# Investment Mobilisation Measures Roadmap Document Summary

December 2019

**English Version** 



### Introduction

The Mobilising Investment (MI) project for NDC implementation is a 3-year project focused on interventions within seven target countries: Bangladesh, Dominican Republic, Ethiopia, Kenya, Perú, Philippines and Vietnam, supported by the German government's International Climate Initiative (IKI). The ultimate goal is to mobilise significant investment for NDC implementation in priority sub-sectors. This report is an English summary version of the final output that was delivered as part of the Perú country project which focused on improving the enabling environment for mobilising investment into sustainable infrastructure and technologies for the final disposal of waste.

The purpose of this report is to develop a high-level roadmap to serve as guidance for the implementation of investment mobilisation measures (IMMs) that could support the mobilisation of investment in the solid waste sector (SWS), specifically the final disposal stage. It has been prepared to be used by the Ministry of Environment of Perú (MINAM) as a tool to promote investment among solid waste operating companies (SW-OC) and private financial institutions. These IMMs also serve to facilitate investment into activities and technologies that contribute to the national targets for reducing greenhouse gas (GHG) emissions in the SWS.

As part of the project in Perú, two investment cases in the SWS were developed in the following locations:

- Trujillo: the Trujillo investment case calculated the costs associated with the construction of a landfill with technology for LFG capture, flaring and the generation of electricity to be sold to the national electricity grid during a useful life of 28 years and the revenues associated with the operation of the landfill and the sale of electricity to the grid. This required an initial investment of US \$5.4 million for the first cell and the gas capture technology, followed by investments totalling US \$ 24.7 million to carry out extensions to the landfill for additional cells and the construction of the electricity generation plant, including the equipment, plus additional annual operating costs of US \$ 1.3 million. The cash flows from the operation of the landfill were based on assumed tariffs of around US \$ 5-7 per tonne of waste disposed paid by the municipal government for waste management services and around US \$ 120 per MwH of electricity sold to the grid. The cost of the land for the landfill would be zero in both scenarios as this has been donated by the government for waste management uses¹.
- San Juan Bautista: the San Juan Bautista investment case differs from the Trujillo investment case in that it provides analysis on the integration of the leachate evaporator technology into the landfill, but not the construction of the landfill itself, as this had already been funded and executed through an Inter-American Development Bank/ Japan International Cooperation Agency initiative. Given issues identified in relation to the environmental risks and costs associated with the municipalities' existing plans to send leachate to a wastewater treatment plant, identifying a feasible model for a suitable alternative was crucial. It is also worth noting that leachate management in landfills is a widespread issue in the Amazonian and Andean regions of Perú where there are similar climatic characteristics, and therefore a successful model would have a wide scope for replication<sup>2</sup>.

### **Identification of barriers**

Through the analysis of the two very different landfill projects and engagement with various public and private actors operating in the waste sector, the MI team identified a number of key barriers to mobilising investment for NDC implementation into this sector. Although the scope of the team's analysis in the former phases of work was limited to the final disposal of waste and mobilising investment, many of the barriers identified also relate to the broader waste management process and affect a broad set of public sector stakeholders (i.e. municipalities and local governments). The infographic below (figure 1) highlights some of the regulatory, legislative, financial, political and capacity barriers that were identified.

<sup>&</sup>lt;sup>2</sup> CDKN and PwC. (2019). Caso de Inversión San Juan Bautista. <a href="https://cdkn.org/project/project-mobilising-investment-for-ndc-implementation-in-peru/?loclang=en\_gb">https://cdkn.org/project/project-mobilising-investment-for-ndc-implementation-in-peru/?loclang=en\_gb</a>



<sup>&</sup>lt;sup>1</sup> CDKN and PwC. (2019). Caso de Inversión Trujillo. <a href="https://cdkn.org/project/project-mobilising-investment-for-ndc-implementation-in-peru/?loclang=en\_gb">https://cdkn.org/project/project-mobilising-investment-for-ndc-implementation-in-peru/?loclang=en\_gb</a>

