, the data collection, development and compilation of resource or
9 natural asset and ecosystem service accounts, environmental and emission
10 accounts, and ocean accounts, relevant to each agency's mandates, and
11 formulate viable data development approaches and methodologies in
12 coordination with PSA;
13
14 b) Collaborate with the science community in conducting studies and research in
15 support of policy development related to PENCAS;
16
17 c) Ensure that sustainable development principles, especially regenerative
18 resource use, resource conservation and climate, environmental and indigenous
19 biodiversity considerations, are integrated in all its bureaus and offices and in
20 their policy, national and project planning and implementation based on PENCAS
21 results; and strengthen its statistical capabilities, especially regulatory monitoring
22 to provide environmental and natural resources data and accounts to other
23 national government agencies, local government units (LGUs), private sector,
24 civil society, and other data users;
25
26 d) Prioritize the data generation for the PENCAS accounts for the blue economy,
27 particularly for areas of national patrimony most in danger of exploitation and
28 appropriation, such as the West Philippine Sea and the Philippine Rise; and
29
30 e) Institutionalize open data for the studies and research in support of policy
31 development related to PENCAS.
32

33 The DILG shall assist the LGUs in building capacity and performing the above
34 functions as far as they are able in order to build their own PENCAS accounts. It shall
35 also consolidate local government data and statistics and compare these with the
36 national accounts as generated by the other agencies.
37

38 **SEC. 10. *Staffing Pattern for Natural Capital Units.*** – The agencies concerned
39 shall, as far as practicable, utilize existing qualified employees for staffing the Natural
40 Capital Units. In case, however, of the lack of qualified employees who have the skills
41 and capabilities required of the functions of the Units, the concerned agency shall be
42 allowed to include new plantilla items, subject to the approval of the Department of
43 Budget and Management (DBM) and in accordance with the rules and regulations of
44 the Civil Service Commission (CSC).
45

46 **SEC. 11. *Functions of the NEDA.*** – The Natural Capital Unit at the NEDA shall:

- 47
48 a) Coordinate the conduct of consultations, orientations, and training seminars on
49 the PENCAS and its implementation for the national government agencies,
50 LGUs, and other concerned institutions, as well as the private sector and civil

1 society organizations, upon their request;

- 2
- 3 b) Coordinate the conduct of studies and research in support of policy development
4 related to PENCAS and provide training for non-governmental entities on
5 generating natural capital data and statistics;
6
- 7 c) Establish a mechanism for integration of environmental and regenerative
8 resource conservation considerations in national, regional, local and sectoral
9 planning, policy, project development and implementation based on PENCAS
10 results, particularly assuring that legally extracted resources and energy are
11 sufficient for the plans for their sustainable use;
12
- 13 d) Formulate and update indicators on the economy-environment interactions and
14 regenerative and sustainable development indices; and
15
- 16 e) Provide technical services to the (i) Development Budget Coordination
17 Committee (DBCC) for the integration of environment, ecosystems, natural
18 capital, and climate change in macroeconomic planning and allocation of
19 expenditures and capital outlays; (ii) NEDA Investments Coordinating Committee
20 (ICC) that would review completeness of project evaluation and ensure that it is
21 inclusive of economic benefits and costs, sources of proposed natural resources,
22 risks and uncertainty due to climate change, natural capital, environmental,
23 biodiversity and social safeguards, justification of use of non-renewable
24 resource, and matching of natural capital supply and demand; and (iii) any Task
25 Force/s or entities which may be created for the coordinated functioning of the
26 data-gathering agencies and quality decision-making.
27

28 **SEC. 12. Functions of the PSA.** – The Natural Capital Unit at the PSA shall:
29

- 30 a) Compile and collate PENCAS accounts, and study and formulate viable
31 approaches and methodologies for the PENCAS;
32
- 33 b) Formulate templates, guidelines and digital aids to ensure that all units,
34 especially local governments, generating PENCAS data do so in a manner that
35 can be efficiently consolidated, compared and analyzed, and ensure public
36 accessibility for these tools;
37
- 38 c) Explore ways and means to modify and improve current environmental and
39 economic statistics, in coordination with the concerned data producers and
40 users, including those in the academe, private sector, and non-governmental
41 organizations;
42
- 43 d) Include natural resource and environment-related questions in the PSA's census
44 and surveys, such as, but not limited to, Census of Establishments, Annual
45 Survey of Philippine Business and Industry, Family Income and Expenditure
46 Survey, Labor Force Survey, Survey on Tourism Establishments, Surveys of
47 Household and Establishment Energy Consumption, Fisheries and Aquaculture
48 Surveys, Agriculture, Livestock and Poultry Surveys, and Community Based
49 Monitoring System;
50

- 1 e) Collect data up to the fourth-digit level of the Philippine Standard for Industrial
2 Classification particularly for data needed in the ocean accounts;
3
4 f) Develop a satellite account for the oceans, including ocean-based and ocean-
5 related economic activities or sectors, coastal and marine ecosystems (e.g.,
6 mangroves, seagrass, coral reefs, tidal flats, etc.), and marine water quality;
7
8 g) Enhance the water accounts to include both water resources (quantity), water
9 quality for surface water and groundwater (water asset account), and water
10 supply and use account, including water supply in relation to climate trends of
11 extreme climatic events in coordination with DENR and its Environmental
12 Management Bureau (EMB) and National Water Resources Board (NWRB), and
13 DPWH and its Bureau of Research and Standards;
14
15 h) Update the Input-Output table regularly, incorporating the PENCAS accounts;
16 and
17
18 i) Serve as a repository of all PENCAS-related data and materials through the
19 National Statistical Information Center and make the PENCAS data available on
20 the PSA website.
21

22 **SEC. 13. Role of Local Government Units.** – In the planning and local
23 legislation duties, the LGUs shall endeavor to create and populate PENCAS accounts,
24 in compliance with templates and guidelines from the PSA and DILG, and in addition,
25 employ other innovative measures and methods of resource valuation, damage
26 estimation, ecosystem services and natural capital accounting to highlight their
27 ecological competitive edge.
28

29 **SEC. 14. Data and Research Support.** – The PSA shall, in coordination with
30 the involved agencies, designate the required environment and economic statistics in
31 the agencies and bureaus that shall be responsible for generating such data. The DBM
32 shall ensure that such research and data management are supported to prevent
33 government spending that would unduly compromise PENCAS accounts and
34 ecosystem services.
35

36 **SEC. 15. Government Planning Mechanisms and the Environmental Impact
37 Assessment System.** – In all government planning, considerations of PENCAS shall
38 be included. In the Environmental Impact Assessment System, the DENR shall ensure
39 that the natural environment, ecosystem services, and natural capital are framed as
40 opportunities, benefits, or assets as opposed to being merely a constraint or backdrop
41 to absorb impacts. The NEDA and the DENR shall ensure a wide availability of tools,
42 methods, and skills that can support the consideration of ecosystem services as part
43 of the Environmental Impact Assessment and ensure the inclusion of such in the
44 development of the Implementing Rules and Regulations (IRR), further including in
45 such rules accounting for activities that may degrade the natural capital considerably
46 despite not being under the coverage of the Philippine Environmental Impact
47 Statement (EIS) System.
48

49 **SEC. 16. PENCAS in the Educational System.** – The Department of Education
50 (DepEd), Commission on Higher Education (CHED), and Professional Regulation

1 Commission (PRC) shall lead in mainstreaming PENCAS in all relevant modules,
2 courses, curriculum, training, and licensure examination. They may establish
3 partnerships with different educational institutions and private entities for learning and
4 development in forms of resource sharing, module and training development,
5 standards development, and other similar forms.
6

7 **SEC. 17. Participatory Mechanisms and Citizen Remedies.** – Each Natural
8 Capital Unit shall institute consultative mechanisms, mass collaboration measures and
9 digital comment and recommendation solicitations to effectively popularize PENCAS
10 and ensure wide comprehensibility and usage of the accounts.
11

12 Any Filipino citizen shall have:

- 13
- 14 a) the right to information on any accounts generated under this Act;
 - 15
 - 16 b) the standing to compel the performance of any of the mandates under this Act;
17 and
 - 18
 - 19 c) the right to seek justification from any government agency who may have ignored
20 or neglected PENCAS data in their policy or decision-making.
21

22 Major PENCAS accounts, results on nature's wealth and the economic value of
23 ecosystem services shall be released along with all releases of national economic
24 data, such as GNP, GDP, and other similar indicators of economic condition, and
25 highlight the contribution of resources and ecosystems to the economy, income, and
26 employment.
27

28 **SEC. 18. Rights of Nature.** – Nothing in this Act shall be construed to mean that
29 nature has no intrinsic value separate and distinct from its economic value, or that it
30 loses interdependencies and pricelessness by such valuation. Whenever data or
31 accounts tend to show that valuation of ecosystems or discrete and identified life-
32 support mechanisms will commodify and/or degrade them, any citizen is authorized to
33 submit a registration to the NEDA for the latter's recognition of such intrinsic value and
34 the right of such ecosystem or mechanism to exist and maintain its integrity, which
35 registration the NEDA is required to accept. The generated data and accounts can still
36 be used but only for the purpose of the recognition of such rights rather than for
37 commodification or ecologically unacceptable trade-offs.
38

39 **SEC. 19. Appropriations.** – The amount necessary to implement this Act shall
40 be sourced from the excesses in funds, such as the funds under Republic Act No.
41 9147, otherwise known as the "Wildlife Resources Conservation and Protection Act,"
42 Republic Act No. 8749, otherwise known as the "Philippine Clean Air Act," and similar
43 special accounts, especially the ones that have remained dormant.
44

45 The allocations shall be based on the plan and priorities decided by the NEDA,
46 in coordination with the agencies performing the functions. These shall be included in
47 the budget preparation of each agency to be incorporated in the annual General
48 Appropriations Act under separate fund items.
49

50 **SEC. 20. Implementing Rules and Regulations (IRR).** – Within ninety (90)

1 days from the effectivity of this Act, the NEDA shall, in consultation and coordination
2 with appropriate national government agencies, civil society organizations, private
3 sector, and other stakeholders, promulgate the IRR for the effective implementation of
4 this Act.

5
6 **SEC. 21. Separability Clause.** – Should any provision of this Act or part hereof
7 be declared unconstitutional, the other provisions or parts not affected thereby shall
8 remain valid and effective.

9
10 **SEC. 22. Repealing Clause.** – All laws, decrees, orders, and issuances, or
11 portions thereof, which are inconsistent with the provisions of this Act, are hereby
12 repealed, amended, or modified accordingly.

13
14 **SEC. 23. Effectivity.** – This Act shall take effect fifteen (15) days after its
15 complete publication in the *Official Gazette* or in a newspaper of general circulation.

Approved,

NINETEENTH CONGRESS OF THE)
REPUBLIC OF THE PHILIPPINES)
First Regular Session)



23 FEB 21 P 6 :28

SENATE

S. No. 1914

RECEIVED BY

Introduced by SENATOR RAMON BONG REVILLA, JR.

**AN ACT
INSTITUTIONALIZING THE PHILIPPINE ECOSYSTEM AND NATURAL
CAPITAL ACCOUNTING SYSTEM (PENCAS), APPROPRIATING FUNDS
THEREFOR AND FOR OTHER PURPOSES**

EXPLANATORY NOTE

The national income accounts (NIA) are important indicators that determine the country's development. Traditionally, NIA systems measure economic performance by determining the aggregate value of goods and services produced in a country to come up with indicators of economic development such as the Gross Domestic Product (GDP). However, this is an incomplete picture of a development without considering the natural capital.

The natural capital is a crucial component of our country's wealth. In addition to economic and social capital, natural capital accounts (NCA) for the stock of renewable and non-renewable resources which provide a flow of benefits to people. It includes the ecosystem services that are often "invisible" to most people such as, flood protection, carbon sequestration and habitats for wildlife, among others.

