

System of
Environmental
Economic
Accounting



Recommendations for Philippine Environmental- Economic Accounts in the 4IR and 5IR

GEM B. CASTILLO, PhD

President and Chairman of the Board

Resources, Environment and Economics Center for Studies (REECS)



Initiatives on Envi. Concerns of the SDGs

1st Industrial Revolution

Mechanization of manufacturing with the introduction of steam and water power

2nd Industrial Revolutions

Mass production assembly lines using electricity and oil-based power

3rd Industrial Revolutions

Automated production using electronics, programmable logic controllers, IT systems and robotics

4th & 5th Industrial Revolutions

Autonomous decision making of cyber physical systems using machine learning through cloud technology

17 (SDGs), 169 sub-targets

- Monitoring, interrelationships, interdependencies, trade-offs and conflicts between these aims
- Impact on the long-term health of natural systems
- Linked Economy-Environment

Tools, Methods, Processes

- Integrated Information System (Socio-economic, biophysical, geospatial, etc.), IEEM
- (Envi) and Natural Capital Accounting, SDG Indicators
- Evidence-based Policy and Policy analysis tools (e.g. BCA, MCA, Risk Assessment, Impact Evaluation, I-O Analysis, etc.)

- ❑ ENRAP
- ❑ TEEB Country Study
- ❑ (Phil-WAVES)
- ❑ Current USAID SIBOL (Site-level, National)
- ❑ ENRA Capacity Building for Climate Change projects



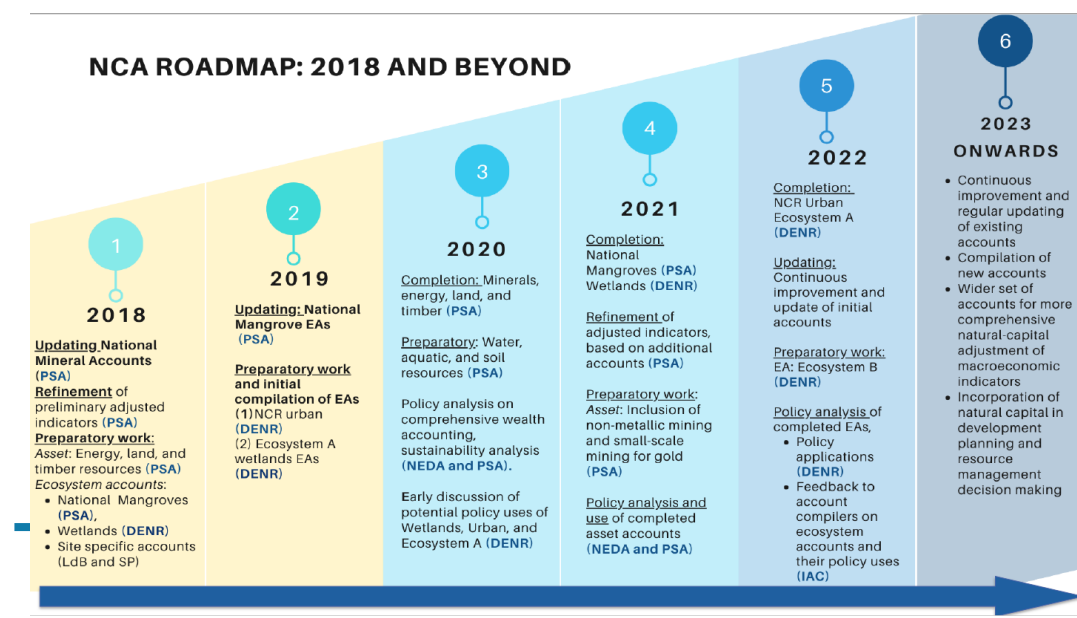
Conduct of research, training, conferences and meetings, institute environmental economics in education, working with government agencies, NGOs, civil society, industry and other members of the civil society



Focuses on building capacity for transdisciplinary research and promoting regional collaboration in addressing global and local economic and environmental challenges. (Note: Training modules on EA)



Recommendations for the Development of Environmental Accounts Roadmap



- **Timeliness of Environment Information, Accounts and Content:** having information available to decision-makers in time to be capable of influencing their decisions, e.g., localize SCP accounts
- **Long-term Collaborative Projects:** Academic, scientific or R&D, data generators and providers; sustained over long periods instead of ad-hoc donor-dependent short-term projects
- **Partnership Programs:** National and regional government institutions, academic institutions, private organizations
- **Regionalize Capacity Building:** Organizing expert groups at the regions, conduct regular training on tools, establishing academic/R&D centers of excellence in environmental accounts that link with data generators and providers
- **Integration Tools and Methods:** Socio-economic, geographic/spatial, environmental, biological and biophysical information using 4IR & 5IR tools
- **Modernization for the 4IR & 5IR:** Internet of Things, Blockchain, AI, Machine Learning, Neural Networks
- **Alternative Resource Generation/Financing:** Designating revenue, income, charges, fees for sustained development of Environmental-Economic Accounts to supplement GAA budget allocation

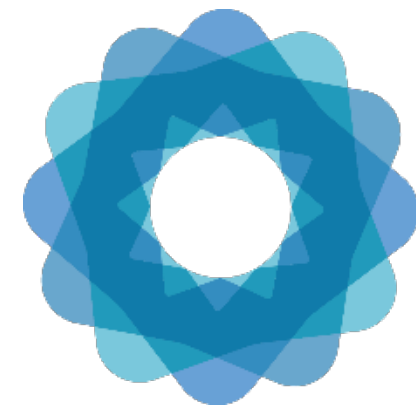
REECS, REAP, EEG Philippines **Support for the Envi-Econ Accounts Development**

Continuing Capacity Building: Enhance the capacity of Philippine researchers, educators, decision makers and managers on data generations, integration and application to SDG policies and processes; support in establishing regional centers of excellence in accounts development through academic institutions

Developing Environmental Accounts and Policy Evaluation : Conduct multi-disciplinary or transdisciplinary research to improve data generation, integration of environment information, and tools in account development to address environment related SDG targets;

Partnership: Engage with multi-disciplinary researchers, educators, and decision makers, managers to generate concrete actions to help address SDG targets especially poverty and environmental issues.

Science Communication: improving the capacity of account providers/developers to communicate with sound advice to policymakers.



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Thank you!



Source: sustainabledevelopment.un.org