Figure 1: Barriers to mobilising investment into the waste sector in Perú

No single overarching Low use of mechanisms to authority with regulatory and ringfence municipal funds for supervisory capacities for waste management and lack of solid waste management applicable public-private investment mechanism e.g Oxl **Barriers** Lack of technical capacity identified Insufficient territorial planning for around calculating the actual potential places of final disposal costs of waste management Lack of contractual continuity due to services and the optimum changes in municipal governments fee to charge for these Financial Uncertainty with regards to the market for renewable energy

Insufficient incentives to promote projects with emissions reductions potential High levels of delinquency in the payment of municipal taxes

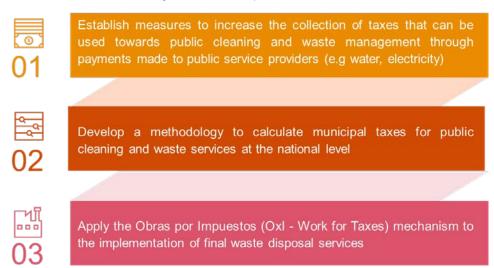
# Development and prioritisation of investment mobilisation measures

The MI team developed a long list of potential IMMs and enabling conditions to address these barriers. These measures were developed through interviews and discussions with different public and private stakeholders in the SWS, such as private companies operating in in the sector, private financial institutions, development finance institutions, municipalities, MINAM, the Ministry of Economy and Finance (MEF), that Tax Administration Service of Lima (SAT), sector specialists. Through consultation with MINAM, the measures were prioritised based on:

- i) Potential impact for municipalities and SW-OCs
- ii) Feasibility of implementation of the IMMs in the short term
- iii) Perceived demand from key actors from the public and private sector

The three prioritised investment mobilisation measures (IMMs) that were chosen, through consultation with MINAM, related to the barriers around the collection of municipal taxes, the availability of funds to provide cash flows to private sector waste operators and mechanisms to incentivise private investment into waste infrastructure.

Figure 1: Short list of prioritised IMMs





### **Investment Mobilisation Measure Roadmaps**

An implementation roadmap was developed for each IMM to guide MINAM in taking forward and implementing these measures. The first two IMMs proposed are strongly related in that they both promote tax flows to municipalities which are essential for providing funds for the ongoing payment of waste management services. The implementation of one of these measures without the other would likely not achieve the goal of mobilising sufficient investment into sustainable waste management. A common factor for all of the IMMs is that successful implementation would require ongoing support and participation of local and central government actors, and specifically that of MINAM in a coordinating capacity.

The roadmaps are presented below:

1. Establish measures to increase the collection of taxes that can be used towards public cleaning and waste management through payments made to public service providers (e.g. water, gas and electricity).

According to MINAM, Currently, the level of delinquency rate for the payment of municipal taxes in Perú is between 60% -70% and outside of Lima it can reach up to 80% -90%. The establishment of measures to increase the collection of public cleaning taxes is therefore needed to provide municipalities with sufficient funds to ensure long-term provision of solid waste management services that meet the health and environmental standards required by law. This increase in funds is also crucial to attract private sector involvement and investment in projects for the final disposal of solid waste, as the risk of insufficient funds to make the payment of tariffs to private waste operators is a significant disincentive for private sector actors.

Some of the barriers that were initially identified related to the collection of taxes for public cleaning services are as follows:

- The payment of public cleaning taxes is not strictly enforced and is often subject to political risks e.g. some contenders for political positions in the past have proposed to annul existing outstanding bills related to non-payments of taxes as part of their campaign promises.
- Taxpayers in Perú often do not feel like there are tangible benefits from paying public cleaning taxes because the SWM service provided is often of poor quality. This negative perception of SWM services among taxpayers does not encourage the payment of public cleaning taxes.
- There is a lack of communication between municipalities and taxpayers that serves to reinforce citizens' understanding of the importance of paying taxes for the provision of good municipal SWM services.

