



## PROJECT DESIGN DOCUMENT (PDD) FORM FOR ARTICLE 6.4 PROJECTS

(Version 02.0)

| BASIC INFORMATION                                                                                                  |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                 |                             |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| <b>UNFCCC project reference number:</b>                                                                            | 21752                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                 |                             |
| <b>Project title:</b>                                                                                              | Methane destruction from landfill gas and energy generation                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                 |                             |
| <b>Host Party:</b>                                                                                                 | Dominican Republic                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                 |                             |
| <b>Other participating Parties:</b>                                                                                | Choose a Party.                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                 |                             |
| <b>Activity participant(s):<br/>(add rows if needed)</b>                                                           | <b>Type of Party</b>                                                                                                                                                                          | <b>Party that is to provide authorization</b>                                                                                                                                                                                                                                                                                                                   | <b>Activity Participant</b> |
|                                                                                                                    | Host Party                                                                                                                                                                                    | Dominican Republic                                                                                                                                                                                                                                                                                                                                              | Equiterra Capital           |
|                                                                                                                    | Choose a type of Party.                                                                                                                                                                       | Choose a Party.                                                                                                                                                                                                                                                                                                                                                 |                             |
|                                                                                                                    | Choose a type of Party.                                                                                                                                                                       | Choose a Party.                                                                                                                                                                                                                                                                                                                                                 |                             |
| <b>PDD version number:</b>                                                                                         | 01.0                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                 |                             |
| <b>PDD completion date:</b>                                                                                        | 03/07/2026                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                 |                             |
| <b>Applied mechanism methodologies and standardised baselines, and their versions:</b>                             | <b>Reference number</b>                                                                                                                                                                       | <b>Title</b>                                                                                                                                                                                                                                                                                                                                                    | <b>Version</b>              |
|                                                                                                                    | A6.4-AMM-001                                                                                                                                                                                  | Flaring or use of landfill gas                                                                                                                                                                                                                                                                                                                                  | 01.0                        |
|                                                                                                                    |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                 |                             |
|                                                                                                                    |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                 |                             |
| <b>Sectoral scope(s):</b>                                                                                          | 01 - Energy industries (renewable and non-renewable sources);<br>13 - Waste handling and disposal                                                                                             |                                                                                                                                                                                                                                                                                                                                                                 |                             |
| <b>Type of the project:</b>                                                                                        | <input checked="" type="checkbox"/> Emission reductions activity<br><input type="checkbox"/> Removals activity<br><input type="checkbox"/> Combined emission reductions and removals activity |                                                                                                                                                                                                                                                                                                                                                                 |                             |
| <b>Estimated annual emission reductions and/or net removals over the crediting period (tCO<sub>2</sub>e/year):</b> | Emission reductions:                                                                                                                                                                          | 73,713 tCO <sub>2</sub> e/year — average over the maximum potential crediting period of 15 years, comprising an initial five-year period renewable twice, WITH fuel displacement (supply of LFG or biomethane to consumers, displacing natural gas); indicative, subject to formal off-taker confirmation.                                                      |                             |
|                                                                                                                    | Net removals:                                                                                                                                                                                 | Not applicable (emission reductions project)                                                                                                                                                                                                                                                                                                                    |                             |
|                                                                                                                    | Total emission reductions and net removals                                                                                                                                                    | 1,105,694 tCO <sub>2</sub> e total over the maximum potential crediting period of 15 years, comprising an initial five-year period renewable twice, WITH fuel displacement (indicative, subject to off-taker confirmation). The methane and supply components are reported separately in Appendix 3. The PCN (reference 21752) reported a methane-only basis of |                             |

|  |  |                                                                                    |
|--|--|------------------------------------------------------------------------------------|
|  |  | 1,400,000 tCO <sub>2</sub> e (without displacement — basis reported in PCN 21752). |
|--|--|------------------------------------------------------------------------------------|

## SECTION A. Project description

### A.1. Project purpose and general description

The "Rafey Landfill Gas Capture and Utilization Project" captures and destroys methane-rich landfill gas (LFG) at the Rafey Landfill (Vertedero de Rafey), located in Santiago de los Caballeros, Dominican Republic (19.4705°N, 70.7513°W). Operated by CILPEN Global Business, S.R.L. under a municipal concession since 2017, the site serves the Santiago metropolitan area and 14 municipalities (including La Vega, Tamboril, Moca, Santiago Oeste, Hato del Yaque, Navarrete, San Francisco de Jacagua, Villa González, Puñal, Canabacoa, Gurabo, Canca la Reina, Monte la Jagua, and Las Palomas). The facility receives approximately 2,500 t/day of MSW (679,798 tonnes managed in 2025).