The efforts to institutionalize the Ecosystem and Natural Capital Accounting System started in the 1990s. Indicators and standards generated by the NIA system are considered vital to economic management and policy-making. They serve as the basis for socio-economic planning, formulation of development programs, and policy

analysis in aid of legislation, among others. Thus, it is important that the national income accounts reflect a more accurate state of development and economic performance of the country. It should incorporate both environmental and non-environmental economic inputs and outputs for policymakers to make responsive, relevant and effective laws, plans and programs necessary for national development.

This bill seeks to institutionalize a Philippine Ecosystem and Natural Capital Accounting System (PENCAS) to reflect environmental inputs and outputs in the determination of national income accounts. It aims to develop ecosystem accounts and creation of NCA units within government agencies.

In view of the holistic appreciation of the country's development, the passage of this measure is highly recommended.


RAMON BONG REVILLA, JR.

NINETEENTH CONGRESS OF THE)
REPUBLIC OF THE PHILIPPINES)
First Regular Session)



23 FEB 21 P 6:28

SENATE
S. No. 1914

RECEIVED BY

Introduced by SENATOR RAMON BONG REVILLA, JR.

AN ACT
INSTITUTIONALIZING THE PHILIPPINE ECOSYSTEM AND NATURAL CAPITAL ACCOUNTING SYSTEM (PENCAS), APPROPRIATING FUNDS THEREFOR AND FOR OTHER PURPOSES

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

- 1 Section 1. *Short Title.* - This Act shall be known as the "*Philippine Ecosystem*
2 *and Natural Capital Accounting System (PENCAS) Law of 2023*".
- 3 Sec. 2. *Declaration of Policy.* - It is hereby declared the policy of the State to:
- 4 a. Promote the common good, conserve and develop our patrimony, as provided
5 in the Preamble of the Constitution, natural capital being the bedrock of the
6 national patrimony;
- 7 b. Develop a comprehensive information system and accounting framework that
8 will take into consideration the role of our natural capital, consisting of both
9 environmental and natural resources, and its impact on the country's economy;
- 10 c. Include and institutionalize natural capital accounting as part of the national
11 income accounting system, strengthening and building on Republic Act No.
12 10625, otherwise known as the "*Philippine Statistical Act of 2013*", on
13 environmental accounts and statistics;
- 14 d. Provide indicators that will facilitate the integration of environmental and
15 natural resource concerns in national development planning and policy making,

1 in allocation of budgets, and in designating statistics that will be produced
2 regularly for an identified period of analysis;

3 e. Establish and improve inter-agency coordination for the purpose of linking
4 economic with environmental and natural resource information and efficient
5 data management among concerned government agencies and their partner
6 institutions, and to establish an office to guide such coordination; and,

7 f. Include nature's pricelessness, its intrinsic value, and its interdependencies in
8 the implementation of the foregoing policies to consider that nature and
9 ecosystems have intrinsic rights to exist, with an end in view of recognizing
10 legal rights that serve to protect endangered ecosystems and applying the
11 precautionary principle, especially when economic values cannot be estimated.

12 *Sec. 3. Definition of Terms.* – For purposes of this Act, the following terms are
13 hereby defined as follows:

14 a. "*Ecosystem*" is a complex community of living organisms, their physical
15 environment, and all their interrelationships in a particular unit of space, and
16 these biotic and abiotic components are linked together through nutrient cycles
17 and energy flows;

18 b. "*Capital*" is a stock concept, which yields a periodic income, which is a flow
19 concept;

20 c. "*Natural capital*" is the concept of nature as a stock that provides a flow of
21 benefits to people and the economy. Natural capital consists of stocks of
22 natural assets – both biotic and abiotic. It includes air, water, soil, minerals,
23 forests, coral reefs, seagrass beds, and all living things. It is from this natural
24 capital that humans derive a wide range of goods and services, which make
25 human life possible. The goods and services that natural capital provides, such
26 as food, water, energy or climate regulations, are called ecosystem services.
27 These provide people everywhere with the means for healthy lives and
28 underpin all economic activity;

29 d. "*Ecosystem services*" are the flows of benefits, which people gain from natural
30 ecosystems, while natural capital consists of the stock of natural ecosystems or
31 stock of renewable and non-renewable natural resources from which these
32 benefits flow; and

1 e. "*The United Nations System of Environmental-Economic Accounting (SEEA)*" is
2 a framework that integrates both economic and environmental data to provide
3 a more comprehensive and multipurpose view of the interrelationships between
4 the economy, the environment and ecosystems, and the stocks and changes in
5 stocks of natural assets, as they bring benefits to humanity.

6 Sec. 4. *Philippine Environmental and Natural Capital Accounting System*
7 (*PENCAS*). – A system of Environmental-Economic Accounting is hereby
8 institutionalized within the government bureaucracy. The Philippine Environmental
9 and Natural Capital Accounting System (*PENCAS*) shall be based on the existing
10 environmental accounting frameworks that are covered by the UN *SEEA* and are
11 theoretically correct and accepted as evaluated based on international standards.
12 Among others, the *PENCAS* framework shall include a list of the officially designated
13 statistics on the depreciation of natural capital, environmental protection expenditures,
14 pollution and quality of land, air and sea, environmental damages, and genuine
15 savings. It shall conform to and expound, expand and localize the UN *SEEA*. A
16 roadmap and manual for further development of these indicators for each of the
17 terrestrial (land and freshwater) and blue (marine) economies shall be formulated.
18 The draft roadmap and international manuals shall be customized to the ecosystems
19 in the Philippine archipelago that support the terrestrial and blue economies. All these
20 data shall constitute the Philippines' natural capital, the conservation of which shall be
21 paramount.

22 Sec. 5. *Objectives of the PENCAS*. – The *PENCAS* shall supplement the current
23 System of National Accounts and shall have the following major functions:

- 24 a. To support economic-environmental policy development and decision-making;
- 25 b. To generate the Philippine version of the UN *SEEA* satellite accounts covering
26 both the Central Framework and the Ecosystem Accounts;
- 27 c. To serve as a comprehensive data framework in the generation of *PENCAS*
28 statistics; and
- 29 d. To ensure that ecosystems and habitats, especially the ones in critical danger
30 of irreparable damage, are conserved and restored, in line with the objectives
31 and timelines of key Multilateral Environmental Agreements, including the

1 United Nations Decade of Ecological Restoration and the 2030 Agenda for
2 Sustainable Development.

3 *Sec. 6. National Economic and Development Authority (NEDA) as the Lead*
4 *Agency.* - NEDA shall be the lead agency in fulfilling the objectives of this Act.

5 The NEDA and its instrumentalities shall ensure that PENCAS is considered in
6 all its policy decisions and project evaluation systems. In order to ensure this, the
7 composition of the NEDA Board shall always include the departments that generate
8 the most crucial data on PENCAS accounts, such as the DENR and DA.

9 *Sec. 7. Involvement of Government Agencies.* – The following government
10 agencies and the concerned offices and bureaus under or attached to them shall be
11 involved in the establishment and institutionalization of the PENCAS:

- 12 a. National Economic and Development Authority (NEDA) as the Lead Agency;
- 13 b. Philippine Statistics Authority (PSA);
- 14 c. Department of Environment and Natural Resources (DENR);
- 15 d. Department of Agriculture (DA);
- 16 e. Department of the Interior and Local Government (DILG);
- 17 f. Department of Science and Technology (DOST);
- 18 g. Department of Energy (DOE);
- 19 h. Department of Tourism (DOT);
- 20 i. Department of Transportation (DOTr);
- 21 j. Department of Public Works and Highways (DPWH);
- 22 k. Department of Health (DOH);
- 23 l. Department of Human Settlements and Urban Development (DHSUD); and,
- 24 m. Other agencies as necessary.

25 *Sec. 8. Creation of the Natural Capital Units.* – Natural Capital units shall be
26 created within the organizational structure of the NEDA, PSA, DENR, DA, DOE, DOT,
27 DOTr, DPWH, DTI, DOH, DILG, DOST, DHSUD, and other agencies as necessary.

28 The head of the Natural Capital Units in the foregoing government agencies
29 should be at a Division Chief or higher level. The Department Head shall designate
30 existing personnel within the Department or hire new ones within its budget to operate
31 its Natural Capital Unit.

1 **Sec. 9. *Natural Capital Units at National Agencies.*** – The Natural Capital Units
2 at the NEDA, PSA, DENR, DA, DOE, DOT, DOTr, DPWH, DTI, DOH, DILG, DOST,
3 DHSUD shall:

- 4 a. Develop and apply, with its various offices, attached agencies, GOCCs and
5 beneficiaries, the data collection, development and compilation of resource or
6 natural asset and ecosystem service accounts, environmental and emission
7 accounts and ocean accounts, relevant to each agency’s mandates, and
8 formulate viable data development approaches and methodologies in
9 coordination with PSA;
- 10 b. Collaborate with the science community in conducting studies and research in
11 support of policy development related to PENCAS;
- 12 c. Ensure that sustainable development principles, especially regenerative
13 resource use, resource conservation and climate, environmental and indigenous
14 biodiversity considerations, are integrated in all its bureaus and offices and in
15 their policy, national and project planning and implementation based on
16 PENCAS results; and strengthen its statistical capabilities, especially regulatory
17 monitoring to provide environmental and natural resources data and accounts
18 to other national government agencies, local government units, private sector,
19 civil society, and other data users;
- 20 d. Prioritize the data generation for the PENCAS accounts for the blue economy,
21 particularly for areas of national patrimony most in danger of exploitation and
22 appropriation, such as the West Philippine Sea and the Philippine Rise;
- 23 e. Institutionalize open data for the studies and research in support of policy
24 development related to PENCAS;

25 The DILG shall assist the local governments in building capacity and performing
26 the above functions as far as they are able in order to build their own PENCAS
27 accounts. It shall also consolidate local government data and statistics and compare
28 these with the national accounts as generated by the other agencies.

29 **Sec. 10. *Staffing Pattern for Natural Capital Units.*** – The agencies concerned
30 shall, as much as practicable, utilize existing qualified employees for staffing the
31 Natural Capital Units. In case, however, of the lack of qualified employees who have
32 the skills and capabilities required of the functions of the Units, the concerned agency

1 shall be allowed to include new plantilla items in accordance with the prescribed
2 procedures therefore.