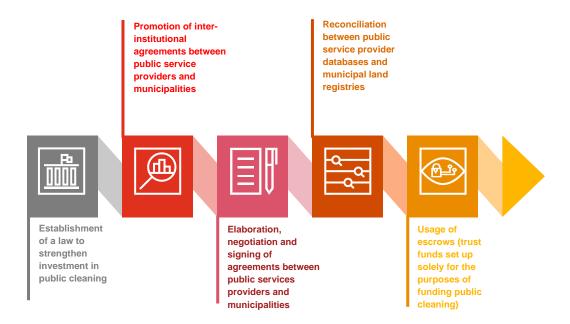
The first IMM was developed in response to the lack of sustainable flows of funding that are needed to attract private sector involvement and investment in projects related to the final disposal of waste. It proposes that municipal taxes for all public cleaning services, including waste management, should be combined with the payments made for public services such as water, gas or electricity that have consequences for payment delinquency which are felt more directly by customers and therefore have higher collection rates. This method has been found to be successful in increasing tax collection rates in a number of different countries in Latin America and it has been implemented successfully in Perú between the municipality of Chancay and the Municipal Company of Potable Water and Sewerage³. The team concluded that in Perú, including the payment in electricity bills would be most effective given the high coverage of household electricity across the country.

This IMM could be implemented through the formulation of a law that promotes interinstitutional agreements specifically for public cleaning tax collection between public services providers and municipal governments. The roadmap also recommends that the income from such taxes be directed to an escrow or trust fund which is designed so that the funds may only be used for the payment and/or guarantee of obligations to private sector waste operators for final disposal services they provide. This would serve to lower the risk of default of payments to waste operators and therefore improve the risk-return profile of investing in public waste projects. Detailed steps for the implementation of this IMM are provided below.

<sup>&</sup>lt;sup>3</sup> Inter-American Development Bank. (2010). Informe de la Evaluación Regional del Manejo de Residuos Sólidos Urbanos en América Latina y el Caribe (LAC) 2010. <a href="https://publications.iadb.org/publications/spanish/document/Informe-de-la-evaluaci%C3%B3n-regional-del-manejo-de-residuos-s%C3%B3lidos-urbanos-en-Am%C3%A9rica-Latina-y-el-Caribe-2010.pdf">https://publications.iadb.org/publications/spanish/document/Informe-de-la-evaluaci%C3%B3n-regional-del-manejo-de-residuos-s%C3%B3lidos-urbanos-en-Am%C3%A9rica-Latina-y-el-Caribe-2010.pdf</a>



Figure 3: Roadmap for establishing measures to increase the collection of taxes that can be used towards public cleaning and waste management through payments made to public service providers



### **Proposed steps:**

### a) Establishment of a law to strengthen investment in public cleaning

Currently in Perú, the establishment of inter-institutional agreements for the collection of public cleaning services through public services receipts is only promoted through article 70 of the Legislative Decree (LD) 1278. This article is very broad and has not served to support an increase in the implementation of this type of mechanism. A similar measure has been adopted for the case of citizen security taxes through the enactment of LD 1253, which provides significantly more detail on: the objective of the agreement; its optional nature; determining the tax collection amounts; the responsibilities and commitments of parties involved; the use of funds collected; and transparency measures. As a result, LD 1253 has served to strengthen investment in public safety through the collection of taxes through public services receipts.

It is proposed that LD 1278 be revised, or a new law be formulated to promote and strengthen investment, both public and private, in public cleaning. This law should have a similar content to LD 1253 and provide the same level of detail. If such a law is established, it would enable a greater uptake in the application of this mechanism for collecting public cleaning taxes through public services receipts at the national level. The success in uptake of the mechanism would rely on MINAM assuming a leadership role for promoting the law and assisting in the implementation of the law.

### b) Promotion of inter-institutional agreements between public service providers and municipalities

For the purpose of increasing the appetite of public service providers and municipalities to commit to a mechanism for the collection of public cleaning taxes through public services recipes, MINAM should consider adopting a mediation and advisory role between these parties. MINAM should ensure the communication of this mechanism and the proposed law to facilitate its implementation at the national level and publicise the benefits that can be obtained from it.

