Respecting the rights of informal waste sector workers: A human rights due diligence toolkit

Stage 1: Plastic value chain mapping tool

Contents

How to use the Stage 1: Plastic value chain mapping tool

The *Stage 1: Plastic value chain mapping tool* serves as a high-level guidance. It offers recommendations for companies who aim to:
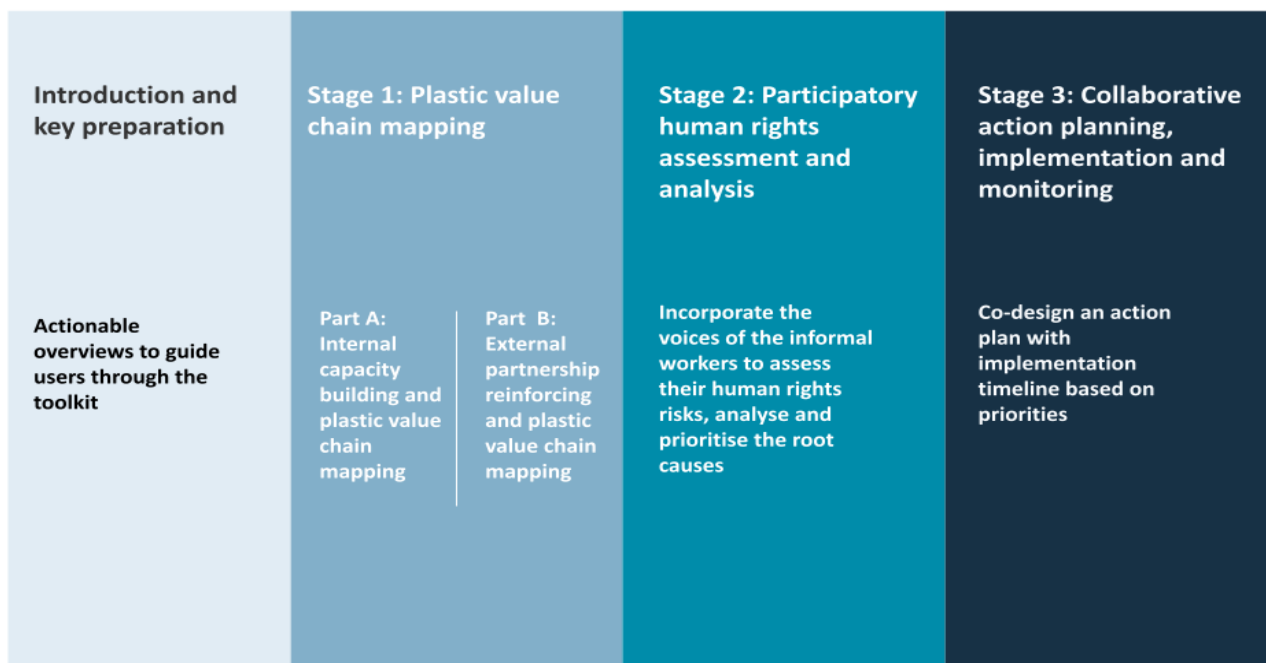
- explore the extent to which informal waste sector workers – in particular waste pickers – are involved in their value chain

- understand the human rights risks associated

- develop background information on the challenges they face within the chain

The tool will:
- support users to recognise the critical role of waste pickers in company recycling value chains
- help users acknowledge their responsibility to prevent and address the human rights impacts experienced by those workers

As a result, this knowledge will better equip companies to use or increase their leverage with other responsible parties within their value chain. This will allow them to effectively direct their influence to prevent or mitigate human rights impacts.

