

Sustainable Financing for Waste Management: Design It Yourself Workbook

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# Step 8 - Detailed Scheme Design

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| **What Involved to Complete Step**This step will assist to use the findings from the feasibility study and consultation feedback to confirm an appropriate design for an ARFD system appropriate for the local context. Key aspects of a scheme to be confirmed in this step include: | **Information / Consultation Recommended to Complete Step*** Findings from the pre-feasibility study and feasibility study
* Findings / feedback from political and stakeholder consultation (with communities. Government agencies, and private sector)
 | **Resources Available**  Powerpoint illustrations with speaking notes (request from SPREP / PacWaste Plus) |
| 1. What seeking for ARFD to achieve
2. Approved scheme uses
3. Collection of ARFD and scheme financial management
4. What items to include
5. Scheme Finances - Deposit and Fees
6. Collection Depots
 | 1. In-Country Materials Processing/Transfer Facilities
2. Logistics providers and scheme partners
3. Managing legacy waste
4. Scheme management
5. Scheme governance
6. Scheme reporting
7. Scheme promotion and advertising
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| 1. What Seeking to Achieve
 | Using findings from the feasibility study and feedback from stakeholder consultation, summarise the identified priorities for the ARFD scheme by dragging the icons (or writing the priorities) into one of the four boxes (delete icons not selected). |
|     | Top Priority (recommend ~3 items) |
| Medium Priority |
| Low Priority  |
| No priority (not relevant)  |
| Outline the clear purpose / objectives for the scheme:

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| *For example: To provide for the shared responsibility for the long-term self-sustainable management of beverage container and electronic waste throughout their life cycle, and provide for equality in recycling services for all communities. Key outcomes sought:* * *Achieve a recycling performance of 80% for all scheme inclusions within 5 years,*
* *Scheme activities funded 100% by scheme fees withing 2 years without reliance on external funding sources*
* *Reduce beverage container litter by 80% from baseline*  *in 2 years*
* *Eliminate number of illegal stockpiles EOL electronic items in 2 years*
* *To ensure 100% communities of over 1,000 people are provided facilities to participate in the scheme*
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| **Scheme Purpose / Objectives** To provide…. |

To enable measurement and understanding of performance against purpose / objectives for the scheme, it is recommended to gather the baseline data (from Steps 1 and 2) and indicate the desired performance target

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| **List Goals of the Scheme** | **Baseline** | **Target** | **Comments** |
| *E.g., Scheme achieving target recycling performance*  | *12%* | *80%* |  |
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| Other comments: |

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| 1. Approved Scheme Uses
 | Based on purpose / objectives for the scheme, consider what scheme fund will be used for. Communicating and committing to the fund only being used for approved uses is an important way to keep trust of Private Sector and communities.Some options for approved uses are provided to the right – consider each and answer yes or no. Add comments or further factors for consideration. | **Consider Approved Uses of the Scheme** | **Y/N** | **Comments** |
| Completing agreed recycling activities – operation of Collection Depots, In-Country Materials Processing/Transfer Facilities, and scheme logistics  |  |  |
| Purchase required scheme infrastructure |  |  |
| Purchase infrastructure to achieve other waste management goals – i.e., circular economy solutions (in country recycling/repurposing) |  |  |
| Waste minimisation and management education initiatives |  |  |
| Scheme promotion and advertisement |  |  |
| Scheme management and auditing |  |  |
| Other:  |  |  |
| Other: |  |  |
| Provide other comments on approved uses of the scheme |