# c) <u>Elaboration, negotiation and signing of agreements between public services providers and</u> municipalities

In order to mitigate potential risks associated with the establishment of this type of agreement, it is essential to clearly define the rights and responsibilities of both the public services providers and the municipalities that will be party to the agreements. It is proposed that the agreement signed between the District Municipality of Paramonga and the "Empresa de Servicios Eléctricos Municipales de Paramonga S.A." (EMSEMSA), which establishes the partial collection of citizen security taxes through electricity bills, be used



as a successful example to inform future agreements. This inter-institutional cooperation agreement establishes the following clauses that should be considered as a minimum: i) Background and purpose of the agreement, ii) Regulatory Framework, iii) Commitment of parties involved, iv) Term of Validity, v) Monthly amount to be collected, vi) PSP Fare, vii) Obligations, viii) Usage of collected funds, ix) Diffusion & Transparency.

# d) Reconciliation between public service provider databases and municipal land registries

In principle, through the implementation of the mechanism, taxes for public cleaning should be charged on all household electricity bills. However, there exists the issue that electricity supply may not correspond to a single tax-paying household (i.e. in the case of multi-family properties with a single power supply or a single-family property with multiple power supply lines). It is therefore necessary to reconcile user data between public service providers databases and municipality taxpayer (land registry) databases. Direct payment of taxes under the mechanism should only initially be set up for cases where the users can be cross-referenced between both datasets. In the cases that the data on electricity users and tax-paying households do not match on the databases, these should be analysed and reconciled and where applicable, a statement should be to the taxpayer requiring the update of municipal information.

### e) Usage of escrow (trust fund set up solely for the purposes of funding public cleaning)

It is proposed that a trust fund model be used to support the implementation of this mechanism, with the resources collected from public cleaning taxes to be held in an escrow account. By using an escrow, this ensures that the taxes collected may only be used for the purposes of funding public cleaning i.e. as a means of payment and guarantee of the obligations derived from the services provided by the SW-OC. The use of an escrow serves to ensure that the municipal government will not be able to redirect these funds for other purposes in the case that political priorities change.

The team identified some potential issues that may impede the implementation of this IMM that should be considered. These are as follows:

- The platforms and timelines for the collection of public services payments and public cleaning taxes may differ significantly. For example, the electricity billing cycle is generally on a monthly basis and the collection of taxes is carried out quarterly. There may be some difficulties associated with modifying these systems to align with each other.
- Including taxes for public cleaning services in the payments for electricity services by customers may
  inadvertently increase the delinquency rate for these payments and result in complaints related to
  the additional charges.
- Public service providers may suffer damage to their public image by collaborating with municipalities that have an unfavourable public perception (i.e. due to corruption cases).

# 2. Develop a methodological framework for the calculation of municipal taxes for public cleaning at the national level.

Currently, local governments and municipalities in Perú do not have a standard methodology for accurately calculating the costs of waste management services and generally do not have enough information regarding the cost structure of SWM services. As a result, most costs incurred while providing SWM services are not passed on to the taxpayer which further exacerbates the issue of insufficient levels of funds to provide adequate SWM services that meet the health and environmental standards required by law.

Some of the barriers that were initially identified related to the calculation of municipal taxes for public cleaning are as follows:

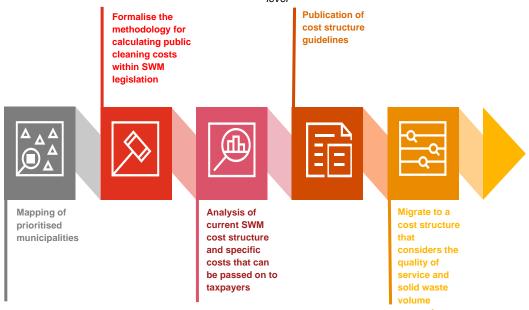
- There is not enough disaggregated historical cost data for the maintenance and operation of sanitary landfills to be able to calculate the public cleaning taxes required for adequate SWM services.
- Most municipalities outside Lima do not have an adequate final disposal infrastructure therefore
  establishing a proper cost structure that considers best practices for its maintenance and operation is
  not possible. This results in a catch-22 situation where there is not enough infrastructure to provide



adequate SWM services that can politically justify the collection of taxes, but without raising funds through tax collection there will be not enough funds invest in improving SWM services.