The *Stage 1: Plastic value chain mapping tool* will also support companies' understanding of where gaps in knowledge of the chain exist to ensure traceability and ultimately inform the development of action plans to improve human rights across the chain for all informal waste sector workers.

| Introduction and key preparation	Stage 1: Plastic value chain mapping		Stage 2: Participatory human rights assessment and analysis	Stage 3: Collaborative action planning, implementation and monitoring
Actionable overviews to guide users through the toolkit	Part A: Internal capacity building and plastic value chain mapping	Part B: External partnership reinforcing and plastic value chain mapping	Incorporate the voices of the informal workers to assess their human rights risks, analyse and prioritise the root causes	Co-design an action plan with implementation timeline based on priorities

This Stage 1 tool is split into two parts, Part A and Part B, to simplify the process. This allows companies to first map their formal value chain with their internal teams before connecting with external partners to begin to trace the informal value chain. In Stage 1, users will focus on profiling the formal segment of their company value chain before subsequently building relationships within the informal sector in Stage 2: Participatory human rights assessment and analysis tool. This Stage 1 tool also provides users with methods to identify key partners to engage, as well as a series of sample waste value chains.

As a reminder, before commencing Stage 1, users should review the *Introduction and key preparation* in the toolkit to build a foundational understanding of the work ahead.

Together, the *Introduction and key preparation* and the *Stage 1: Plastic value chain mapping tool* will equip users to:

1. Identify the appropriate internal team to successfully execute their own mapping of a waste flow for a selected value chain, or allocate additional resources necessary for using this tool.
2. Educate others on the role of waste pickers, the potential challenges and human rights impacts they commonly face, and the role they play in companies' spheres of influence.
3. Introduce the importance of conducting a deliberate gender-focused due diligence process to promote gender equality and address specific human rights impacts on women.
4. Complete a waste flow discovery exercise internally to identify their resin suppliers. This will help them to put methods in place to reach full traceability to the first collector.
5. Understand when and where in the value chain to engage with external partners and what outcomes effective engagement should deliver.

Stage 1A: Internal capacity building and plastic value chain mapping
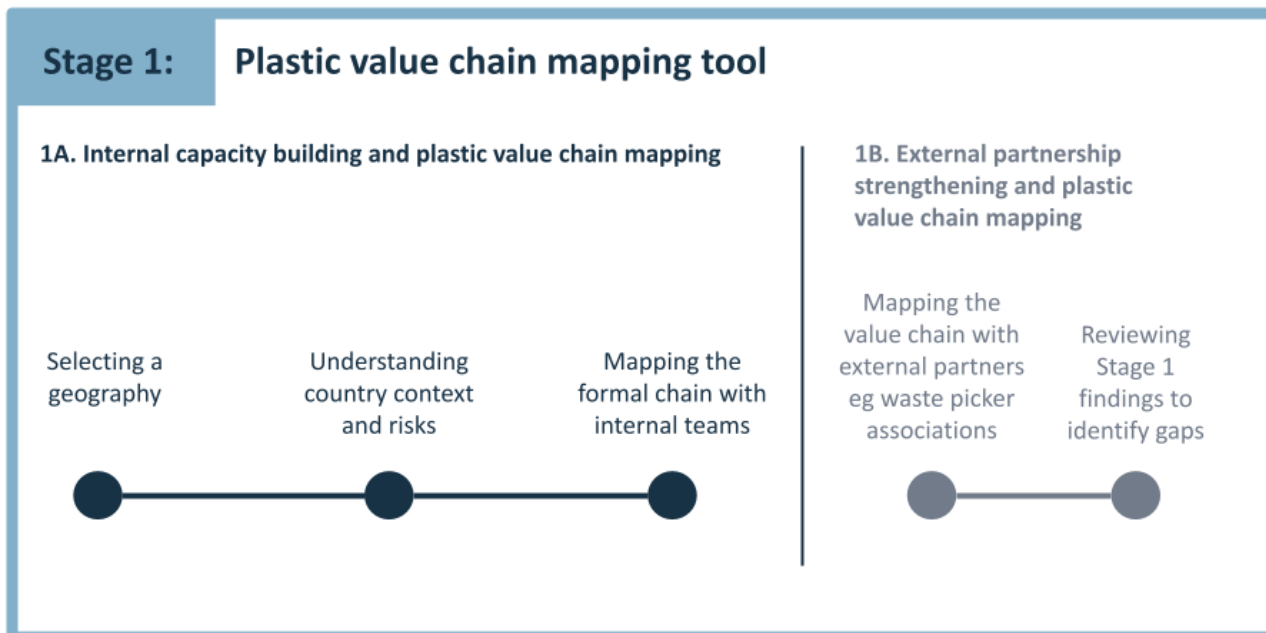
The focus of Stage 1A is to build internal capacity to begin the process, as outlined in the graphic above. During this stage of the work, your team will be asked to collaborate to understand the traceability of your plastic value chains, and where and how you should focus your next few steps. You will also identify knowledge gaps in your value chain and work to prioritise how to fill in the gaps. It is important to know that there will be knowledge gaps, and even more important to acknowledge them and to take note of the system changes that will be required to address them. This is not unusual and it is also a critical part of the process.