3 *Sec. 11. Functions of the National Economic Development Authority and the*
4 *NEDA Board.* – The National Capital Unit at the NEDA shall:

- 5 a. Coordinate the conduct of consultations, orientations and training seminars on
6 the PENCAS and its implementation for the national government agencies, local
7 government units and other concerned institutions as well as on request by the
8 private sectors and civil society organizations, upon their request;
- 9 b. Coordinate the conduct of studies and research in support of policy
10 development related to PENCAS and provide training for non-governmental
11 entities on generating natural capital data and statistics;
- 12 c. Establish a mechanism for integration of environmental and regenerative
13 resource conservation considerations in national, regional, local and sectoral
14 planning, policy, project development and implementation based on PENCAS
15 results, particularly assuring that legally extracted resources and energy are
16 sufficient for the plans for their sustainable use;
- 17 d. Formulate and update indicators on the economy-environment interactions and
18 regenerative and sustainable development indices;
- 19 e. Provide technical services to the
 - 20 i. Development Budget Coordination Committee (DBCC) for the integration
21 of environment, ecosystems, natural capital, and climate change in
22 macroeconomic planning and allocation of expenditures and capital
23 outlays;
 - 24 ii. Investments Coordinating Committee that would review completeness
25 of project-evaluation and ensure that it is inclusive of economic benefits
26 and costs, sources of proposed natural resources, risks and uncertainty
27 due to climate change, natural capital, environmental, biodiversity and
28 social safeguards, justification of use of non-renewable resource, and
29 matching of natural capital supply and demand; and,
 - 30 iii. any Task Forces or deputized or contracted entities, which may create
31 or partner with for the coordinated functioning of the data-gathering
32 agencies and quality decision-making

1 Sec. 12. *Functions of the Philippine Statistics Authority (PSA).* – The Natural
2 Capital Unit at the PSA shall have a pivotal role in the implementation of the PENCAS:

- 3 a. Compile and collate PENCAS Accounts, and study and formulate viable
4 approaches and methodologies for the PENCAS;
- 5 b. Formulate templates, guidelines and digital aids to ensure that all units,
6 especially local government, generating PENCAS data do so in a manner that
7 can be efficiently consolidated, compared and analyzed, and ensure public
8 accessibility for these tools;
- 9 c. Explore ways and means to modify and improve current environmental and
10 economic statistics, in coordination with the concerned data producers and
11 users, including those in the academe, private sector, and non-governmental
12 organizations;
- 13 d. Include natural resource and environment-related questions in the PSA's census
14 and surveys, such as, but not limited to, Census of Establishments, Annual
15 Survey of Philippine Business and Industry, Family Income and Expenditure
16 Survey, Labor Force Survey, Survey on Tourism Establishments, Surveys of
17 Household and Establishment Energy Consumption, Fisheries and Aquaculture
18 Surveys, Agriculture, Livestock and Poultry surveys, Community Based
19 Monitoring System, and any surveys these may change into or added to them;
- 20 e. Collect data up to the fourth-digit level of the Philippine Standard for Industrial
21 Classification particularly for data needed in the ocean accounts, and update
22 the Input-Output and Supply and Use tables regularly;
- 23 f. Develop a satellite account for the oceans, including ocean-based and ocean-
24 related economic activities or sectors, coastal and marine ecosystems (e.g.,
25 mangroves, seagrass, coral reefs, tidal flats, etc.), and marine water quality;
- 26 g. Enhance the water accounts to include both water resources (quantity), water
27 quality for surface water and groundwater (water asset account), and water
28 supply and use account, including water supply in relation to climate trends of
29 extreme climatic events in coordination with DENR and its Environmental
30 Management Bureau and National Water Resources Board, and DPWH and its
31 Bureau of Research and Standards;

1 h. Update the Input-Output table regularly, incorporating the PENCAS accounts;
2 and,

3 i. Serve as a repository of all PENCAS-related data and materials through the
4 National Statistical Information Center and make the PENCAS data available on
5 the PSA website.

6 Sec. 13. *Role of the Local Government Units.* – In the planning and local
7 legislation duties, local governments shall endeavor to create and populate PENCAS
8 accounts, in compliance with templates and guidelines from the PSA and DILG, and in
9 addition, employ other innovative measures and methods of resource valuation,
10 damage estimation, ecosystem services and natural capital accounting to highlight
11 their ecological competitive edge.

12 Sec. 14. *Data and Research Support.* – The PSA, in coordination with the
13 involved agencies, shall designate the required environment and economic statistics
14 in the agencies and bureaus that shall be responsible for generating such data. The
15 Department of Budget and Management (DBM) shall ensure that such research and
16 data management are supported so as to prevent government spending that would
17 unduly compromise PENCAS accounts and ecosystem services or the deterioration of
18 the national patrimony.

19 Sec. 15. *Government Planning Mechanisms and the Environmental Impact*
20 *Assessment System.* – In all government planning, considerations of PENCAS shall be
21 included. In the Environmental Impact Assessment System, the DENR shall ensure
22 that the natural environment, ecosystem services and natural capital are framed as
23 opportunities, benefits or assets as opposed to being merely a constraint or backdrop
24 to absorb impacts. The Commission shall ensure a wide availability of tools, methods
25 and skills that can support the consideration of ecosystem services as part of the
26 Environmental Impact Assessment and ensure the inclusion of such in the
27 development of the Implementing Rules and Regulations (IRR), further including in
28 such rules accounting for activities that may degrade the natural capital considerably
29 despite not being under the coverage of the Philippine EIS System.

30 Sec. 16. *PENCAS in the Educational System.* – The Department of Education
31 (DepEd), Commission on Higher Education (CHED) and Professional Regulation
32 Commission (PRC) shall lead in mainstreaming PENCAS in all relevant modules,

1 courses, curriculum, training and licensure examination. They may establish
2 partnerships with different educational institutions and private entities for learning and
3 development in forms of resource sharing, module and training development,
4 standards development, and other similar forms.

5 *Sec. 17. Participatory Mechanisms and Citizen Remedies.* – Each Natural Capital
6 Unit shall institute consultative mechanisms, mass collaboration measures and digital
7 comment and recommendation solicitations to effectively popularize PENCAS and
8 ensure wide comprehensibility and usage of the accounts. Any citizen shall have the
9 right to information on any accounts generated under this Act, have the standing to
10 compel the performance of any of the mandates under this Act, and seek justification
11 from any government agency who may have ignored or neglected PENCAS data in
12 their policy or decision-making. Major PENCAS accounts, results on nature’s wealth
13 and the economic value of ecosystem services shall be released along with all releases
14 of national economic data, such as GNP, GDP and other often-released measures of
15 the state of the country’s economic health, and highlight the contribution of resources
16 and ecosystems to the economy, income, and employment.

17 *Sec. 18. Rights of Nature.* – Nothing in this Act shall be construed to mean that
18 nature has no intrinsic value separate and distinct from its economic value, or that it
19 loses interdependencies and pricelessness by such valuation. Whenever data or
20 accounts tend to show that valuation of ecosystems or discrete and identified life-
21 support mechanisms will commodify and/or degrade them, any citizen is authorized
22 to submit a registration to the Commission for the latter’s recognition of such intrinsic
23 value and the right of such ecosystem or mechanism to exist and maintain its integrity,
24 which registration the Commission is required to accept. The generated data and
25 accounts can still be used but only for the purpose of the recognition of such rights
26 rather than for commodification or ecologically unacceptable trade-offs.

27 *Sec. 19. Appropriations.* – The amount necessary to implement this Act shall
28 be sourced from the excesses in funds, such as the funds under Republic Act 9147,
29 otherwise known as the “*Wildlife Resources Conservation and Protection Act*”,
30 Republic Act 8749, otherwise known as the “*Philippine Clean Air Act*”, and similar
31 special accounts, especially the ones that have remained dormant.

1 The allocations shall be based on the plan and priorities decided by the NEDA,
2 in coordination with the agencies performing the functions. These shall be included
3 in the budget preparation of each agency to be incorporated in the annual General
4 Appropriations Act under separate fund items.

5 Sec. 20. *Implementing Rules and Regulations (IRR)* – The NEDA, in
6 consultation and coordination with appropriate national government agencies, civil
7 society organizations, private sector and other stakeholders, shall promulgate the IRR
8 for the effective implementation of this Act no later than one hundred eighty (180)
9 days upon the effectivity of this Act.

10 Sec. 21. *Separability Clause.* – If any part or provision of this Act is declared
11 invalid or unconstitutional, the other parts hereof not affected thereby shall remain in
12 full force and effect.

13 Sec. 22. *Repealing Clause.* – Any law, presidential decree or issuance,
14 executive order, letter of instruction, administrative order, rule, or regulation contrary
15 to or inconsistent with the provisions of this Act are hereby repealed, modified, or
16 amended accordingly.

17 Sec. 23. *Effectivity.* – This Act shall take effect fifteen (15) days after its
18 publication either in the *Official Gazette* or in two (2) newspapers of general circulation
19 in the Philippines.

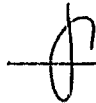
Approved,

NINETEENTH CONGRESS OF THE)
REPUBLIC OF THE PHILIPPINES)
First Regular Session)



'22 JUL -4 A8:31

SENATE
S. No. 9

RECEIVED BY: 

Introduced by Senator Loren B. Legarda

AN ACT
INSTITUTIONALIZING THE PHILIPPINE ECOSYSTEM AND NATURAL
CAPITAL ACCOUNTING SYSTEM (PENCAS), MANDATING ITS USE IN
POLICY AND DECISION-MAKING, DESIGNATING THE AGENCIES
RESPONSIBLE FOR ITS IMPLEMENTATION, PROVIDING INSTITUTIONAL
ARRANGEMENTS AMONG RESPONSIBLE AGENCIES, APPROPRIATING
FUNDS THEREFOR AND FOR OTHER PURPOSES

EXPLANATORY NOTE

The national income accounts are important indicators for determining a country's development level. Conventional national income accounting systems measure economic performance by determining the value of goods and services produced in a country and aggregating them to come up with indicators of economic development such as the Gross National Product (GNP) and Gross Domestic Product (GDP). The goods and services that are included in this accounting system are those that are marketed. The basis for estimating the value of these goods and services is their prices, which are then included in computing economic indicators. This methodology reflects the goods and services produced, sold, and bought in the economy.

However, the conventional methodology for computing national income accounts has its shortcomings. The natural environment generates goods and services that are utilized but are not properly valued. The national income accounting fails to reflect the value of the consumption benefits of amenities provided by the natural

environment, waste disposal services, and pollution, as part of the production of marketed commodities.

Indicators and standards generated by the national income accounting system are considered vital information for economic management and policymaking. They serve as the basis for socio-economic planning, formulation of development programs, and policy analysis in aid of legislation, among others. Thus, it is important that the national income accounts reflect a more accurate state of development and economic performance of the country. It should incorporate both environmental and non-environmental economic inputs and outputs for policymakers to make responsive, relevant, and effective laws, plans, and programs necessary for national development.

This bill seeks to institutionalize a Philippine Ecosystem and Natural Capital Accounting System (PENCAS) to reflect environmental inputs and outputs in the determination of national income accounts.

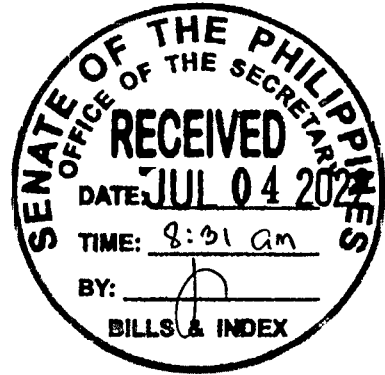
In view of the foregoing, the urgent passage of this bill is earnestly sought.


LOREN LEGARDA

NINETEENTH CONGRESS OF THE)
REPUBLIC OF THE PHILIPPINES)
First Regular Session)

SENATE

S. No. 9



Introduced by Senator Loren B. Legarda

AN ACT
INSTITUTIONALIZING THE PHILIPPINE ECOSYSTEM AND NATURAL
CAPITAL ACCOUNTING SYSTEM (PENCAS), MANDATING ITS USE IN
POLICY AND DECISION-MAKING, DESIGNATING THE AGENCIES
RESPONSIBLE FOR ITS IMPLEMENTATION, PROVIDING INSTITUTIONAL
ARRANGEMENTS AMONG RESPONSIBLE AGENCIES, APPROPRIATING
FUNDS THEREFOR AND FOR OTHER PURPOSES

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

1 Section 1. *Short Title.* – This Act shall be known as the Philippine Ecosystem and
2 Natural Capital Accounting System (PENCAS) Law of 2022, which shall adhere to the
3 United Nations System of Environmental-Economic Accounting (SEEA).