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| 1. Collection of ARFD and Scheme Financial Management
 | Summarise the identified financial arrangements of the scheme (when the ARFD will be collected and by which agency) by dragging the icons (or writing the options) into the table provided (delete icons not selected).Icons to use if desire: |
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| **Identified Agency / Partnership Responsible for Capturing ARFD\*** | **When ARFD Collected\*\*** | **Key Activities for Agency Collecting ARFD** | **Reporting and Record Keeping Requirements for Agency Collecting ARFD (what needed to ensure fair and transparent collection)** | **Offences for Agency Collecting the ARFD** | **Systems and Infrastructure Required for Collecting ARFD (i.e., customs system upgrade)** | **Estimated Budget** |
|  |  |  |  |  |  |  |
| **Identified Agency / Partnership Responsible for Administering ARFD fund\*** | **Where ARFD Fund Located\*** | **Key Activities for Agency Administering ARFD Fund****How fund ringfenced / controlled (i.e., Identify procedures for payment from the fund)** | **Approved Uses of Fund** | **Reporting and Record Keeping Requirements for Fund Administrator (What needed to ensure fair and transparent operation of fund)** | **Offences for Fund Administrator** | **Systems and Infrastructure Required for Fund Administrator (i.e., Finance database upgrade, SOP developed)** | **Estimated Budget** |
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| \* Options: Department of Finance, Environment, Customs, or Other Government Office, Scheme Manager, Scheme Governance, Other\*\* Options: Upon import, after first sale, once items returned for recycling, Other |

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| Provide further comments on scheme financial management  |

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| 1. Items to Include
 | Summarise the identified items to be included in the ARFD scheme by dragging the icons (or writing the items) into one of the three boxes (delete icons not selected).*It is recommended to reconsider the following questions. Do the items selected for inclusion in the scheme…:* * *fit with what is sought for scheme to achieve?*
* *fit with any limitations to the scope of a scheme?*
* *have a current recycling/transfer system (i.e., are they currently collected for recycling)? How will existing recycling activities be considered or enhanced by the ARFD?*
* *have potential for in-country recycling or overseas export?*
* *have existing equipment in country to collect and process the expected throughput? Is it known what additional equipment will be needed*
* *have existing systems in country to collect and process the expected throughput? Is it known what additional systems will be needed? i.e., what contracts will be needed, what are the requirements for international export markets (i.e., responsible storage, pre-processing, and transport) and can they be achieved?*
* *provide for social equality – i.e., not have disproportionate impacts on marginalised groups, whoever buys item should be able to recycle them and access refund*
* *have any perverse outcomes (e.g., producers may switch to using LPB over PET to get around participating in the scheme)*
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| Pet Bottle Vector Icon Illustration Royalty Free Cliparts, Vectors, And  Stock Illustration. Image 153813128.Recycle - The 4 R's - RecycleKiwi Wine bottle with label - Free iconsTetrapak Icons - Free SVG & PNG Tetrapak Images - Noun ProjectCar, cars, tractor, van, vehicles icon - Download on IconfinderConstruction, excavator, heavy equipment, build, tool icon - Download on  IconfinderOven Icon Royalty Free Cliparts, Vectors, And Stock Illustration. Image  80878215.Devices icons - subtriangular.internetbuzz.siteVehicle Tyre Icons - Download Free Vector Icons | Noun ProjectCar Battery Icons - Download Free Vector Icons | Noun Projectsolar panel sun energy eco comments - solar panel icon PNG image with  transparent background | TOPpngCrude-Oil Icons - Free SVG & PNG Crude-Oil Images - Noun Project | Items for inclusion phase 1 of ARFD: |
| Items for inclusion phase 2 of ARFD |
| Items not feasible for inclusion in ARFD |
| Note: regardless of what items selected for Phase I of ARFD, it is recommended the Working Group “future proof” the legislation, i.e., determine items to be included in Phase I and focus attention/investment on ensuring these items can be managed, but provide in legislation the ability to “turn on” additional items once conditions are reached. It may be appropriate to list included products in a “Schedule” to the Act or Regulation and provide for amendment to the list as situations change (i.e., new problematic products are identified, new materials processing facility established, or recycle technology developed, etc). |