1. Selecting a geography

Before beginning the mapping process, companies will first have to select a geography within their value chain to focus on. Starting with a value chain in one country or geography of choice will allow users to familiarise themselves with the process and the steps needed to carry out the tools in each stage before applying the process on a wider scale. There are many factors to consider when selecting a geography to proceed with this tool. The defining factors will differ among companies depending on:

- the location and concentration of value chains
- material volumes and challenges experienced in each chain
- existing relationships or partnerships
- prevalence of an informal sector and human rights issues

Regardless of the factors at play, it is important to have a discussion with internal team members to consider multiple perspectives. This will ensure that everyone is on the same page about where to start. Fig. 1 (below) offers a set of potential factors along with guiding questions and recommendations for each to help users in their selection of a geography to proceed with this tool.

Fig 1: Guidance for selection of geography

Potential factor	Guiding questions	Recommendations
Location and concentration of value chains	In what country or region is the highest concentration of our value chains? In larger regions or countries, is there one or several areas where there is a higher concentration of value chains?	Evaluate all the geographies and countries in which your company's value chains are located. Pinning the location of each value chain on a map and listing them out accordingly could help your team better visualise their geographic distribution. Depending on where the majority of your value chains are concentrated, this could be a logical starting point for companies to focus their efforts. Some companies may only have value chains in one country, in which case, they might want to select a smaller area – state, county, region, or even a zone(s) to focus on.
Volumes	Which value chain located in a single geographic location utilises or purchases the highest volumes of post-consumer recycled material?	It may be the case that despite having a majority of your value chains concentrated in one geographic area, they do not produce a majority of the company's volumes. In this case, it may make more sense to select the geography with the highest volume-producing value chain since it will result in the greatest impact.
Existing partnerships	Do we have any existing relationships or partnerships with key actors in a value chain we could leverage?	Companies may have existing relationships and partnerships with suppliers and key actors in specific value chains that they could leverage in this process. If so, considering where these partnerships already exist could provide a starting point for selecting geographies. Having existing relationships and knowing who to contact will make proceeding with this process easier.
Challenges and human rights risks	Which value chain has more significant challenges and human rights risks than the others due to reasons relating to rules and regulations, or lack thereof, in the geography? Are you aware that any of your value chains pose severe human rights violations that require immediate attention?	Not all value chains experience the same level of human rights and visibility challenges. It is more difficult to establish transparency in some countries than others due to differences in national income levels, local laws, and varying levels of support from governments and organisations. These are also the geographies where workers typically face harsher working conditions and more human rights issues. As such, it is critical to identify and prioritise these value chains first.

2. Understanding country contexts and risks

Country and local context is critical to understanding country-specific risks and cultural norms that may impact the ability of actors within a value chain to uphold human rights standards. It is important to be

aware of the specific challenges to addressing human rights concerns for both formal and informal waste workers in the selected geography. A desk-based review and analysis of local labour laws, minimum wage laws for both formal and informal work (if they exist), EPR laws, laws or policies relating specifically to the informal waste sector (if they exist), and specific due diligence processes, can support companies in understanding the context of the particular value chain they are mapping and provide an objective comparison point for information gathered later in the tool. The level of available information on the informal waste sector will vary between geographies, but it will be helpful to conduct an initial review to be aware of what resources exist for the country of interest.

Tool users can start with an overview of labour laws in their selected geography using country labour sites before delving into other resources to help nuance their understanding as laws and policies can differ by region.