4 Sec 2. *Declaration of Policy.* – It is hereby declared the policy of the State to:

- 5 a. Promote the common good, conserve and develop our patrimony, as
6 provided in the Preamble of the Constitution, natural capital being
7 the bedrock of the national patrimony;
- 8 b. Develop a comprehensive information system and accounting
9 framework that will take into consideration the role of our natural
10 capital, consisting of both environmental and natural resources, and
11 its impact on the country's economy;
- 12 c. Include and institutionalize natural capital accounting as part of the
13 national income accounting system, strengthening and building on
14 RA 10625 on environmental accounts and statistics;

- 1 d. Provide indicators that will facilitate the integration of
2 environmental and natural resource concerns in national
3 development planning and policymaking, in the allocation of
4 budgets, and in designating statistics that will be produced regularly
5 for an identified period of analysis.
- 6 e. Establish and improve interagency coordination for the purpose of
7 linking economic and environmental and natural resource
8 information and efficient data management among concerned
9 agencies and their partner institutions and establish an office to
10 guide such coordination; and
- 11 f. Include nature's pricelessness, its intrinsic value, and its
12 interdependencies in the implementation of the foregoing policies to
13 consider that nature and ecosystems have intrinsic rights to exist,
14 with an end view of recognizing legal rights that serve to protect
15 endangered ecosystems and applying the precautionary principle,
16 especially when economic values cannot be estimated;

17 **Sec. 3. Definition of Terms.** – For purposes of this Act, the following terms are
18 hereby defined as follows:

- 19 a. *Ecosystem* - a complex community of living organisms, their physical
20 environment, and all their interrelationships in a particular unit of
21 space, and the biotic and abiotic components are linked together
22 through nutrient cycles and energy flows
- 23 b. *Capital* - a stock concept, which yields a periodic income, which is a
24 flow concept
- 25 c. *Natural capital* - the concept of nature as a stock that provides a flow
26 of benefits to people and the economy. Natural capital consists of the
27 stocks of natural assets – both biotic and abiotic. It includes air,
28 water, soil, minerals, forests, coral reefs, seagrass beds, and all living
29 things. It is from this natural capital that humans derive a wide range
30 of goods and services, which make human life possible. The goods
31 and services that natural capital provides, such as food, water,
32 energy, or climate regulation, are called ecosystem services. These

1 provide people everywhere with the means for healthy lives and
2 underpin all economic activity

3 d. *Ecosystem services* - the flows of benefits, which people gain from
4 natural ecosystems, while natural capital consists of the stock of
5 natural ecosystems or stock of renewable and non-renewable natural
6 resources from which these benefits flow

7 e. *The United Nations System of Environmental-Economic Accounting*
8 (*SEEA*) - a framework that integrates both economic and
9 environmental data to provide a more comprehensive and
10 multipurpose view of the interrelationships between the economy,
11 the environment and ecosystems, and the stocks and changes in
12 stocks of natural assets, as they bring benefits to humanity.

13 Sec. 4. *Philippine Environmental and Natural Capital Accounting System*
14 (*PENCAS*). - A System of Environmental-Economic Accounting is hereby
15 institutionalized within the government bureaucracy. The Philippine Environmental
16 and Natural Capital Accounting System (*PENCAS*) shall be based on the existing
17 environmental accounting frameworks that are covered by the UN *SEEA* and are
18 theoretically correct and accepted as evaluated based on international standards.

19 Among others, the *PENCAS* framework shall include a list of the officially designated
20 statistics on the depreciation of natural capital, environmental protection
21 expenditures, pollution and quality of land, air and sea, environmental damages, and
22 genuine savings. It shall conform to and expound, expand and localize the UN *SEEA*.

23 A roadmap and manual for further development of these indicators for each of the
24 terrestrial (land and freshwater) and blue (marine) economies shall be formulated.
25 The draft roadmap and international manuals shall be customized to the ecosystems
26 in the Philippine archipelago that support the terrestrial (land and freshwater) and
27 blue (marine) economies. All these data shall constitute the Philippines' natural
28 capital, the conservation of which shall be paramount.

29 Sec. 5. *Objectives of the PENCAS*. - The *PENCAS* shall supplement the current
30 System of National Accounts and shall have the following major functions:

31 a. To support economic-environmental policy development and
32 decision-making;

- b. To generate the Philippine version of the UN SEEA satellite accounts covering both the Central Framework and the Ecosystem Accounts;
- c. To serve as a comprehensive data framework in the generation of PENCAS statistics; and
- d. To ensure that ecosystems and habitats, especially the ones in critical danger of irreparable damage, are conserved and restored, in line with the objectives and timelines of key Multilateral Environmental Agreements, including the United Nations Decade of Ecological Restoration and the 2030 Agenda for Sustainable Development.

Sec. 6. *Involvement of Government Agencies.* – The following agencies and the concerned offices under or attached to them shall be involved in the establishment and institutionalization of the PENCAS:

- a. Department of Environment and Natural Resources (DENR);
- b. Department of Agriculture (DA);
- c. Philippine Statistics Authority (PSA);
- d. National Economic and Development Authority (NEDA);
- e. Department of Energy (DOE);
- f. Department of Tourism (DOT);
- g. Department of Transportation (DOTr);
- h. Department of Public Works and Highways (DPWH),
- i. Department of Health (DOH);
- j. Department of Interior and Local Government (DILG);
- k. Department of Science and Technology (DOST);
- l. Department of Human Settlements and Urban Development (DHSUD);
- m. National Water Regulatory Board (NWRB); and
- n. Other agencies, as necessary.

Sec. 7. *Duties of Specific Bureaus within the Agencies.* – The following Bureaus shall have special mandates for natural capital accounting herein based on their primary functions:

- a. Bureau of Fisheries and Aquatic Resources;
- b. Bureau of Soils and Water Management;

- c. All Bureaus of the DENR, including the National Mapping and Resource Information Authority (NAMRIA), and National Water Resources Board (NWRB);
- d. National Renewable Energy Board (NREB);
- e. Research and Development Institutes and Science and Technology Services of the DOST;
- f. Philippine Coconut Authority (PCA);
- g. Philippine Rice Research Institute (PhilRice);
- h. National Irrigation Administration (NIA);
- i. Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA); and
- j. Philippine Institute of Volcanology and Seismology; (PHIVOLCS)

Sec. 8. *Creation of the Natural Capital Units.* - Natural Capital units shall be created within the organizational structure of the DENR, DA, PSA, NEDA, DOE, DOT, DOTr, DPWH, DTI, DOH, DILG, DOST, DHSUD, and other agencies as necessary.

The head of the Natural Capital Units in the foregoing government agencies should be a Division Chief or higher level. The Department Head shall designate existing personnel within the Department or hire new ones within its budget to operate its Natural Capital Unit.

Sec. 9. *Staffing Pattern for Natural Capital Units.* - The agencies concerned shall, as much as practicable, utilize existing qualified employees for staffing the Natural Capital Units. In case, however, of a lack of qualified employees who have the skills and capabilities required for the functions of the Units, the concerned agency shall be allowed to include new plantilla items in accordance with the prescribed procedures therefor.

Sec. 10. *Functions of the Philippine Statistics Authority (PSA).* - The Natural Capital Unit at the PSA shall have a pivotal role in the implementation of the PENCAS:

- a. Compile and collate PENCAS Accounts, and study and formulate viable approaches and methodologies for the PENCAS;

- 1 b. Formulate templates, guidelines, and digital aids to ensure that all units,
2 especially local governments, generating PENCAS data do so in a manner
3 that can be efficiently consolidated, compared and analyzed, and ensure
4 public accessibility for these tools;
- 5 c. Explore ways and means to modify and improve current environmental
6 and economic statistics, in coordination with the concerned data
7 producers and users, including those in the academe, private sector, and
8 non-governmental organizations;
- 9 d. Include natural resource and environment-related questions in the PSA's
10 census and surveys, such as, but not limited to, Census of Establishments,
11 Annual Survey of Philippine Business and Industry, Family Income and
12 Expenditure Survey, Labor Force Survey, Survey on Tourism
13 Establishments, Surveys of Household and Establishment Energy
14 Consumption, Fisheries and Aquaculture Surveys, Agriculture, Livestock
15 and Poultry surveys, Community-Based Monitoring System, and any
16 surveys these may change into or be added to them.
- 17 e. Collect data up to the fourth-digit level of the Philippine Standard for
18 Industrial Classification, particularly for data needed in the ocean
19 accounts, and update the Input-Output and Supply and Use tables
20 regularly.
- 21 f. Develop a satellite account for the oceans, including ocean-based and
22 ocean-related economic activities or sectors, coastal and marine
23 ecosystems (e.g. mangroves, seagrass, coral reefs, tidal flats, etc.), and
24 marine water quality;
- 25 g. Enhance the water accounts to include both water resources (quantity)
26 and water quality for surface water and groundwater (water asset
27 account) and water supply and use account, including water supply in
28 relation to climate trends or extreme climatic events in
29 coordination with DENR (Environmental Management Bureau and
30 National Water Resources Board), and DPWH (Bureau of Research and
31 Standards);

1 h. Update the Input-Output tables regularly, incorporating the PENCAS
2 accounts; and;

3 i. Serve as a repository of all PENCAS-related data and materials through
4 the National Statistical Information Center and make the PENCAS data
5 available on the PSA website;

6 Sec. 11. *Natural Capital Units at National Agencies.* – The Natural Capital Units
7 at the DENR, DA, NEDA, DILG, DOE, DOT, DOTr, DPWH, DTI, DOH, DILG, DOST,
8 and DHUSD shall:

9 a. Develop and apply, with its various offices, attached agencies, GOCCs,
10 and beneficiaries, the data collection, development and compilation of
11 resource or natural asset and ecosystem service accounts, environment
12 and emission accounts and ocean accounts, relevant to each agency's
13 mandates, and formulate viable data development approaches and
14 methodologies in coordination with PSA;

15 b. Collaborate with the science community in conducting studies and
16 research in support of policy development related to PENCAS;

17 c. Ensure that sustainable development principles, especially regenerative
18 resource use/resource conservation and climate and environmental and
19 indigenous biodiversity considerations, are integrated into all its
20 bureaus and offices and in their policy, national and project planning,
21 and implementation based on PENCAS results; and Strengthen its
22 statistical capabilities, especially regulatory monitoring, to provide
23 environmental and natural resources data and accounts to other national
24 government agencies, local government units, private sector, civil
25 society, and other data users;

26 d. Prioritize the data generation for the PENCAS accounts for the blue
27 economy, particularly for areas of national patrimony most in danger of
28 exploitation and appropriation, such as the West Philippine Sea and the
29 Philippine Rise;

30 e. Institutionalize open data for the studies and research in support of
31 policy development related to PENCAS.

1 The DILG shall assist the local governments in building capacity and
2 performing the above functions as far as they are able in order to build their own
3 PENCAS accounts. It shall also consolidate local government data and statistics and
4 compare these with the national accounts as generated by the other agencies.

5 Sec. 12. *Duties of Specific Bureaus within the Agencies.* – The following Bureaus
6 shall have special mandates for natural capital accounting herein based on their
7 primary functions:

- 8 a. Bureau of Fisheries and Aquatic Resources
- 9 b. Bureau of Soils and Water Management
- 10 c. All Bureaus of the DENR, especially the National Mapping and
11 Resource Information Authority (NAMRIA)
- 12 d. National Renewable Energy Board (NREB)
- 13 e. Research and Development Institutes and Science and Technology
14 Services of the DOST;
- 15 f. Philippine Coconut Authority (PCA);
- 16 g. Philippine Rice Research Institute (PhilRice);
- 17 h. National Irrigation Administration (NIA);
- 18 i. National Water Resources Board (NWRB);
- 19 j. Philippine Atmospheric, Geophysical and Astronomical Services
20 Administration (PAGASA); and
- 21 k. Philippine Institute of Volcanology and Seismology (PHIVOLCS)

22
23 Sec. 13. *Functions of the National Economic Development Authority and the NEDA*
24 *Board.* – The Natural Capital Unit at the NEDA shall:

- 25 a. Coordinate the conduct of consultations, orientations, trainings, and
26 seminars on the PENCAS and its implementation for the national
27 government agencies, local government units, and other concerned
28 institutions as well as on request by the private sectors and civil society
29 organizations, upon their request;
- 30 b. Coordinate the conduct of studies and research in support of policy
31 development related to PENCAS and provide training for non-
32 governmental entities on generating natural capital data and statistics;

- 1 c. Establish a mechanism for integration of environmental and
2 regenerative resource conservation considerations in national, regional,
3 local and sectoral planning, policy, project development, and
4 implementation based on PENCAS results, particularly assuring that
5 legally extracted resources and energy are sufficient for the plans for
6 their sustainable use;
- 7 d. Formulate and update indicators on the economy-environment
8 interactions and regenerative and sustainable development indices;
- 9 e. Provide technical services to the (i) Presidential Commission on Natural
10 Capital, (ii) Development Budget Coordination Committee (DBCC) for
11 the integration of environment, ecosystems, natural capital, and climate
12 change in macroeconomic planning and allocation of expenditures and
13 capital outlays, (iii) Investments Coordinating Committee that would
14 review the completeness of project-evaluation and ensure that it is
15 inclusive of economic benefits and costs, sources of proposed natural
16 resources, risks and uncertainty due to climate change, natural capital,
17 environmental, biodiversity and social safeguards, justification of use if
18 nonrenewable resource, and matching of natural capital supply and
19 demand, and (iv) any Task Forces or deputized or contracted entities,
20 which the Presidential Commission on Natural Capital may create or
21 partner with for the coordinated functioning of the data-generating
22 agencies and quality decision-making; and
- 23 f. The NEDA Board and its instrumentalities shall ensure that PENCAS is
24 considered in all its policy decisions and project evaluation systems. In
25 order to ensure this, the composition of the NEDA Board shall always
26 include the departments that generate the most crucial data on PENCAS
27 accounts, such as the DENR and DA.