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| 1. Scheme Finances - Deposit and Fees
 | Based on data found in Step 5, and from feedback from consultation with communities and the Private Sector, confirm the scheme finances (Deposit and Fee) for items included in the scheme.Before finalising this decision, it is recommended to reconsider the following:  |
| Deposits * The cost to the consumer
* Minimum and/or living wage – potential for create disproportionate impacts on low-income earners
* The level of convenience provided by the scheme
* Potential effects on informal workforce and existing litter-pickers
* Supplementary income and meaningful employment opportunities
* The influence on consumers purchasing the items
* The influence on consumers returning the eligible scheme materials
 | Fees* The “true cost” for recycling each product, including:
	+ Construction and operating Collection Depots, including labour
	+ Construction and operating Material Processing Facilities, including labour
	+ Transport and logistics
	+ Infrastructure
	+ Legacy waste management
* Provide for costs of administrating the scheme, including:
	+ Contract management
	+ Financial management
	+ Auditing
	+ Reporting
	+ Marketing and advertising
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| **Material Types** | **Deposit Amount** | **How Deposits Refunded to Consumers** | **Key Activities for Agency Refunding Deposits to Consumers** | **Offences for Agency Refunding Deposits to Consumers** | **Identify Condition of Returned Items that will allow refund of Deposits** |
| PET bottles (plastic) |  |  |  |  |  |
| Aluminium cans |  |  |  |  |  |
| Glass bottles |  |  |  |  |  |
| Other containers – HDPE, LPB, tin food cans |  |  |  |  |  |
| Vehicles  |  |  |  |  |  |
| Heavy Equipment  |  |  |  |  |  |
| Whiteware  |  |  |  |  |  |
| Electronics  |  |  |  |  |  |
| Tyres |  |  |  |  |  |
| Batteries  |  |  |  |  |  |
| Solar panels |  |  |  |  |  |
| Used Oil |  |  |  |  |  |
| *Other* |  |  |  |  |  |
| *Other* |  |  |  |  |  |

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| **Material Types** | **Handling Fee Amount** | **Identify Procedures for Payment from ARFD Fund** | **Summarise Key Activities for Agencies Using Handling Fees** | **Summarise Offences for Agencies Using Handling Fees** | **Administration Fee Amount** | **Summarise Key Activities for Agencies Using Administration Fees** | **Summarise Offences for Agencies Using Administration Fees** |
| PET bottles (plastic) |  |  |  |  |  |  |  |
| Aluminium cans |  |  |  |  |  |  |  |
| Glass bottles |  |  |  |  |  |  |  |
| Other containers – HDPE, LPB, tin food cans |  |  |  |  |  |  |  |
| Vehicles  |  |  |  |  |  |  |  |
| Heavy Equipment  |  |  |  |  |  |  |  |
| Whiteware  |  |  |  |  |  |  |  |
| Electronics  |  |  |  |  |  |  |  |
| Tyres |  |  |  |  |  |  |  |
| Batteries  |  |  |  |  |  |  |  |
| Solar panels |  |  |  |  |  |  |  |
| Used Oil |  |  |  |  |  |  |  |
| *Other* |  |  |  |  |  |  |  |
| *Other* |  |  |  |  |  |  |  |

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| 1. Collection Depots
 | Summarise the identified Collection Depots style and operators to collect the products to be included in Phase 1 of the scheme (strike out or delete the material types not considered).Icons to use if desire: |
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| **Material Types** | **Selected Collection Depot Style\*** | **Number of Depots Required at Scheme Commenc-ement** | **Operators of Collection Depots\*\*** | **Comments on Depot Operators – how Selected / Engaged** | **Key Activities for Depot Operators (included Data Collection Requirements)** | **GEDSI Design and Operations Considerations (access for those with reduced mobility and vision, outer island communities, people with limited transport, etc)** | **Summarise Offences for Depot Operators** |
| Beverage Containers (PET, Aluminium, Glass bottles, Other containers)  |  |  |  |  |  |  |  |
| Bulky Items (Vehicles, Heavy Equipment, Whiteware, Electronics, Tyres, Batteries, Solar panels) |  |  |  |  |  |  |  |
| Used Oil |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |
| \* Options: Central Depot, Community Depots, Automated Depots, Store Buy-back, Mobile Depots, Informal Depots, Other\*\* Options: Public Sector, Private Sector, NGO, Partnership/Combination, Social Disability NGO, Managing Agency, Other |