Below in Figure 2, are listed examples of a few country-specific labour sites, relevant legislation, and articles to help show the type of information that may exist and help get users started in their research. It is best to get the most up-to-date and recently published information where possible, but for countries lacking information, older publications may provide context to begin with. Following the desk-based research, users will also be tasked with engaging with local experts to confirm their findings and gather further insights. Information can be recorded in the *Stage 1: Country and local context template* in the toolkit spreadsheet.

Fig. 2: Country context guidance

Country	Labour sites
Ghana	ILO National Labour Law Profile: Ghana 2006 Ghana Increases Minimum Wage for 2021 and 2022
Indonesia	Employment and Labour Laws and Regulations 2022-2023 Indonesia Minimum Wages 2023 Role of Minimum Wage in Informal Wage Determination in Indonesia 2006
India	A Guide to Minimum Wage in India in 2022 India passes 'historic' minimum wage law amid activist worries Mapping Local Plastic Recycling Supply Chains: Insights from Selected Cities in India
South Africa	Waste Picker Integration Guideline for South Africa Building Capacity for Waste Picker Integration - Reclaim, Revalue, Reframe
EU	EU Corporate sustainability due diligence

3. Mapping the formal value chain with internal teams

A: Identify formal vs. informal segments of the waste flow

Begin internally to determine which team(s) within your company will have the most information on key partners in the value chain. Meeting with the procurement, supplier engagement or sustainability teams in the selected geography is often the best place to start. These groups can usually point you to the manufacturers and PCR suppliers that develop products and materials for the company.

The following visuals in Fig.3, 4 and 5 outline examples of the tiers of a waste value chain. Each tier includes a key partner that plays a critical role in the processing of PCR materials for a company. Tiers can be grouped by formal and informal segments, as noted below. For definitions of formal versus informal parts of the waste sector, please refer to the terms listed in the Glossary found in the *Introduction and key preparation* document. After identifying the appropriate team members to help in this process, use the information you have gathered internally to outline your company's waste value chain in your selected geography. You can do this by identifying as many key partners as possible in each tier and outlining which tiers are included in the informal and formal segments. It is likely that some of the tiers are unknown as they were not traced in the past. This may be your company's first attempt to map your value chain to the first collector so ensure you take time to understand where the gaps are and why they exist. Review the examples and the corresponding explanations before completing the identification of your company's waste value chain.

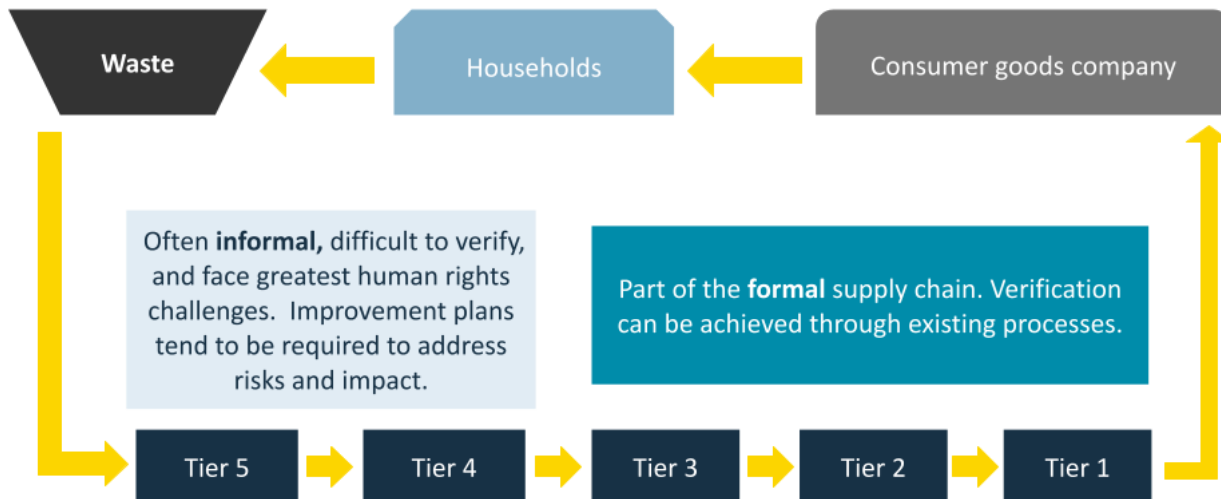*Fig. 3: Example of a typical waste value chain (1)*