28 *Sec. 14. Data and Research Support.* – The PSA, in coordination with the involved
29 agencies, shall designate the required environment and economic statistics in the
30 agencies and bureaus that shall be responsible for generating such data. The
31 Department of Budget and Management (DBM) shall ensure that such research and
32 data management are supported to prevent government spending that would unduly

1 compromise PENCAS accounts and ecosystem services or the deterioration of the
2 national patrimony.

3 Sec. 15. *Creation of the Presidential Commission on Natural Capital Accounting.* – A
4 commission is hereby created to ensure the fulfillment of the objectives of this law and
5 coordinate the performance of the functions of the agencies enumerated. It shall have
6 the following composition:

- 7 a. The President or his appointee to the Commission as Chair;
- 8 b. An Economic statistician
- 9 c. An Environment and Natural Resources Economist
- 10 d. A Terrestrial ecologist who shall ALSO cover freshwater
11 ecosystems;
- 12 e. A Marine ecologist who shall cover coastal and marine
13 ecosystems;
- 14 f. An Environmental Lawyer;

15 All Commissioners shall be appointed by the President from nominations by
16 the agencies or civil society conglomerations.

17 Sec. 16. *Functions of the Commission.* – The Commission shall provide directions
18 for the coordinated functioning and implementation of the Natural Capital Units. It
19 shall create ad-hoc or permanent inter-agency committees and task forces that will
20 support the data and technical requirements of the departments and their Natural
21 Capital Units. It shall ensure that the Officials, as well as other instrumentalities of
22 government, have access to PENCAS data and endeavor to ensure that such data are
23 used in policy and decision-making, taking care, however, that there are security
24 measures to prevent poaching or any foreign intrusion that could impact our
25 utilization and enjoyment of our natural resources.

26 The designated Undersecretary level officials in charge of policy and planning
27 in their agencies shall represent the member agencies for DENR, DA, DOE, DOT,
28 DOTr, DPWH, DOST, DTI, DILG, DOH, DHUSD, NEDA, and PSA in all technical
29 working groups constituted by the Commission.

30 The Commission shall compile existing surveys and data generation activities
31 of all government agencies to ensure that the information needed for generating the
32 accounts are efficiently captured, including but not limited to existing physical

1 accounts and monetary accounts, data from the Community-Based Monitoring
2 System, DENR's Biodiversity Assessment and Monitoring System and Socio-
3 Economic Assessment and Monitoring System, and monitoring data from projects,
4 such as the Wealth Accounting and Valuation of Ecosystem Services (WAVES),
5 Environment Natural Resource Accounting Project (ENRAP) and the National
6 Greening Program, the Department of Agriculture's Ocean accounts, data submitted
7 by license, permit and certification applicants, and the like.

8 Sec. 17. *Government Planning Mechanisms and the Environmental Impact*
9 *Assessment System.* – In all government planning, considerations of PENCAS shall be
10 included. In the Environmental Impact Assessment System, the DENR shall ensure
11 that the natural environment, ecosystem services, and natural capital are framed as
12 opportunities, benefits or assets as opposed to being merely a constraint or backdrop
13 to absorb impacts. The Commission shall ensure a wide availability of tools, methods
14 and skills that can support the consideration of ecosystem services as part of the
15 Environmental Impact Assessment and ensure the inclusion of such in the
16 development of the Implementing Rules and Regulations (IRR), further including in
17 such rules accounting for activities that may degrade the natural capital considerably
18 despite not being under the coverage of the Philippine EIS System.

19
20 Sec. 18. *Role of the Local Government Units.* – In their planning and local
21 legislation duties, local governments shall endeavor to create and populate PENCAS
22 accounts, in compliance with templates and guidelines from the PSA and DILG, and
23 in addition, employ other innovative measures and methods of resource valuation,
24 damage estimation, ecosystem services and natural capital accounting to highlight
25 their ecological competitive edge.

26 Sec. 19. *PENCAS in the Educational System.* – The Department of Education
27 (DepEd) shall cause the crafting of modules in all levels of the formal and non-formal
28 education spheres to ensure that all citizens, and especially the academe, are able to
29 help change the definition of economic success towards defining wealth inclusively,
30 to generate, analyze and use the PENCAS to its maximum effect and assess the
31 systemic extent of nature-related financial risk. The CHED shall include PENCAS in
32 all curricula and the DepEd shall ensure that PENCAS is incorporated in current

1 courses on these subjects with the objective of generating credible, decision-grade
2 data, which government, businesses and financial institutions and civil society can
3 use to fully integrate nature-related considerations into their decision-making and
4 assess and disclose their use of and impact on nature.

5 The Professional Regulation Commission (PRC) shall ensure that PENCAS is
6 included in all professional examinations.

7 Sec. 20. *Rights of Nature.* – Nothing in this Act shall be construed to mean that
8 nature has no intrinsic value separate and distinct from its economic value, or that it
9 loses interdependencies and pricelessness by such valuation. Whenever data or
10 accounts tend to show that the valuation of ecosystems or discrete and identified life-
11 support mechanisms will commodify and or degrade them, any citizen is authorized
12 to submit a registration to the Commission for the latter’s recognition of such intrinsic
13 value and the right of such ecosystem or mechanism to exist and maintain its integrity,
14 which registration the Commission is required to accept. The generated data and
15 accounts can still be used but only for the purpose of the recognition of such rights
16 rather than for commodification or ecologically unacceptable trade-offs.

17
18 Sec. 21. *Participatory Mechanisms and Citizen Remedies.* – Each Natural Capital
19 Unit shall institute consultative mechanisms, mass collaboration measures, and
20 digital comment and recommendation solicitations to effectively popularize PENCAS
21 and ensure wide comprehensibility and usage of the accounts.

22 Any citizen shall have to right to information on any accounts generated under
23 this Act, have the standing to compel the performance of any of the mandates under
24 this Act, and seek justification from any government agency who may have ignored
25 or neglected PENCAS data in their policy or decision-making. Major PENCAS
26 accounts, results on nature’s wealth and the economic value of ecosystem services
27 shall be released along with all releases of national economic data, such as GNI, GDP
28 and other often-released measures of the state of the country’s economic health and
29 highlight the contribution of resources and ecosystems to the economy, incomes and
30 employment.

31 Sec. 22. *Appropriations.* – The creation and initial funding of the Commission
32 shall be Two Hundred Million Pesos (Php 200,000,000.00) to be sourced from excesses

1 in funds, such as, the funds under RA 9147, RA 8749 and similar special accounts,
2 especially the ones that have remained dormant. Two Billion Pesos (Php
3 2,000,000,000.00) shall be apportioned by the Department of Budget and Management
4 for the performance of agency functions required herein for the generation of data
5 through expeditions and scientific investigations in the terrestrial/freshwater and
6 marine disciplines. Eight Hundred Million Pesos (Php 800,000,000.00) shall be
7 apportioned to the agencies for the creation and improvement of their Natural Capital
8 Units. The apportionment and allocations shall be based on the plan and priorities
9 decided by the Commission in coordination with the agencies performing the
10 functions. These shall be included in the budget preparation of each agency to be
11 incorporated in the annual general appropriations act under separate fund items.

12 *Sec 23. Implementing Rules and Regulations (IRR).* -The Commission shall
13 constitute an interagency working group to craft the IRR and is hereby given the
14 authority to adopt such IRR, the adoption of which shall constitute its inclusion as
15 part of the administrative rules and regulations of all members of the Committee.

16
17 *Sec. 24. Separability Clause.* - If any provision of this Act is declared
18 unconstitutional or otherwise invalid, the validity of the other provisions shall not be
19 affected thereby.

20 *Sec. 25. Repealing Clause.* - All other laws, decrees, orders, rules and regulations,
21 other issuances, or parts thereof inconsistent with the provisions of this Act are hereby
22 repealed or modified accordingly.

23 *Sec. 26. Effectivity.* - This Act shall take effect fifteen (15) days after its
24 publication in the Official Gazette or in a newspaper of general circulation.

Approved,

NINETEENTH CONGRESS OF THE)
REPUBLIC OF THE PHILIPPINES)
First Regular Session)

Office of the Secretary

23 MAR 14 A9:39

SENATE

S. No. 1993

RECEIVED



Introduced by: Senator Loren Legarda

AN ACT
ESTABLISHING A FRAMEWORK FOR BLUE ECONOMY, PROMOTING
STEWARDSHIP AND SUSTAINABLE DEVELOPMENT OF COASTAL AND
MARINE ECOSYSTEMS AND RESOURCES

EXPLANATORY NOTE

In a 2021 study by Meijer et al, the Philippines is the highest ocean plastic pollutant in the world, emphasizing the estimated contribution of the Pasig River and 4,820 other rivers. An infographic demonstrating was generated by designer Louis Logas graphically showing how much this contribution is compared to that of other countries and it showed a very damning picture. With the second highest coastline of 32,289 kilometers after Indonesia, an average precipitation rate of 4,604mm, and a population of 113.9 million (2021 data), we are challenged to reverse the damage we are wreaking on our marine national patrimony. Granting, this study did not take into account the gargantuan efforts of some agencies such as the Metro Manila Development Authority which installed and maintains trash traps at mouth of the rivers in the Metropolis and the mandamus agencies which year after year make plans and execute them to clean up Manila Bay.

We are a maritime nation with a seafarer population. This is evidenced not only by our percentage contribution of seafarers in the global industry reaching as high as 30% but also by the sheer actual numbers. In 2019, there were over half a million Filipinos engaged in this trade, dropping during the pandemic but rising again

to a high of about 345 thousand currently. The ocean is in our DNA, with a great majority of our population living in our coastal cities and municipalities.

Up to 88% of our territory is marine covering 2.2 million square kilometers. One of the world's leading fish-producing countries, the Philippines produced 1.89 million tons of marine capture fisheries in 2018 alone. We are 11th in the world in both capture fisheries and aquaculture fish production. Add to this, ocean freight and transportation, oil, gas and renewable energy, and coastal and marine tourism make up a vibrant marine-based economy. The Philippines is one of the world's top suppliers of seafarers. In 2016, marine-based industries contributed over 6%, rising from a mere 3.6% in 2018.

Conscientious and strategic management of these resources requires more focused governance based on valuation, analysis, threat and opportunity detection and a development framework that highlights our maritime heritage and ensures a bright future for our oceans.

There is a dire and urgent need to protect these resources and take advantage of the economic opportunities presented by a maritime economy. For all these reasons, we urge this Chamber to pass this measure.