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| 1. In-Country Materials Processing/ Transfer Facilities
 | Summarise the identified In-Country Materials Processing/Transfer Facilities - EXISTING or NEW - required for processing the expected throughput of ARFD items to be included in Phase 1 of the scheme, and the operators of the Material Processing Facilities (strike out or delete the material types not considered).Icons to use if desire: |
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| **Material Types** | **Selected In-Country Materials Processing/Transfer Facility** | **Number of In-Country Materials Processing/Transfer Facilities required at scheme commenc-ement** | **Operator of In-Country Materials Processing/Transfer Facilities \*** | **Comments on In-Country Materials Processing/Transfer Facility Operator – how Selected / Engaged** | **Key Activities for In-Country Materials Processing/Transfer Facility Operators (included Data Collection Requirements)** | **GEDSI Design and Operations Considerations** **(allow for inclusive employment (Step 5.1))** | **Summarise Offences for In-Country Materials Processing/Transfer Facility Operators** |
| Beverage Containers (PET, Aluminium, Glass bottles, Other containers)  |  |  |  |  |  |  |  |
| Bulky Items (Vehicles, Heavy Equipment, Whiteware, Electronics, Tyres, Batteries, Solar panels) |  |  |  |  |  |  |  |
| Used Oil |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |

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| Notes for Follow-up / Further Research / Discussions: |

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| 1. Logistics Providers and Scheme Partners
 | Summarise the identified logistics providers and scheme partners required for scheme operation in the following table. |
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| **Logistics Providers Required for Scheme\*** | **Selected Logistics Service Providers** | **Comments on Logistics Providers – How Selected / Engaged** | **Key Activities for Logistics Providers (including Data Collection Requirements)** | **How will Logistic Providers be Paid by the Scheme** | **Summarise Offences for Logistics Service Providers** |
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| \* Options: Internal shipping, Truck transport, External shipping, Customs, Accounting, Phone application (“app”), Barcode system, Website, Advertising/Promotion, Other |

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| **Other Scheme Partners \*** | **How will Partners Participate in the Scheme** | **Comments on Other Partners – How Selected / Engaged** | **Key Activities for other partners (including Data Collection Requirements)** | **Summarise Offences for Other Scheme Partners** |
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| \* Options: Importers, retailers, schools, NGOs, Other |

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| Notes for Follow-up / Further Research / Discussions: |

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| 1. Managing Legacy Waste
 | Summarise the identified system for managing legacy waste by dragging the icons (or writing the options) into the table provided (delete icons not selected).Icons to use if desire:  |
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| **How will Legacy Waste be Managed?\*** | **What Agency Responsible** | **Summarise Key Responsibilities** | **How Provided for in Scheme Legislation / Regulation** | **Reporting and Record Keeping Requirements** | **Systems and Infrastructure Required (i.e., barcode system)** | **Estimated Budget (if required)** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| \* Options: Secure seed funding, delay issuing refunds, clean-up initiatives, host amnesty events, staged approach, barcode system, other  |

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| Notes for Follow-up / Further Research / Discussions: |
| 1. Scheme Management
 | Summarise the identified management for the scheme and identified responsibilities by dragging the icons (or writing the options) into the table provided (delete icons not selected).Icons to use if desire: |
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| **Agency / Partnership Identified as Scheme Manager\*** | **Comment on Scheme Manager - how selected / engaged** | **Key Activities for Scheme Manager (daily tasks, or targets to reach)** | **Reporting and Record Keeping Requirements for Scheme Manager** | **Offences for Scheme Manager** | **Outline Measures if Identified Tasks / Targets not Reached** |
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|  |  |  |  |  |  |
| \* Options: Public Sector, Private Sector, Managing Agency, Partnership / Combination, Other  |