The second IMM therefore proposes developing a methodological framework for the calculation of municipal taxes for public cleaning services across the country. We have proposed that this be done through developing the methodology with a pilot group of prioritised municipalities that have established a comprehensive public cleaning service (cleaning of public areas, waste collection, transport of water and final disposal of waste in sanitary landfills) and are ideally in different regions of the country and have unique geographical characteristics. The pilot project would involve gathering data on operational and maintenance costs of the various elements of public cleaning services under different business models to inform a methodology which could be applied nationally. It would also enable an evaluation of how those costs could be passed onto the taxpayer. The methodology, once developed, should be formalised within a law to enable dissemination and implementation across the country. Detailed steps for the implementation of this IMM are provided below.

Figure 3: Roadmap for developing a methodological framework for the calculation of municipal taxes for public cleaning at the national level



### **Proposed steps:**

### a) Mapping of prioritised municipalities

In order to develop a methodological framework for the calculation of municipal taxes for public cleaning services, a pilot project should be carried out with a group of selected municipalities. The municipalities that are selected should have a comprehensive public cleaning service (must at least perform sweeping, collection, transport and final disposal in sanitary landfills that meet the standards required by law) and should be in different regions of the country (desert, jungle and coast). Information on operational and maintenance costs within the different stages of public cleaning should then be collected from this group of municipalities. This data will be used to determine specific unit cost indicators that consider the unique characteristics of each region. It is recommended that the following characteristics should be considered: volumes of SW generation; zoning; beach cleaning costs; use of incineration systems; use of sanitary landfills; and use of emissions reduction and leachate management technologies among others.

### b) Formalise the methodology for calculating public cleaning costs within SWM legislation

The cost indicators identified for the calculation of the costs of public cleaning services from the pilot studies should be established by the Constitutional Tribunal and the methodology for calculating costs should be formalised within a law. The formalisation of this methodology should serve to facilitate the dissemination and uptake of the methodology at the national level and ensure that municipalities are informed in this regard. This should also facilitate coordination between local governments, regional governments and the central government.



### c) Analysis of current SWM cost structure and specific costs transferable to taxpayers

MINAM, as a governing body, should carry out an exhaustive review of costs related to the SWM service and identify the elements of this that can be transferred to the taxpayer, such as direct (labour, tools and materials, depreciation of machinery and / or equipment, among others), indirect and fixed costs. These costs must be directly linked to the service provided to the taxpayers in order to be politically justifiable. The cost structure guide issued by MINAM in 2009 should be used as a reference since it contemplates different cost models depending on whether the service is provided by the municipality itself, a SW-OC or a mix of both. It is recommended that MINAM draw on the data gathered from the pilot study to support this review.

### d) Publication of cost structure guidelines

Once the cost structure has been analysed and the elements that can be transferred to the taxpayer have been identified, it is recommended that MINAM publish new technical cost structure guidelines for calculating the costs and taxes associated with public cleaning services. The guidelines should clearly indicate the elements that can be transferred to the taxpayer and include different cost structure models that take into account whether the provision of the service is provided directly by the municipality, if it is partly outsourced to a SW-OC, or if it is completely outsourced, as each model will require different treatment.

# e) Migrate to a cost structure that considers quality of service and solid waste volume generation

In the longer term, MINAM should consider developing a cost structure composed of variable costs related to the service (i.e. pay-as-you-throw model) since there is significant potential to incentivise the reduction of waste and increase the separation of different types of waste at the source. A hybrid system of waste rates could be considered, where one component is a base charge or rate that covers part of the structural costs of waste management services (sweeping, collection and transportation, administrative costs) and the other is a variable part that depends on the amount of waste that is collected and the distance to the landfill where it will be deposited.

# 3. Incentivise the application of the "Obras por Impuesto" (OxI) scheme for the implementation of final disposal infrastructure.