LOREN LEGARDA

NINETEENTH CONGRESS OF THE)
REPUBLIC OF THE PHILIPPINES)
First Regular Session)

Office of the Secretary

23 MAR 14 A9:39

SENATE
S. No. 1993

RECORDED BY 

Introduced by: Senator Loren Legarda

AN ACT
ESTABLISHING A FRAMEWORK FOR BLUE ECONOMY, PROMOTING
STEWARDSHIP AND SUSTAINABLE DEVELOPMENT OF COASTAL AND
MARINE ECOSYSTEMS AND RESOURCES

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

- 1 Section 1. *Short Title.* - This Act shall be known as the "Blue Economy Act."
2 Sec. 2. *Declaration of Policy.* - It shall be the policy of the State to:
3 (a) Adopt blue economy as a framework for sustainable and safe use and
4 development of marine wealth within our Maritime Zones, as a pillar of our national
5 economy and patrimony;
6 (b) Exercise stewardship of our seas and coasts, and protect and conserve
7 the health and resilience of marine and coastal ecosystems and habitats to promote
8 the well-being, prosperity and security of present and future generations;
9 (c) Preserve our maritime heritage, recognize the social, cultural, and
10 historical value of our seas and coasts, and foster public understanding and respect of
11 the value of our seas and coasts to build a strong foundation for social responsibility;
12 (d) Enrich scientific understanding of marine and coastal ecosystems, the
13 benefits we gain from these ecosystems (e.g. carbon sequestration), their changing
14 conditions and the causes thereof, and use the best available scientific knowledge to
15 inform decisions affecting our seas and coasts and to enhance our capacity to respond
16 and adapt to changing maritime environments;

1 (e) Foster international cooperation, and exercise rights and jurisdiction in
2 accordance with applicable international laws, including on freedom of navigation;

3 (f) Strategically address the factors that adversely affect the oceans and the
4 living and non-living resources that comprise our seas, turning threats into
5 opportunities and preventing further harm to all water bodies including land-based
6 pollution;

7 (g) Ensure a whole-of-nation approach and a comprehensive, integrated
8 framework for the stewardship of our seas and coasts to facilitate cohesive action of
9 the National Government, local authorities, academe, non-governmental
10 organizations, the private sector, and the public.

11 *Sec. 3. Definition of Terms. – As used in this Act:*

12 (a) *Aquaculture* refers to the farming of aquatic organisms including fish,
13 molluscs, crustaceans and aquatic plants. Farming implies some sort of intervention
14 in the rearing process to enhance production, such as regular stocking, feeding,
15 protection from predators, etc. Farming also implies individual or corporate
16 ownership of the stock being cultivated, the planning, development and operation of
17 aquaculture systems, sites, facilities and practices, and the production and transport;

18 (b) *Aquisilviculture* refers to a multi-purpose production system that allows
19 production of fish in a mangrove reforestation project;

20 (c) *Blue economy* refers to a practical ocean-based economic model using
21 green infrastructure and technologies, innovative financing mechanisms, and
22 proactive institutional arrangements for meeting the twin goals of protecting our
23 oceans and coasts and enhancing its potential contribution to sustainable
24 development, including improving human well-being, and reducing environmental
25 risks and ecological scarcities;

26 (d) *Commercial fishing* refers to the harvesting of fish, either in whole or in
27 part, for sale, barter or trade;

28 (e) *Ecosystem services* refer to the flow of benefits which humans gain from
29 ecosystems, through biological processes and climate, hydrological and biochemical
30 cycles, and experiences that contribute to intangible culture;

31 (f) *Environmental-economic accounting* refers to a systematic way to measure
32 and report on stocks and flows of natural assets and resources – both biotic and biotic,

1 renewable and non-renewable – and ecosystem services, to determine the contribution
2 of the environment to the economy and the impact of the economy on the
3 environment;

4 (g) *Environmental-economic accounts* refer to statistical information, in
5 physical or monetary terms, about the extraction of natural resources, their use within
6 the economy, natural resource stock levels, the changes in those stocks during a
7 specific period, and such other economic activities related to the environment;

8 (h) *Integrated marine and coastal area management* refers to a participatory
9 process for decision-making to prevent, control, or mitigate adverse impacts from
10 human activities in the marine and coastal environment, and to contribute to the
11 restoration of degraded coastal areas;

12 (i) *Investment promotion agencies* refer to government entities created by law,
13 executive order, decree or other issuance, in charge of promoting investments,
14 granting and administering tax and non-tax incentives, and overseeing the operations
15 of the different economic zones and freeports in accordance with their respective
16 special laws. These include the Board of Investments (BOI), Regional Board of
17 Investments-Autonomous Region in Muslim Mindanao (RBOI-ARMM), Philippine
18 Economic Zone Authority (PEZA), Bases Conversion and Development Authority
19 (BCDA), Subic Bay Metropolitan Authority (SBMA), Clark Development Corporation
20 (CDC), John Hay Management Corporation (JHMC), Poro Point Management
21 Corporation (PPMC), Cagayan Economic Zone Authority (CEZA), Zamboanga City
22 Special Economic Zone Authority (ZCSEZA), PHIVIDEC Industrial Authority (PIA),
23 Aurora Pacific Economic Zone and Freeport Authority (APECO), Authority of the
24 Freeport Area of Bataan (AFAB), Tourism Infrastructure and Enterprise Zone
25 Authority (TIEZA), and all other similar existing authorities or that may be created by
26 law;

27 (j) *Land-based pollution* - Municipal, industrial and agricultural wastes and
28 run-off including but not limited to sewage and waste water, persistent organic
29 pollutants (including pesticides), heavy metals, oils, nutrients and sediments -
30 whether brought by rivers or discharged directly into coastal waters

31

1 (k) *Mariculture* refers to the farming of organisms, both plants and animals,
2 in an aquatic medium or environment which may be completely marine (sea), or sea
3 water mixed to various degrees with fresh water. This definition would include both
4 the sea and inland brackishwater areas;

5 (l) *Marine scientific research* refers to any research activity, which is
6 conducted for exclusively peaceful purposes, for the purpose of increasing scientific
7 knowledge about the marine environment, including all natural resources, toward the
8 benefit of mankind and according to the United Nations Convention on the Law of
9 the Sea;

10 (m) *Maritime domain awareness* refers to the effective understanding of any
11 activity that could impact upon the security, safety, economy or environment;

12 (n) *Maritime spatial planning* refers to a process by which human activities in
13 Maritime Zones are analyzed and organized, based on best available scientific
14 knowledge, and to achieve economic, ecological and social objectives;

15 (o) *Ocean-based activities* refer to activities that are undertaken in the ocean,
16 e.g. fisheries and aquaculture, offshore oil and gas, mining, ocean energy,
17 desalination, shipping and marine transportation, marine tourism, marine
18 construction;

19 (p) *Ocean-related activities* refer to activities that use products from the ocean
20 (e.g., seafood processing, marine biotechnology, chemicals, salt, etc.) and produce
21 products and services for the ocean and ocean-based activities (e.g., ship building and
22 repair, ports, tourist resorts, communication, maritime insurance and law, maritime
23 technical services, etc.);

24 (q) *Subsistence fishing* - fishing for personal consumption or
25 traditional/ceremonial purposes;

26 (r) *Ocean literacy* refers to an understanding of the ocean's influence on
27 humans and human influence on the ocean.

28 Sec. 4. *Scope of Application.* - For purposes of this Act, the Philippines shall
29 exercise sovereignty, sovereign rights and jurisdiction, in accordance with
30 international law, as appropriate, in internal waters, archipelagic waters, territorial
31 sea, contiguous zone, exclusive economic zone and continent shelf, herein collectively
32 referred to as "Maritime Zones", including its seabed and subsoil, and any and all

1 maritime features within the Maritime Zones now known or to be known in the future,
2 without prejudice to the power, authority and right granted exclusively to the
3 Bangsamoro Government under Republic Act No. 11054, also known as the "*Organic*
4 *Law for the Bangsamoro Autonomous Region in Muslim Mindanao*," or the powers of
5 Protected Area Management Boards over protected seascapes to explore, develop, and
6 utilize natural resources within its territorial jurisdiction.

7 CHAPTER II

8 NATIONAL MARITIME COUNCIL

9 Sec. 5. *National Maritime Council.* - The National Coast Watch Council, created
10 under Executive Order No. 57, Series of 2011, is hereby renamed and reconstituted as
11 the National Maritime Council, herein referred to as the "Council," and its functions
12 expanded to include the formulation of an integrated strategy to promote blue
13 economy and ecosystem-based management of coastal and marine resources.

14 Sec. 6. *Composition.* - The Council is composed of the following:

- 15 (a) Executive Secretary, as Chairperson;
- 16 (b) Secretary of Socio-Economic Planning;
- 17 (c) Secretary of Environment and Natural Resources;
- 18 (d) Secretary of National Defense;
- 19 (e) Secretary of Foreign Affairs;
- 20 (f) Secretary of Justice;
- 21 (g) Secretary of the Interior and Local Government;
- 22 (h) Secretary of Agriculture;
- 23 (i) Secretary of Tourism;
- 24 (j) Secretary of Transportation;
- 25 (k) Secretary of Trade and Industry;
- 26 (l) Secretary of Energy;
- 27 (m) Secretary of Science and Technology; and
- 28 (n) Secretary of Finance.

29 Department Secretaries may designate an Undersecretary, whose portfolio
30 covers matters directly or principally relating to the development or management of
31 coastal and marine resources and ecosystems, if applicable. They shall sit in a
32 permanent capacity, and their acts shall be considered the acts of their principals.

1 Sec. 7. *Secretariat.* – The Coastal Watch Council Secretariat, created under
2 Section 4 of Executive Order No. 57, Series of 2011, is hereby renamed as the National
3 Maritime Office and shall continue to provide technical and administrative support
4 to the Council.

5 Sec. 8. *Support Agencies.* – Section 6 of Executive Order No. 57, Series of 2011 is
6 hereby amended to include the following agencies to provide material or technical
7 support to the Council, as may be deemed necessary:

- 8 (a) Climate Change Commission
- 9 (b) Bangko Sentral ng Pilipinas;
- 10 (c) Board of Investments;
- 11 (d) Securities and Exchange Commission;
- 12 (e) Philippine Statistics Authority;
- 13 (f) National Mapping and Resources Information Authority;
- 14 (g) Environmental Management Bureau;
- 15 (h) Biodiversity Management Bureau-Coastal and Marine Division;
- 16 (i) Bureau of Agriculture and Fisheries Standards;
- 17 (j) Philippine Fisheries Development Authority;
- 18 (k) Philippine Council for Agriculture and Fisheries;
- 19 (l) Maritime Industry Authority;
- 20 (m) Philippine Ports Authority;
- 21 (n) Philippine Reclamation Authority;
- 22 (o) Philippine Council for Agriculture, Aquatic and Natural Resources
23 Research and Development;
- 24 (p) Philippine Atmospheric, Geophysical and Astronomical Services
25 Administration (PAGASA);
- 26 (q) Department of Foreign Affairs-Maritime and Ocean Affairs Office;
- 27 (r) National Museum-Maritime and Underwater Cultural Heritage
28 Division;
- 29 (s) University of the Philippines-Marine Science Institute; and
- 30 (t) Investment promotion agencies.

31 In order to ensure the efficient and effective discharge of its responsibilities, the
32 Council may create working groups, and call upon other departments, bureaus,

1 offices and instrumentalities of the Government, and academic and research
2 institutions engaged in marine science and ocean-based or ocean-related activities to
3 participate in working groups, as it may deem necessary.

4 CHAPTER III

5 POLICY FRAMEWORK ON BLUE ECONOMY

6 SEC. 9. *Policy Framework on Blue Economy.* - The Council shall, within six (6)
7 months from the effectivity of this Act, formulate a Policy Framework on Blue
8 Economy, herein referred to as the Policy Framework. The Policy Framework shall
9 serve as the basis for marine spatial planning, determination of investments to
10 enhance maritime domain awareness, the preservation of value and sustainability of
11 ocean resources and their protection from threats such as land-based pollution and
12 overfishing and enforcement of economic and environmental regulations within our
13 Maritime Zones. The Policy Framework shall be subject to mandatory review and
14 modification every five (5) years.

