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# Waste, Energy & Ocean Health in the Age of the Circular Economy

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## Pathway 1. Advanced Waste to Energy Plants (End of Life)

*Building the infrastructure to deal with waste when it can no longer be recycled, reused or upcycled, its “end of life.”*



## Pathway 2. Fly Ash Immobilization (Future Proofing)

*Seeking long terms solutions for the end products from advanced waste to energy plants in pathway one. **Mitigating POPs risks to oceans.***



## Pathway 3. Eco Industrial Parks (Centralized Hubs)

*Clustering recycling, upcycling (value creation) and by-product users around “end of life” facilities to increase the amount of waste treated and create more value from sorted higher value items – a mix of industrial symbiosis with the circular economy*





## Pathway 4. Promote Innovative Up-cyclers (Circular Economy)

*Promoting the recyclers, up-cyclers and re-users at both large centralized facilities and distributed locations closer to the point of waste generation.*

## Pathway 5. Community Level Waste Treatment (Distributed)

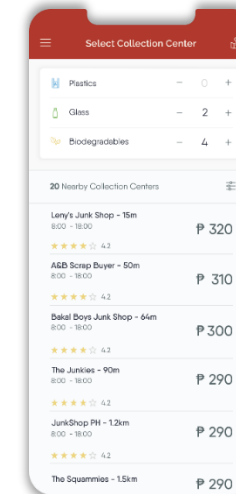
*Empowering communities to create value closer to the source of generation taking advantage of emerging technologies and lower transport costs.*

## Pathway 6. Digitizing Waste Collection & Treatment (APPs)

*“Uberizing” the collection, trading, tracking and treatment of waste by extending second hand trading to waste – Valorizing low value waste.*

## Pathway 7. Use Digitization for Clean Up Efforts (Community)

*Supporting APPs which can be used to link willing donors for clean up with actual proven clean up activities.*



# Developing Solutions towards a Circular Economy

## Pathway 8. Green Port Transformation (Regionalized)

*Linking Green Ports within SIDS as an extension of Pathway 3 (EIP).*

## Pathway 9. Extended Producer Responsibility Digitization (eEPR)

*Costing the impact of products introduced into an economy, charging EPR fee at manufacture/import & tracking via APP from pathway 6. **eEPR.***

## Pathway 10. Strengthen Recycling Industry (Supply Chains)

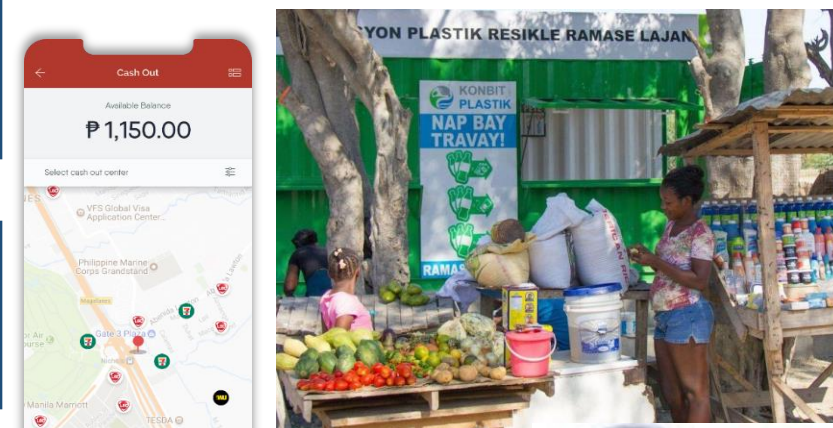
*Supporting innovation in post collection to upcycled product supply chain – innovative recyclers, logistics models and technology.*

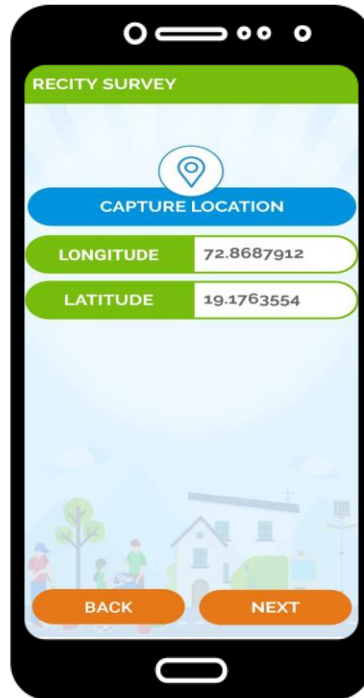
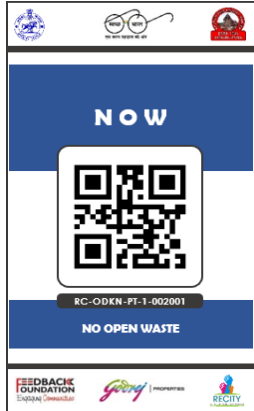
## Pathway 11. Consumer Product Redesign (reduction by design)