The OxI (Work for Taxes) scheme is a mechanism that has been designed to incentivise private companies to collaborate with local and regional governments in Peru to execute high priority public infrastructure projects. Under this scheme, private companies can use the value of expenses they incurred through the financing or execution of the projects as a credit to pay up to 50% of their income tax<sup>4</sup>. Municipal governments are awarded an annual budget from the central government to be used for OxI credits which they can allocate to different projects as they see fit. A private company is able to approach a municipality with a Letter of Intention which proposes a project that they wish to execute under the scheme and the municipality may approve or reject this. Once the project has been completed, it is presented to the relevant public entity which will often take over the operation of the infrastructure, and MEF will issue a credit note. The private company will deduct the value of the note from their taxes and the value of the note will also be deducted from the municipality's OxI credits. To date over 401 projects have been completed which have mobilised US \$1,454.34 million of investment<sup>5</sup>.

However, the OxI mechanism has been only been applied to two projects within the SWS. These projects, which were to build final disposal infrastructure in the district of Huiariaca in the province of Pasco (SNIP code 2142840) and for several locations in the province of Recuay, Ancash (SNIP code 2304851), were relatively small and covered the full public cleaning cycle and not just the construction of final disposal infrastructure. The scheme has therefore never been applied to a case which has had to deal with the SWM problems faced by large provincial municipalities with significant levels of generation of solid waste that are improperly disposed of (i.e. Trujillo, Piura). The OxI scheme has also never been used for a specific phase of the SWM cycle.

Some of the barriers that were initially identified related to application of the OxI scheme for the implementation of final disposal infrastructure are as follows:

<sup>&</sup>lt;sup>5</sup> Obras por Impuestos. (2020). Proyectos Concluidos y Adjudicados 2009 - 2020. https://www.obrasporimpuestos.pe/0/0/modulos/JER/PlantillaStandard.aspx?are=0&prf=0&jer=189&sec=0

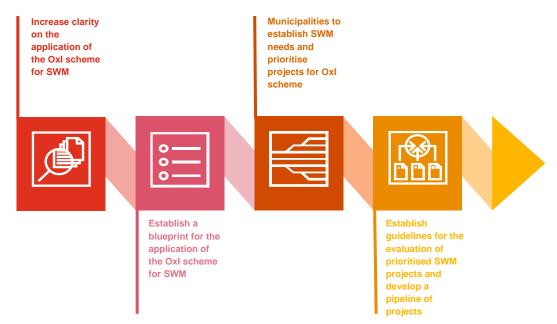


<sup>&</sup>lt;sup>4</sup> Instituto Peruano de Economía. (2016). Obras por Impuestos. <a href="https://www.ipe.org.pe/portal/obras-por-impuestos/">https://www.ipe.org.pe/portal/obras-por-impuestos/</a>

- There is a lack of clarity among different actors in the SWS on the feasibility of applying the OxI scheme to a specific final disposal infrastructure project, as opposed to a project for a complete solution for a SWM service.
- Currently, the OxI scheme has only been applied to the full SWM service cycle (collection & sweeping, transportation and final disposal) and not only for a specific stage such as final disposal infrastructure. Therefore, there is a lack of precedent and experience in the evaluation and execution of SWM projects under the OxI scheme that includes SW-OC for the operation and maintenance of final disposal infrastructure.

The final IMM seeks to facilitate the application of the OxI scheme to the construction of sustainable final waste disposal infrastructure. Currently there is a lack of precedent of the scheme being applied for this purpose and many of the actors we consulted were unsure if, or how, the scheme could be applied to a distinct element of the waste management cycle. The roadmap proposes that MINAM and MEF, which is responsible for the scheme, collaborate to establish a blueprint for how it could be applied to the waste sector. MINAM should then develop guidelines the evaluation of SWM OxI projects and undertake an exercise with municipalities to identify priority projects which the OxI scheme could be applied to. Detailed steps for the implementation of this IMM are provided below.

Figure 3: Roadmap for incentivising the application of the "Obras por Impuesto" (OxI) scheme for the implementation of final disposal infrastructure



### **Proposed steps:**

### a) Increase clarity on the application of the OxI scheme for SWM projects

It is recommended that a meeting/workshop be held between MINAM and the MEF in order to dispel any doubts that may exist regarding the application of the OxI scheme to SWM projects and particularly SWM projects that do not cover the entire SWM cycle. Given the variety of SWM models across the country, this conversation should consider the different ways in which the OxI could be applied to meet the varying characteristics and time horizons for different SWM projects. For example, a shorter time horizon for the construction of a sanitary landfill and a longer one for a project that addresses other SWM phases such as recovery, segregation and/or collection and that can be implemented over a longer time frame and in conjunction with another intervention mechanisms.