15 Sec. 10. *Components of the Policy Framework on Blue Economy.* - The Policy
16 Framework shall include the following components:

17 (a) Review of all existing policies, plans, programs, projects, rules and
18 regulations on ocean-based and ocean-related activities;

19 (b) Adherence to international maritime laws;

20 (c) Analysis of current and emerging trends and changes in demography,
21 consumption, trade, technology, environmental quality and climate that show the
22 interaction between the economy and the environment, present threats and pressures
23 on coastal and marine environments and damage estimation;

24 (d) Environmental-economic accounting of coastal and marine assets and
25 resources, and ecosystem services from coastal and marine environments, including
26 assessment of losses due to degradation or major pollution events such as oil spills;

27 (e) Priority strategic and sustainable ocean-based and ocean-related
28 economic activities, which may include:

29 (1) Fisheries, including commercial fishing, but with preference to
30 subsistence fisheries, as mandated by Section 7, Art. XIII, of the Constitution;

31 (2) Aquaculture, mariculture and aquasilviculture;

32 (3) Marine and coastal tourism;

- 1 (4) Environmentally and hydrologically appropriate reclamation;
- 2 (5) Shipping, logistics and maritime transport;
- 3 (6) Ship-building and ship repair;
- 4 (7) Exploration, exploitation and extraction of oil and natural gas;
- 5 (8) Production of renewable energy from marine sources;
- 6 (9) Submarine mining or extraction of minerals and aggregates;
- 7 (10) Installation of submarine cables and pipelines;
- 8 (11) Bioremediation, Marine biotechnology and bioprospecting;
- 9 (12) Desalination; and
- 10 (13) Underwater cultural heritage and maritime archaeology.
- 11 (f) Guiding framework for integrated marine and coastal area
- 12 management;
- 13 (g) Guiding framework for blue finance;
- 14 (h) Priority research and development agenda, maximizing opportunities
- 15 created for pollution control, remediation, used water economics and other industries
- 16 that address threats;
- 17 (i) Promotion of ocean literacy and social responsibility towards the
- 18 protection of coastal and marine environments;
- 19 (j) Enhancement of capability of the Armed Forces of the Philippines and
- 20 civilian agencies to enforce laws, rules and regulations to protect our marine wealth;
- 21 (k) Goals, targets and indicators for growth, resilience and sustainability of
- 22 priority strategic and sustainable ocean-based and ocean-related activities, including
- 23 its contribution to Gross Domestic Product and job creation;

24 CHAPTER IV

25 ADHERENCE TO INTERNATIONAL MARITIME INSTRUMENTS

26 Sec. 11. *International Maritime Instruments Implementation and Reporting.* – The
27 Council shall establish mechanisms for the full and effective implementation and
28 enforcement of the following international maritime instruments and their
29 subsequent amendments and the reporting of compliance and adherence to the
30 President and Congress:

- 1 (a) Convention on the International Trade of Endangered Species of Flora
2 and Fauna;
- 3 (b) UNESCO Convention on the Protection of the Underwater Cultural
4 Heritage;
- 5 (c) International Convention for the Safety of Life at Sea, 1974, as amended,
6 and its Protocol of 1988 (SOLAS 74);
- 7 (d) International Convention for the Prevention of Pollution from Ships and
8 its Protocol of 1978 (MAPROL 73/78);
- 9 (e) Convention on the International Regulations for Preventing Collisions
10 at Sea, 1972, as amended (COLREG 72);
- 11 (f) International Convention on Load Lines, 1966 and its Protocol of 1988,
12 as amended (LL 66);
- 13 (g) International Convention on the Tonnage Measurement of Ships, 1969
14 (TONNAGE 69);
- 15 (h) Convention for the Suppression of Unlawful Acts Against the Safety of
16 Maritime Navigation, 1988 (SUA) and its Protocol;
- 17 (i) International Convention on Oil Pollution Preparedness, Response and
18 Co-operation 1990 (OPRC 1990);
- 19 (j) International Convention for the Control and Management of Ships'
20 Ballast Water and Sediments, 2004 (BWM 2004);
- 21 (k) Convention on the Prevention of Marine Pollution by dumping of
22 Wastes and Other Matter, 1972, as amended, and its 1996 Protocol (LCP);
- 23 (l) Special Trade Passenger Ships Agreement, 1971 (STP 71);
- 24 (m) Convention on the International Mobile Satellite Organization, as
25 amended (IMSO 1976) and its Operating Agreement (INMARSAT);
- 26 (n) International Convention on Standards of Training, Certification and
27 Watchkeeping for Seafarers, 1978, As Amended (STCW 78);
- 28 (o) International Convention on the Control of Harmful Anti-Fouling
29 Systems on Ships, 2001 (AFS 2001);
- 30 (p) Protocol of 1992 to Amend the International Convention on Civil
31 Liability for Oil Pollution Damage, 1969;

1 (q) Protocol of 1992 to amend the International Convention on the
2 Establishment of an International Fund for Compensation for Oil Pollution Damage,
3 1971;

4 Sec. 12. *Application.* – Unless otherwise indicated, the international conventions
5 enumerated in the preceding section shall apply to:

6 (a) All ships, whether seagoing or coastwise, which are registered under the
7 Philippine flag;

8 (b) All persons, partnerships, corporations, firms and other entities duly
9 registered or licensed in the Philippines to engage in ocean-based or ocean-related
10 enterprise, or those acting on their behalf;

11 (c) All foreign ships that are within the waters, ports, harbors and offshore
12 terminals of the Philippines regardless of whether or not they are registered in, or
13 belong to, State Parties to the conventions sought to be implemented by this Act.

14 (d) All entities that have land-based activities with substantial positive or
15 adverse impact on the marine ecosystem;

16 CHAPTER V

17 ENVIRONMENTAL-ECONOMIC ACCOUNTING

18 SEC. 13. *Environmental-Economic Accounting.* – The Council shall undertake
19 environmental-economic accounting of maritime ecosystems and resources, based on
20 the United Nations System of Environmental-Economic Accounting. Members of the
21 Council and heads of support agencies shall contribute data on environmental-
22 economic accounts relating to their mandates including damage estimation and sea
23 level rise projections.

24 Sec. 14. *Framework.* – The Philippine Statistics Authority (PSA) shall develop a
25 framework for the collection, compilation, processing, analysis, publication and
26 dissemination of environmental-economic accounts and its integration in the national
27 accounts: *Provided,* That PSA shall integrate the collection of environmental-economic
28 accounts into the Community-Based Monitoring System for local government units
29 (LGUs); *Provided, further,* That the PSA shall coordinate with and provide technical
30 assistance to Members of the Council, support agencies, investment promotion

1 agencies and LGUs to ensure compliance to standard environmental-economic
2 accounting techniques, methodologies, concepts, definitions and classifications to
3 prevent duplication in collection of statistical information.

4 CHAPTER VI

5 INTEGRATED MARINE AND COASTAL AREA MANAGEMENT

6 Sec. 15. *Integrated Marine and Coastal Area Management (IMCAM)*. – The
7 Integrated Marine and Coastal Area Management (IMCAM) shall be the framework
8 to address human impacts on marine and coastal biological diversity, and for
9 promoting conservation and sustainable use of this biodiversity.

10 Sec. 16. *Elements of the National IMCAM Framework*. – The Council shall develop
11 and implement the National IMCAM Framework within one (1) year from the
12 effectivity of this Act to provide direction, support and guidance to relevant member
13 and support agencies, LGUs and other stakeholders, according to the Elaborated
14 Programme of Work on Marine and Coastal Biological Diversity contained in the
15 Annex to Decision VII/5 of the Conference of the Parties to the United Nations
16 Environmental Programme Convention on Biological Diversity.

17 Accordingly, the National IMCAM Framework shall consider the following
18 elements:

19 (a) Building capacity of stakeholders, in both national and local levels, to
20 apply relevant policy instruments to address legal issues, institutionalize
21 participatory processes, and develop strategies to promote multidisciplinary and
22 multisectoral ecosystem-based management of coastal and marine environments;

23 (b) Direct action to protect coastal and marine environments from negative
24 impacts, such as:

25 (1) Alteration and destruction, of coastal and marine habitats,
26 particularly areas important for reproduction, *inter alia*, coral reef systems, sea
27 grass areas and the sea bed;

28 (2) Marine and land-based pollution;

29 (3) Improper coastal land use and the mismanagement of
30 watersheds;

31 (4) Illegal, unreported and unregulated fishing, by-catch especially
32 of threatened species, ;

1 (c) Establishment of mechanisms and guidelines for research, monitoring,
2 assessment and valuation of coastal and marine ecosystems and resources, including
3 indicators to measure natural and human-induced impacts

4 CHAPTER VII

5 PROTECTION AND CONSERVATION OF COASTAL AND MARINE 6 RESOURCES

7 SEC. 17. *Protection of Endangered Species.* – The Council shall spearhead the
8 conservation, protection and rehabilitation of rare, threatened and endangered
9 aquatic species as it may determine, including their habitats and migratory routes
10 such as the East Asian Current. It shall recommend to the President and Congress the
11 designation of coastal and marine areas as protected areas under the Expanded
12 National Integrated Protected Areas System, or sanctuaries of local conservation areas
13 under the Fisheries Code and the Local Government Code, and in compliance with
14 the relevant provisions of international treaties and agreements such as, the
15 Convention on the International Trade in Endangered Species of Wild Flora and
16 Fauna, the United Nations Convention on the Law of the Sea, and Convention on
17 Biological Diversity.

18 Sec. 18. *Policy Coordination.* – The Council shall harmonize rules and regulations
19 of all relevant agencies responsible for the implementation and enforcement of laws
20 to prevent and eliminate illegal fishing such as Republic Act (RA) No. 8550, also
21 known as the “*Philippine Fisheries Code of 1998*,” as amended by RA 10654.

22 CHAPTER VIII

23 DEVELOPMENT PLANNING

24 Sec. 19. *Maritime Spatial Planning.* – The Council shall undertake a nationwide
25 maritime spatial planning to identify the spatial and temporal distribution of priority
26 activities and uses and the interactions thereof in Maritime Zones, in order to reduce
27 conflict among uses, facilitate complementary uses, mitigate environmental impacts,
28 prevent marine dead zones and preserve ecosystem services.

29 Sec. 20. *Industry Development Plans.* – The Council, through working groups
30 created for the purpose, shall prepare five-year and ten-year development plans for
31 each priority strategic and sustainable ocean-based or ocean-related industry, in
32 accordance with the Policy Framework.

1 Sec. 21. *Integration with Area and National Development Plans.* – The National
2 Economic and Development Authority shall integrate the maritime spatial plan and
3 industry development plans into the Philippine Development Plan, the National
4 Priority Plan, the National Physical Framework Plan, and Area Spatial Development
5 Framework.

6 Sec. 22. *Inclusion in Strategic Investment Priority Plan.* – The Council shall
7 recommend to the Board of Investments the inclusion of identified priority strategic
8 ocean-based and ocean-based activities in the Strategic Investment Priority Plan.

9 Sec. 23. *Blue Economic Zones.* – Investment promotion agencies shall encourage
10 the establishment of blue economic zones and the transformation of existing special
11 economic zones (SEZs) into the same, where locator enterprises engaged in ocean-
12 based or ocean-related activities shall enjoy the privileges, benefits, advantages or
13 exemptions granted to economic zones and freeports in accordance with their
14 respective special laws.

15 In addition, the incentives provided for under the following laws may be
16 granted to blue SEZs:

- 17 (a) RA 9003, or the “*Ecological Solid Waste Management Act of 2000;*”
- 18 (b) RA 9275, or the “*Philippine Clean Water Act of 2004;*”
- 19 (c) RA 9513, or the “*Renewable Energy Act of 2008;*” and
- 20 (d) RA 10771, or the “*Philippine Green Jobs Act of 2016.*”

21 Blue SEZs may also qualify for financing provided for under RA 11293, or the
22 “*Philippine Innovation Act.*”

23 CHAPTER IX

24 BLUE FINANCE

25 Sec. 24. *Role of the Bangko Sentral ng Pilipinas (BSP).* – In the exercise of its
26 regulatory powers over financial institutions, the BSP shall mandate banks and quasi-
27 banks to adopt the United Nations Environment Programme Sustainable Blue
28 Economy Finance Principles as a foundation of corporate governance and risk
29 management.