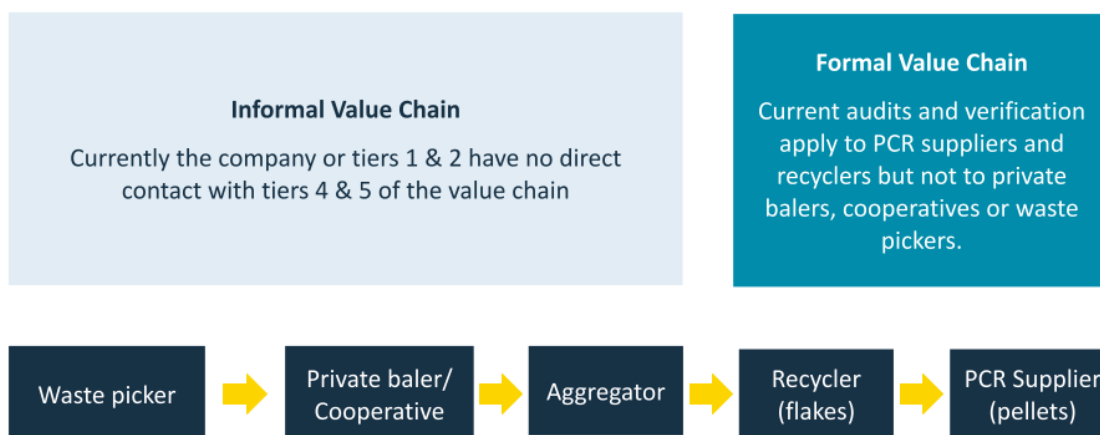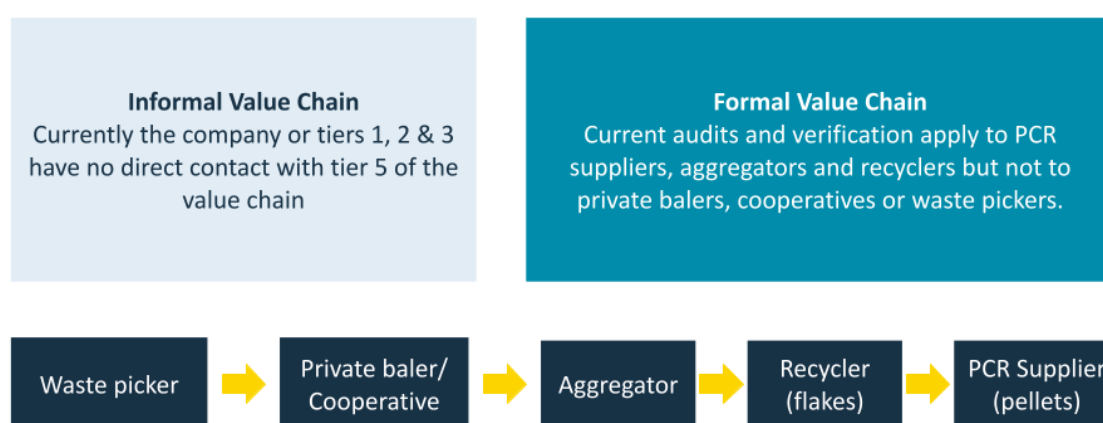*Fig. 4: Example of actors in the tier structure (1)*

Informal Value Chain

Currently the company or tiers 1 & 2 have no direct contact with tiers 4 & 5 of the value chain

Formal Value Chain

Current audits and verification apply to PCR suppliers and recyclers but not to private balers, cooperatives or waste pickers.

Waste picker → Private baler/ Cooperative → Aggregator → Recycler (flakes) → PCR Supplier (pellets)

Fig. 5: Example of actors in the tier structure (2)

Informal Value Chain
Currently the company or tiers 1, 2 & 3 have no direct contact with tier 5 of the value chain

Formal Value Chain
Current audits and verification apply to PCR suppliers, aggregators and recyclers but not to private balers, cooperatives or waste pickers.