Historically operating with passive cement vent pipes and no active extraction, the baseline scenario consists of uncontrolled surface emissions of LFG into the atmosphere. Under a BOM framework backed by a signed Letter of Intent (19 June 2026), Equiterra Capital LLC will design, invest in and operate an active gas collection network, a conditioning unit, an enclosed flare and a biogas processing unit. Captured biogenic landfill gas, of the order of 2,400 to 3,500 m<sup>3</sup>/h over the crediting period, is upgraded to biomethane and supplied to a neighbouring industrial consumer, with surplus or off-specification gas destroyed in the enclosed flare. The activity achieves ex-ante emission reductions averaging approximately 73,713 tCO<sub>2</sub>e/year over a maximum potential crediting period of 15 years, comprising an initial five-year period renewable twice (2028-2042). Capital and operating costs are set out in the investment analysis, which will be made available to the designated operational entity for validation. The activity is aligned with Law 225-20, the national PLANGIR roadmap, and the Host Party's Article 6.4 rules approved by the Designated National Authority on 01 June 2026.

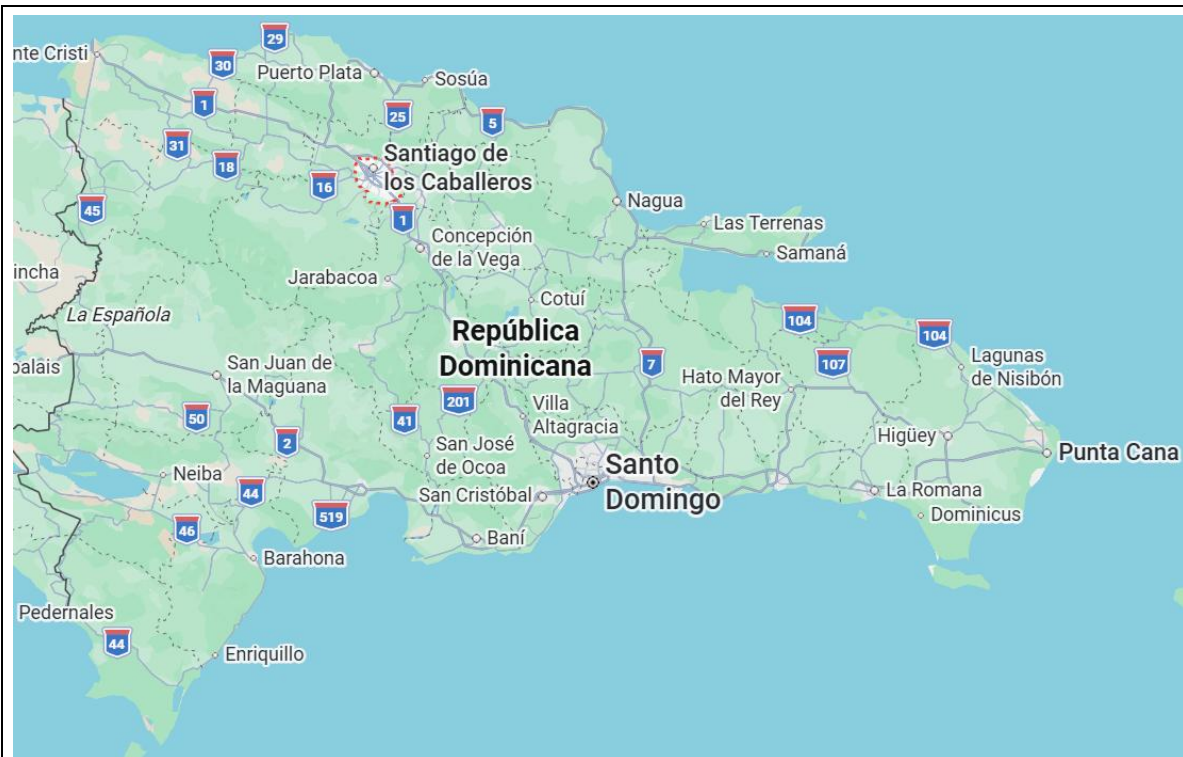
The gas collection system and the enclosed flare are commissioned in the fourth quarter of 2027, ahead of the crediting period. From the start of the crediting period the biogas processing unit is in operation and the captured landfill gas is upgraded to biomethane and supplied to an industrial consumer, displacing natural gas. The flare operates as a back-up during periods when the biogas processing and supply system is unavailable, and to destroy gas captured in excess of the capacity of that system. The share of the captured methane that is supplied varies annually with the installed upgrading capacity and is reported in Appendix 3.