30 Sec. 25. *Role of Securities and Exchange Commission (SEC).* – The SEC shall
31 encourage the issuance of blue bonds where proceeds will be exclusively applied to
32 finance or refinance, in part or in full, strategic and sustainable ocean-based or ocean-

1 related activities, in accordance with ASEAN Green Bonds Standards and Green
2 Bonds Principles, as developed and may be revised from time to time by the ASEAN
3 Capital Markets Forum and the International Capital Market Association,
4 respectively.

5 *Sec. 26. Role of Government Financial Institutions.* – The Land Bank of the
6 Philippines and the Development Bank of the Philippines shall allocate five percent
7 (5%) of its regular loan portfolio for credit to strategic and sustainable ocean-based or
8 ocean-related enterprises.

9 CHAPTER X

10 MARINE SCIENCE AND OCEAN LITERACY

11 *Sec. 27. Marine Scientific Research.* – The State recognizes marine science as a
12 foundation of maritime governance, insofar as rules governing the use of coastal and
13 marine resources must be based on the sound scientific understanding of the marine
14 environment. In accordance with UNCLOS, the Philippines has the exclusive rights to
15 regulate, authorize and conduct marine scientific research in our internal waters,
16 archipelagic waters and territorial sea; whereas, the Philippines has rights to regulate,
17 authorize and conduct maritime research in our exclusive economic zone and
18 continental shelf: *Provided*, That the marine scientific research activities shall not
19 unjustifiably interfere with other legitimate uses of the sea and shall not constitute the
20 legal basis for any claim to any part of the marine environment or its resources.

21 Marine scientific research by foreign states and competent international
22 organizations may only be conducted with the express consent of and the conditions
23 set forth by the Council, in accordance with the UNCLOS.

24 *Sec. 28. Ocean Literacy Framework.* – The Department of Education, Commission
25 on Higher Education, Technical Education and Skills Development Authority and
26 other government agencies implementing sector-specific literacy programs, in
27 consultation with relevant Members of the Council or support agencies, shall integrate
28 into the curricula of K-12, the Alternative Learning System, general education
29 programs of higher education institutions, technical and vocational education and
30 training, and other community-based training programs, the essential principles and
31 fundamental concepts of ocean sciences to develop the following competencies:

- 32 (a) Understanding the importance of the ocean to humankind;

1 (b) Communicating about the ocean in a meaningful way; and,

2 (c) Making informed and responsible decisions regarding the ocean and its
3 resources.

4 CHAPTER XI

5 FREEDOM OF NAVIGATION

6 SEC. 29. *Archipelagic Sea Lanes.* – The Council shall designate sea lanes and air
7 routes there above, suitable for the continuous and expeditious passage of foreign
8 ships and aircrafts through or over the archipelagic waters and the adjacent territorial
9 sea, and shall, where necessary as regards to the safety of navigation, require foreign
10 ships exercising the right of innocent passage to use such lanes and traffic separation
11 schemes in accordance with the UNCLOS.

12 CHAPTER XII

13 ROLE OF LOCAL GOVERNMENTS

14 Sec. 30. *Role of Local Government Units.* – Cities and municipalities shall continue
15 to exercise jurisdiction over municipal waters, pursuant to RA 7160, also known as the
16 “Local Government Code of 1991,” as amended, and RA 8550, as amended. Consistent
17 with this mandate, local government units shall act as the frontline agencies in the
18 formulation, planning and implementation of IMCAM in their respective
19 jurisdictions. LGUs shall integrate the National Maritime Spatial Plan and
20 opportunities such as the National Sewage and Septage Management Plan and the
21 funds under the Clean Water Act in their Comprehensive Development and Annual
22 Investment Plans.

23 Sec. 31. *Inter-LGU Cooperation.* – Consistent with the provisions of RA 7160, as
24 amended, LGUs may group themselves, consolidate or coordinate their efforts,
25 services, and resources for the accomplishment of the objectives of this Act.

26 CHAPTER XIII

27 FINAL PROVISIONS

28 Sec. 32. *Congressional Oversight.* – For the effective implementation of this Act,
29 a Congressional Oversight Committee is created to be known as the Blue Economy
30 Oversight Committee. The Blue Economy Oversight Committee shall be composed of
31 five (5) Senators and five (5) Representatives to be appointed by the Senate President
32 and the Speaker of the House of Representatives, respectively. The Minority shall be

1 entitled to pro rata representation. The Blue Economy Oversight Committee shall be
2 jointly chaired by the Chairperson of the Senate Committee on Economic Affairs and
3 the Chairperson of the House Committee on Economic Affairs.

4 Sec. 33. *Appropriations.* - The amount of One hundred million pesos
5 (P100,000,000.00) as initial funding for the Council to be charged against the
6 unexpended Contingency Fund of the Office of the President is hereby appropriated.
7 Thereafter, the amount needed for the implementation of this Act shall be included in
8 the annual General Appropriations Act.

9 Sec. 34. *Implementing Rules and Regulations.* - The Council shall issue the
10 implementing rules and regulations within sixty (60) days from the approval of this
11 Act: *Provided, That* That failure to issue rules and regulations shall not in any manner
12 affect the executory nature of the provisions of this Act.

13 Sec. 35. *Separability Clause.* - If any provision of this Act is held invalid or
14 unconstitutional, the remaining provisions not affected shall remain in full force and
15 effect.

16 Sec. 36. *Repealing Clause.* - All other laws, decrees, executive orders, and rules
17 and regulations contrary to or inconsistent with the provisions of this Act are repealed
18 or modified accordingly.

19
20 Sec. 37. *Effectivity.* - This Act shall take effect fifteen (15) days after its
21 publication in the *Official Gazette* or in a newspaper of general circulation.

Approved,

'22 AUG -1 P1 :44

SENATE

P.S. Res. No. 81

RECEIVED BY: 

Introduced by Senator Grace Poe

RESOLUTION

URGING THE SENATE COMMITTEE ON ECONOMIC AFFAIRS TO CONDUCT AN INQUIRY, IN AID OF LEGISLATION, ON THE ENORMOUS UNTAPPED POTENTIAL OF THE PHILIPPINE 'BLUE ECONOMY', AND TO REVIEW THE EFFECTIVENESS OF EXISTING LAWS IN BOOSTING ITS DEVELOPMENT

1 WHEREAS, Section 19, Article II of the 1987 Philippine Constitution directs
2 the State to develop a self-reliant and independent national economy effectively
3 controlled by Filipinos;

4 WHEREAS, Section 1, Article XII of the Constitution further directs the State
5 to promote industries that makes full and efficient use of natural resources, and
6 which are competitive in both domestic and foreign markets;

7 WHEREAS, further, Section 2 of the same provision States that:

- 8 1) All of the water resources of the Philippines are owned by the State;
9 2) The exploration, development and utilization of such resources shall
10 remain under the full control and supervision of the State; *and*
11 3) The State may directly undertake such activities, or it may enter into co-
12 production, joint venture, or production-sharing agreements with Filipino
13 citizens, or corporations or associations at least 60 per centum of whose
14 capital is owned by such citizens.

15 WHEREAS, historically, the Philippine economy is driven by domestic
16 consumption, particularly since household expenditures account for 60% of Gross
17 Domestic product (GDP)¹;

¹ Philippine Statistics Authority (PSA), Annual Gross Domestic Product Series, 1946-2021.

18 WHEREAS, the economic recession after severe mobility restrictions were
19 imposed to control the spread of COVID-19 showed that relying entirely on
20 domestic consumption is untenable and exposes the Philippines to extreme risks;

21 WHEREAS, the rapid rise in inflation spurred by Russia's invasion of Ukraine
22 has drastically reduced the purchasing power of Filipino consumers, and may
23 further dampen the growth prospects of our consumption-based economy in the
24 coming years;

25 WHEREAS, the weakening of the Philippine peso to historical lows
26 constitutes another damper on growth prospects, as we are a net importer of
27 goods and services;

28 WHEREAS, therefore, there is a major imperative to restructure our
29 economy to reduce dependence on domestic demand and to develop export-
30 oriented industries;

31 WHEREAS, according to a report by the Department of Science and
32 Technology entitled "Pagtanaw 2050: The Philippine Foresight"² the Philippine Blue
33 Economy is one potential sector with enormous untapped potential for growth;

34 WHEREAS, according to the same report, the entire sea area within the
35 maritime zones of the country is seven times larger than our entire land area³, and
36 is our greatest natural resource;

37 WHEREAS, the Philippines has the 6th longest coastline in the world,
38 measuring 36,389 kilometers⁴, and nearly 60% of our population reside in coastal
39 areas;

40 WHEREAS, according to data from the Philippine Statistics Authority (PSA)⁵,
41 ocean-based industries contributed Php 617.20 billion to the Philippine economy in
42 terms of Gross Value Added (GVA) in 2020, and provided employment to nearly
43 2.05 million Filipinos;

² Department of Science and Technology (DOST). 2021. "Pagtanaw 2050: The Philippine Foresight".

³ *Ibid.*

⁴ *Ibid.*

⁵ Philippine Statistics Authority (PSA). 2020. "Ocean-based industries declined by -32.6 percent, accounted for 3.4 percent of GDP in 2020".

44 WHEREAS, the Ocean Fishing Sector accounted for 31.9% of the GVA and
45 more than 50% of the jobs provided by the Philippine Blue economy;

46 WHEREAS, the global market for Seafood is projected to reach a revised size
47 of \$138.7 billion by 2027, equivalent to a compounded annual growth rate of
48 2.7%⁶;

49 WHEREAS, ocean-based industries, which include off-shore and coastal
50 mining and quarrying, manufacture of ocean-based products, coastal construction,
51 and ocean-based power generation, contributed an additional, provided an
52 additional P264.01 billion in GVA, and contributed 95,831 jobs;

53 WHEREAS, ocean-based services, such as sea-based transportation and
54 storage, marine information services, marine insurance, marine renting and
55 business activities, maritime safety, surveillance and resource management,
56 maritime education, coastal accommodation and recreation contributed an
57 additional 156.53 million in GVA and 920,568 jobs;

58 WHEREAS, similar to Republic Act No. 10771, or the "Philippine Green Jobs
59 Act of 2016", the incentives therein may also apply to enterprises which are
60 engaged in the blue economy;

61 WHEREAS, enterprises involved in the blue economy squarely fall within the
62 definition of Tier I activities which have "high potential for job creation" and
63 "potential competitive advantage" under the rationalized scheme of fiscal
64 incentives provided under the Chapter II of Republic Act No. 11534, or the
65 "*Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act*";

66 WHEREAS, the Philippine blue economy encompasses the fishing, energy,
67 and infrastructure, transportation, utilities, logistics and support services which are
68 listed as Tier I activities;

69 WHEREAS, finally, in the book entitled *How Asia Works*, Joe Studwell argues
70 that State-controlled financing and credit tied to export targets was a key part in

⁶ <https://www.globenewswire.com/en/news-release/2021/07/19/2264627/28124/en/Global-Seafood-Market-Report-2021-2027-Surging-Demand-for-Fresh-Live-Chilled-Seafood-Catapults-the-Category-to-the-Dominant-Position.html#:~:text=Amid%20the%20COVID%2D19%20crisis,the%20analysis%20period%202020%2D2027.>

71 the rapid, sustained and inclusive growth of manufacturing in successful Asian
72 countries like Japan and South Korea;

73 NOW THEREFORE BE IT RESOLVED, as it is hereby resolved, by the Senate
74 of the Philippines, to urge the Senate Committee on Economic Affairs to conduct
75 an inquiry, in aid of legislation, on the enormous untapped potential of the
76 Philippine 'Blue Economy', and to review the effectiveness of existing laws in
77 boosting its development.

Adopted,



GRACE POE