Waste picker → Private baler/ Cooperative → Aggregator → Recycler (flakes) → PCR Supplier (pellets)

B. Complete waste material flow profiles for tiers 1 and 2 to gather key information on the formal partners involved in the waste material value chain

After identifying the formal vs. informal segments of the value chain, the focus of this toolkit turns to mapping up to the tier 2 suppliers of the formal supply chain in the geography selected from the previous section. The actors that represent these tiers will differ between value chains, but they will most likely be the resin and recycler suppliers in the chain.

Fig.6 is a sample waste material flow profile that includes common background information and Fig.7 provides sample questions to guide companies in their conversations with team members (and later external partners) to better understand their waste value chains and the needs of their key formal partners. The profile is divided into two parts: a high-level overview and summary of key partners in the value chain, then a list of questions to guide users in making an initial assessment of the scope of work. Keep in mind that completion of a profile for tiers 1 and 2 is for the sole purpose of tracing material to source. Companies should have existing responsible sourcing or partnership guidelines for their tier 1 suppliers that should include human rights risks. Some companies may also have policies covering tier 2.

Record your data in the *Stage 1: Mapping tool template* within the toolkit spreadsheet (Tab 2). Refer to the example column to help you fill in the information for the associated tiers and scope. If any information is unable to be identified from the knowledge of internal team members and company resources, leave these sections blank to be addressed in Part B. On the other hand, if you have any information on lower tiers, jot

them down as you will need them for *Stage 2: Participatory human rights assessment and analysis.* You can continue to fill any gaps and gather information about the remaining tiers in Part B, with the help of external partners.

Fig. 6: Sample waste flow profile – Stage 1: Mapping tool

| Background	Tier 1	Tier 2
Key partner (include name, company or individual)	Repurpose Plastics	XYZ Recycling Company
Role and responsibility within the chain	PCR supplier Processes rPET resins for manufacturer	Recycler Transforms baled PET into flakes and sells to a PCR Supplier
Work status (informal or formal)	Formal	Formal
Background on this demographic (eg What do they do for the value chain? Which tiers do they buy from and sell to?)	Pelletizers purchase flakes from recyclers and transform the flakes into pellets. This PCR is then used by brands/manufacturers to be made into final products. Pelletizers operate within facilities and are easily audited and certified.	Purchases material from aggregators and balers and processes them into flakes which are sold to the PCR supplier.
Years of operation	10 years	8 years
Demographic of employees	55 employees (15 part-time, 40 full-time, 80% men, 20% women) Average age = 34	30 employees (20 full-time, 10 part-time 75% men, 25% women) Average age = 38
Equipment	Baler, extruder	Recycling
Type of materials	PET, HDPE, LDPE	PET, HDPE
Volume collected or processed per month	200 tons PET, 300 tons HDPE, 50 tons LDPE	120 tons PET, 100 HDPE
Material procurement	Deliveries by recyclers across the country and material imported from other countries	Purchases from approx 2 regional aggregators and 3 municipal EPR schemes
List of working regulations and standards or available resources that exist	Labour regulations enforced by government – limited to 50 hours/week	Labour regulations enforced by government – limited to 50 hours/week

Fig. 7: Sample questions for formal sector

Scope and risks to key partners	Questions
Number of actors in the tier (how are they organised?)	How many tiers of suppliers and number of suppliers in each tier are in the value chain?
Demographics of employees	How many employees do they each have? (formal contract, full-time, part-time) What percentage of workers are women vs. men? What is the average age of workers? What is the age range?
Years of operation	How long have they been in operation?
Equipment	What equipment do they use? How do they move material from their centre to the next point in the value chain?
Type of materials	Where do they get their materials from? How does material get collected for transport?
Volume collected or processed a month	How much material are they buying/selling monthly? How many informal waste sector workers indirectly sell material to them?