*Assisting product manufacturers to understand the impact of pathway 9 and supporting transitions to lower impact products*

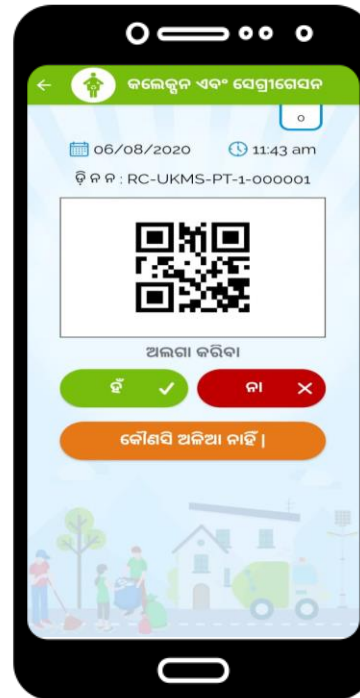
## Pathway 12. Strengthening Enforcement/Governance (Capacity)

*Supporting the ability of governments to enforce environmental legislation – creation of avoid cost model to support pathway 9.*





Geo Tag  
Property  
Units



Daily Covid  
Waste  
Collection



Transfer To  
Waste to Energy  
Facility



Record Of  
Waste To WTE  
Facility



*Note: Mobile application in local language - Odia*



Platform & APP linking import/sale, location & treatment charge (TC)/subsidy (S) over product lifecycle



### Government

Create regulatory environment, owns platform, collects revenue (TC) & disburses subsidy (S)

Policy, Regulation, Taxation & Subsidy

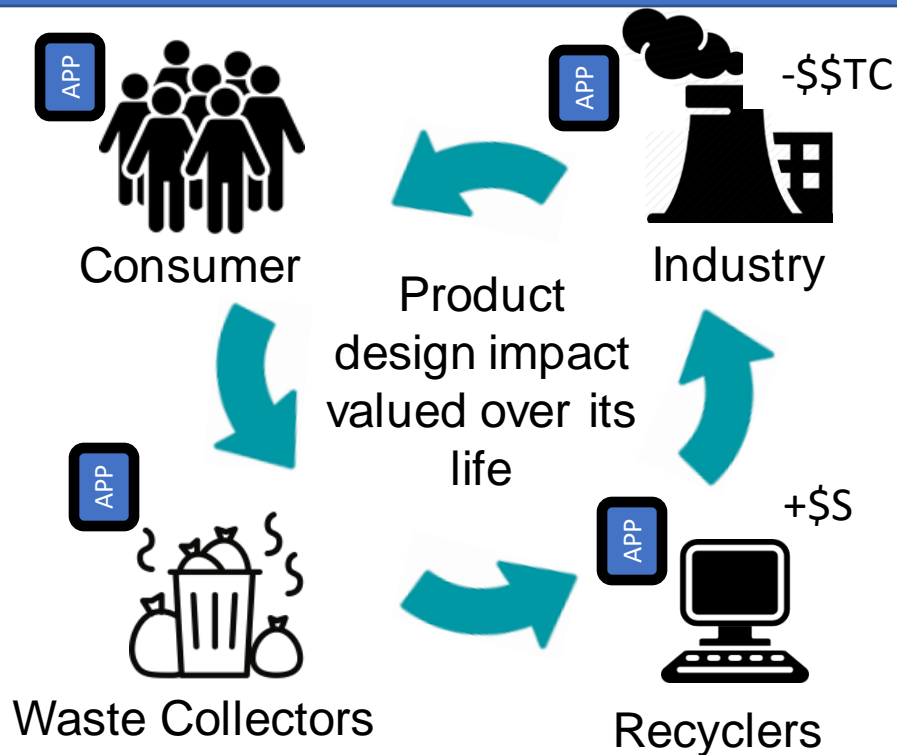


Changes deployment of capital to more attractive subsidized waste activities & low impact FMCG companies

Capital with Confidence



Enforcement



End of Life facility provider paid a flat toll charge, removing perverse incentive to burn – encourages recyclers

End of Life Technology

**Waste managed to be within ecosystem services boundary**



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Thank You  
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