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| 1. Scheme Governance
 | Summarise the identified governance for the scheme and identified responsibilities by dragging the icons (or writing the options) into the table provided (delete icons not selected).Icons to use if desire: |
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| **Agency / Partnership Identified as Scheme Governance\*** | **Comment on Scheme Governance Body –how selected / engaged** | **Key Activities for Scheme Governance Body (daily tasks, or targets to reach)** | **Reporting and Record Keeping Requirements for Scheme Governance**  | **Offences for Scheme Governance Body** | **Outline Measures if Identified Tasks / Targets not Reached** |
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|  |  |  |  |  |  |
| \* Options: Public Sector, Private Sector, Managing Agency, Partnership / Combination, Other  |

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| 1. Scheme Reporting
 | Effective reporting will provide for stakeholder confidence and understanding of scheme performance. Scheme reporting requirements are recommended to be included in operational details of required contracts and agreements.Based on purpose / objectives for the scheme and identified partners and activities, consider the reporting requirements to ensure scheme performance can be accessed and communicated.Some options for reporting requirements are provided – consider each and select if appropriate for the scheme, and what scheme partner(s) appropriate to undertake that reporting. Add comments or further factors for consideration. |
| **Consider what reporting requirements** | **What agency responsible** |
| **Collection Depots** | **Materials Processing Facility** | **Scheme Manager** | **Scheme Governance** | **Logistics Providers** | **External agency** | **Government** | **Other (detail)** |
| Financial performance |  |  |  |  |  |  |  |  |
| Rates of recycling |  |  |  |  |  |  |  |  |
| Performance against recycling targets |  |  |  |  |  |  |  |  |
| Performance against legislative requirements |  |  |  |  |  |  |  |  |
| Scheme utilisation by all consumers |  |  |  |  |  |  |  |  |
| Employment  |  |  |  |  |  |  |  |  |
| Scheme infrastructure and investment |  |  |  |  |  |  |  |  |
| Scheme revenue allocated to waste management and minimisation activities |  |  |  |  |  |  |  |  |
| Other: |  |  |  |  |  |  |  |  |
| Other:  |  |  |  |  |  |  |  |  |
| Provide comments on reporting requirements  |

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| 1. Scheme Promotion and Advertising
 | The effectiveness of scheme promotion and advertising will influence consumer engagement, effectiveness of the scheme, and the equality of the scheme. Scheme promotion and advertising requirements are recommended to be included in operational details of required contracts and agreements.Consider what messaging required for effective scheme operation – what is important to communities to know for scheme operation, how to ensure all stakeholders are provide with relevant information. Some options for scheme promotion and advertising are provided – consider each and select if appropriate for the scheme, and what scheme partner(s) appropriate to undertake. Add comments or further factors for consideration. |
| **Messaging required for effective scheme operation** | **What agency responsible** |
| **Collection Depots** | **In-Country Materials Processing/Transfer Facility** | **Scheme Manager** | **Scheme Governance** | **Logistics Providers** | **External agency** | **Government** | **Other (detail)** |
| Depot locations and operating hours |  |  |  |  |  |  |  |  |
| Eligible items and their condition |  |  |  |  |  |  |  |  |
| Refund amounts |  |  |  |  |  |  |  |  |
| Scheme performance – rates of recycling |  |  |  |  |  |  |  |  |
| Information on how material has been re-processed |  |  |  |  |  |  |  |  |
| Scheme financial records  |  |  |  |  |  |  |  |  |
| Upcoming changes to the scheme  |  |  |  |  |  |  |  |  |
| Messaging inclusive and available for all communities  |  |  |  |  |  |  |  |  |
| Messaging translated into main languages |  |  |  |  |  |  |  |  |
| Other  |  |  |  |  |  |  |  |  |
| Provide comments on promotion and advertising requirements  |
| Notes for Follow-up / Further Research / Discussions: |