Stage 1B: External partnership strengthening and mapping
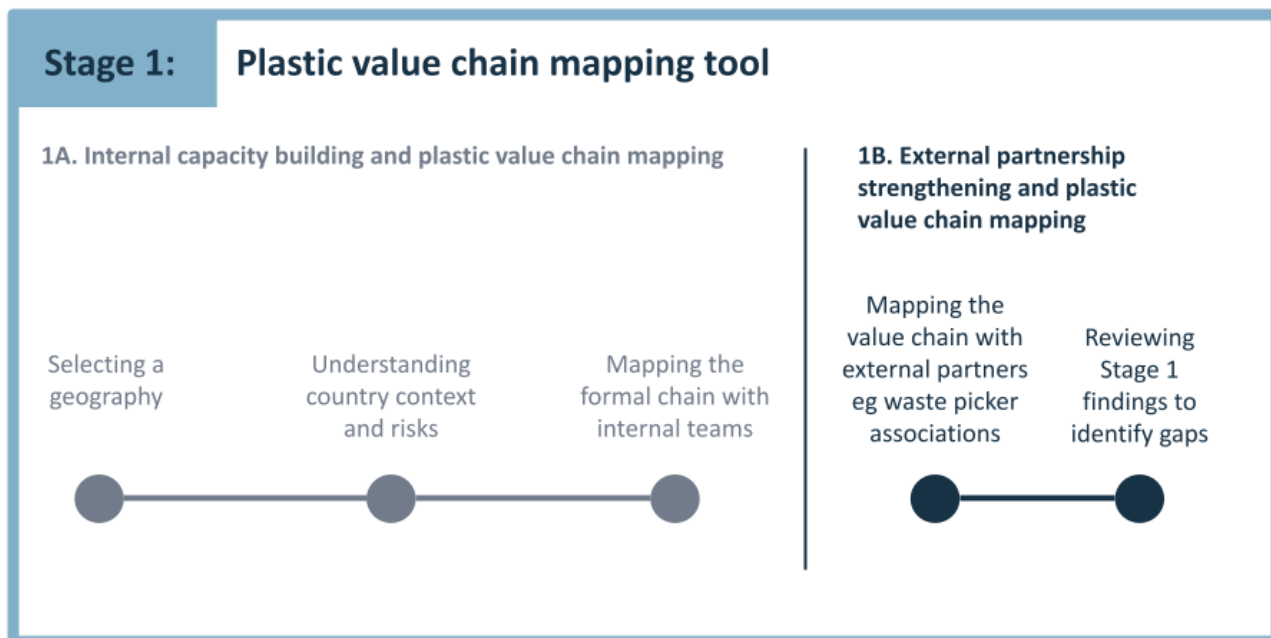
1. Mapping the formal value chain with external partners

Connect with external partners in the formal chain

After gathering information from internal teams, it is possible and typical that a significant portion of the waste flow profile will still remain empty or unknown. At this point, users should have identified up to tier 2 or the recycler level of their selected value chain and will now continue to fill in the remaining parts of the value chain up to tier 3 or 4 **with the identified suppliers** (depending on each company's mapped value chain). The gaps should not only help to highlight areas where gaps in knowledge exist and where transparency in the value chain can be increased, but also identify the necessary external partners to engage with to learn more about their value chains.

An external partner is any key actor in the formal value chain that is not part of the company's internal team. This can be a PCR supplier, recycler, baler, or aggregator in the selected chain who may be able to provide insight into their work and where they source, giving traceability to another tier of the chain.

Since informal segments are further down the value chain and will be more difficult to trace, focus on establishing connections with a key partner in the formal segment (eg the resin level or above) first before engaging deeper. In *Stage 2: Participatory human rights assessment and analysis*, more in depth mapping of the informal actors will take place. Often, formal partners will have information on the tier below and can help to direct the source. Sometimes this will include information about the informal waste sector. Companies with existing relationships and partnerships can start their conversations with their initial contacts at this point as well as developing new relationships to continue gathering information for each profile. Leverage any existing connections and relationships with formal actors in the value chain to gather baseline information. You can profile as many of their suppliers as possible in the informal chain using the same questions listed above to assess the scope and risks to key partners.