### b) Establish a blueprint for the application of the OxI scheme for SWM projects

Following the agreement between MINAM and MEF on the scope of the application of the OxI scheme to SWM projects, these actors should establish a blueprint for the application of the OxI scheme for SWM



projects. This blueprint should include guidelines that clearly explain the types of SWM projects the scheme can be applied to and how such projects should be structured and prepared. These guidelines should also establish the prerequisites that project proponents must complete prior to applying to the OxI scheme. Prerequisites could include: a prefeasibility study; a budget assessment; elaboration of a risk mitigation matrix; and an environmental and social impact assessment.

# c) Municipalities to establish SWM needs and prioritise projects for OxI scheme

Municipalities should undertake an exercise to establish the SWN needs of the municipality, e.g. the construction of new sanitary landfills, and propose projects that could be implemented to address those needs. The scope of the projects should be defined and should include information on which segments of the SWM chain it covers, the specific characteristics and time horizon of the project and which elements of the project could be covered by OxI scheme. Once this is defined, the municipality should prioritise the projects according to the level of urgency for implementation. MINAM could consider creating a technical team dedicated to supporting municipalities to identify and prioritise projects using set criteria such as: level of urgency; social and environmental impact; and beneficiary population among others.

# d) <u>Establish guidelines for the evaluation of prioritised SWM projects and develop a pipeline of projects</u>

MINAM should establish guidelines by which these projects will be evaluated and declared viable or not. Aspects that could be considered in the evaluation of SWM projects include: project scope and approach; technical feasibility; costs; environmental and social impacts; project sustainability; project organisation and management; implementation plan; and logical framework. Once SWM projects have been evaluated and declared to be viable for the OxI scheme they will be registered in the National Public Investment System (SNIP). This will create a pipeline of SWM projects that private SW-OCs will be able to enter into a Regional/Municipal Council Agreement within the framework established by Law No. 29230 to execute.

### **Conclusion**

Private actors in the waste sector in Perú have significant technical expertise and resources that can be drawn on to improve waste management services, however they lack experience in collaborating with public actors on municipal waste management which is largely due to the low capacity of public sector to facilitate and engage in public-private collaboration. At this stage, as well as addressing the actual and perceived barriers and risks associated with private investment and involvement in this area, the government needs to provide additional financial incentives. Significant commitment and collaboration is required from the public sector to implement the recommended IMMs and other measures that would serve to improve the environment for investment into the waste sector.

One of the main limitations for the implementation of SWM projects, is the capacity of municipalities to raise funds, through the collection of public cleaning taxes, to cover the costs of SWM services (including the operation and maintenance of landfills). Improving municipalities' understanding of the actual costs of these services and the portion of those costs that could be passed on to taxpayers is a key starting point to address this limitation. Improving the collection of taxes for public cleaning will allow municipalities to generate enough income to cover SWM service costs and improve the services that are provided. Attempting to reduce delinquency rates in the payment of public cleaning taxes through the implementation of mechanism for the collection of taxes through public services receipts will also support this goal.

Some municipalities may feel like they face a catch-22 situation in which there is not enough infrastructure to provide adequate SWM services that can politically justify the collection of taxes. However, without raising funds through tax collection there will be not enough funds invest in improving SWM services. In cases such as this, additional mechanisms are needed to mobilise both public and private investment to improve the basic public SWM infrastructure that is needed to deliver adequate SWM services. Incentivising the application of the "Obras por Impuesto" (OxI) scheme for the implementation of final disposal infrastructure is one such mechanism that could increase the appetite of private sector actors to invest in SWM projects.



Finding solutions to the problem of waste management in Perú is vital given the growing population and the negative impacts tht inadequate waste management can have on human health and on the high-value biodiversity and ecosystems that are endemic to Perú. A coordinated action plan with multi-stakeholder and multi-level participation that draws on the analysis and recommendations of the Mobilising Investment for NDC Implementation project would help to drive these solutions.





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