Where necessary and possible, ask follow-up questions for clarification and further details, and to build trust and confidence with the key partners within the value chain. These partners will be essential assets throughout this process. Users will need the answers and information gathered to fill in the remaining gaps of the waste flow profile for tier 3 and above.

Connect with an organisational body of waste pickers in the country

Due to the lack of traceability and legal recognition of waste pickers in official statistics in many contexts, it can be difficult to reach them in the value chain. Waste pickers often represent the farthest level from companies – the first mile of the supply chain – and their composition is ever changing. However, they are still very much within a companies' value chain, and companies' responsibilities under the UNGPs extend to them.

Understanding the overall scale and demographic composition of the waste pickers involved in the company's value chain will give users insight into the scope of the informal sector. It will also give companies an idea of the number of waste pickers supporting the development of their products as well as the ethics of their value chains. Companies can use this knowledge to cultivate stronger relationships with stakeholders so there is more meaningful engagement, opportunities for sharing information, and the ability to forge connections to more distant tiers in the waste flow. This will help to achieve the ultimate aim of greater impact in addressing the human rights risks faced by waste pickers within recycling value chains.

In some countries where a national, regional, or local organisational body of waste pickers exists, users can start by connecting with these organisations to gain an overview of the informal waste sector in their selected country. This will help them develop an understanding of the power and influence waste pickers have in their chain, which will look different for each country. The International Alliance of Waste Pickers[1] is a networking process supported by WIEGO that lists a database of waste picker organisations in more than 28 countries, covering mostly Latin America, Asia, and Africa[2].

Each organisation has varying amounts of information but may be able to provide information such as the number of waste pickers in the country, their demographics and composition, the level of support they receive (if any), and the challenges they face. The contact information for organisations is available from WIEGO upon request. Below is a sample list of questions to help guide conversations with waste picker organisations/associations about the demographics of waste pickers in the country as well as barriers and challenges they may face. Continue to fill in the *Stage 1: Mapping tool template tab* in the toolkit spreadsheet where the gathered information may apply for tier 5.

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[1] International Alliance of Waste Pickers
[2] International Alliance of Waste Pickers - Waste Pickers Around the World

Sample questions for waste picker organisations:

In order to understand more about the extent to which waste pickers are organised and the effectiveness of engagement in your selected geography you may wish to use these sample questions.

- How many waste pickers operate in this country/region?

- How, if at all, are they organised? What percentage are independent vs. in cooperatives/organisations?

- How many waste pickers are in the cooperative/organisation? What percentage collects waste full time vs. part-time? What percentage of workers are women vs. men? What is the average age of workers?

- What are some of the common challenges faced by your members?

- What is your role as an association?

- As a representative body, are you invited to any multistakeholder forums focused on waste management?

- Are you consulted in policy processes about waste management? If so, what policies have you successfully advocated for or influenced?

- Are you ever invited to meetings with government and/or industry representatives?

- How easy or difficult is it for you to attend these meetings?

- What are the common challenges faced by the members of your organisation? How could these challenges be overcome?

2. Reviewing the Stage 1 findings to identify gaps

The *Stage 1: Mapping tool template tab* in the toolkit spreadsheet is intended to help users record and organise the data they have gathered so far about each tier. This will enable them to visually identify areas with missing information and unknowns where there may be a lack of traceability in the value chain. This template is not meant for measurement or analysis purposes, only for collecting and organising information at this stage.

Before proceeding with the next tool (Stage 2), users should take time to revisit their findings from Stage 1. This includes taking note of any gaps remaining due to limited knowledge, constraints in available resources, or a lack of traceability. At this stage, users may also refer back to the Introduction and the resources provided for further insights. In some cases, there may be certain elements of the profile that need additional validation during the next stage of the human rights assessment. Take note of the findings that need additional validation in the associated boxes, and the key actors needed to elicit this information in the 'Notes' column. Highlight any information gaps and areas that need to be addressed when continuing to collect data from waste pickers in the next step of the Stage 2 tool. Finally, produce a set of questions by tier and by type of worker to prepare for Stage 2.

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