### A.2. Confirmation that the project aligns with the A6.4 activity types indicated by the host Party

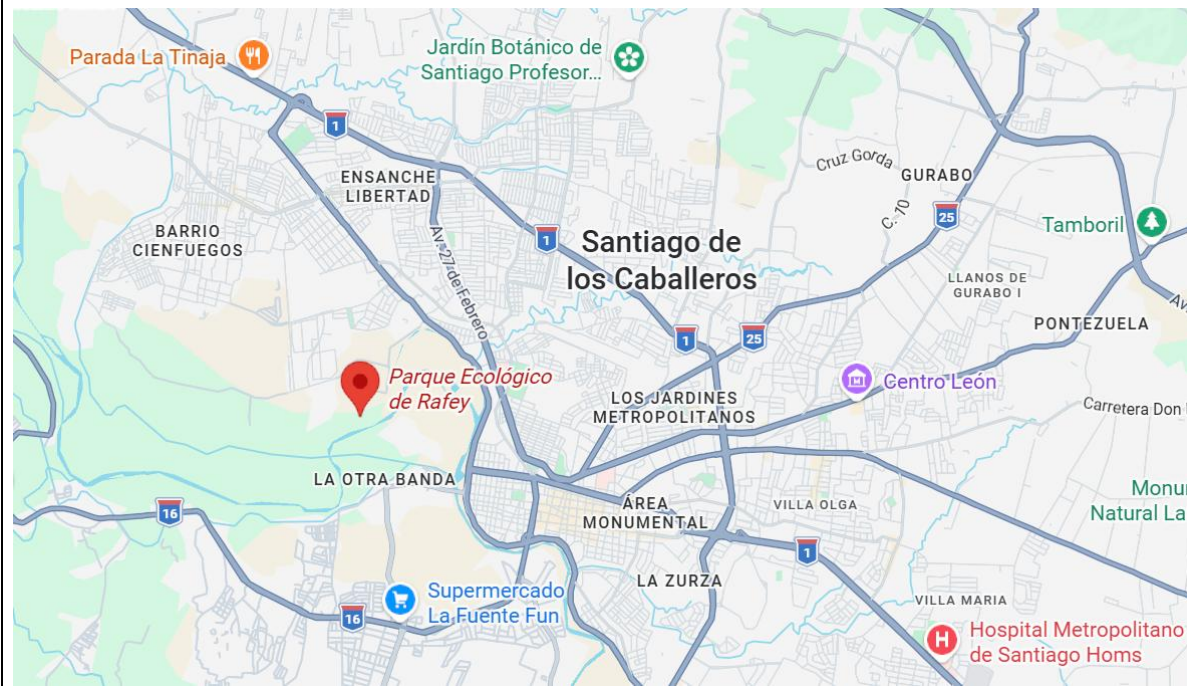
The project falls within the A6.4 mechanism activity type of emission avoidance and reduction -- specifically, the destruction and/or beneficial use of LFG (methane) that would otherwise be released from a solid waste disposal site. This is explicitly covered under A6.4-AMM-001-v01.0 (Flaring or use of landfill gas). The Dominican Republic NDC 2020 includes priority commitments to reduce methane from the waste sector, consistent with this project activity. Equiterra Capital LLC holds authorized entity account AR64D6495EBF in the A6.4 registry (DR DNA, Max Puig, signed 01 June 2026). The project aligns with DR Law 225-20 and the national PLANGIR waste management roadmap.

### A.3. Project geographical location

|                                                           |                                                                                                              |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Host Party</b>                                         | Dominican Republic                                                                                           |
| <b>Region(s)/State(s)/Province(s)</b>                     | Santiago                                                                                                     |
| <b>Cities/towns/communities</b>                           | Santiago de los Caballeros                                                                                   |
| <b>Geographic coordinates</b>                             | 19 deg 27' N, 70 deg 40' W (approx.) -- Av. Circunvalacion Sur, Altos de Rafey, Santiago, Dominican Republic |
| <b>Map of project location</b>                            |                                                                                                              |
| Map of Santiago de los Caballeros, in Dominican Republic: |                                                                                                              |



Map of Rafey landfill operated by CILPEN, in Santiago de los Caballeros, Dominican Republic:



## A.4. Technology/measures

### A.4.1. Pre-activity scenario

Prior to the project, the Rafey landfill operated without LFG collection or control infrastructure. Organic waste deposited in landfill cells decomposed anaerobically, generating LFG. This gas escaped to the atmosphere as fugitive surface emissions, with no capture, utilization, or controlled flaring. The site is transitioning from an open-air dumpsite to a partially controlled landfill but continued without biogas recovery infrastructure. The baseline scenario is the continued surface emission of LFG from the total waste mass in place.

### a) Circumstances immediately prior to implementation

The Rafey landfill (Vertedero de Rafey), located in the Rafey sector of Santiago de los Caballeros, Dominican Republic (19.4705°N, 70.7513°W), is the primary MSW disposal facility for the Santiago metropolitan area. Operated by CILPEN under a concession agreement with the Municipality of Santiago de los Caballeros from 2017 to 2028, with subsequent renewals (Contract No. STGO-CCC-LPN-2024-0004), and under an agreement with the Dominican Republic Solid Waste Management Trust, DO Sostenible, from 2023 to 2027, renewable every two years (Resolution No. 008-2022).

### 1. Existing facilities, systems, practices and/or equipment

The site operated exclusively as a partially controlled MSW disposal facility with no LFG collection, destruction, or utilization infrastructure of any kind. A recycling facility started operations in 2017. Existing elements are currently limited to:

- Waste reception area with access road and vehicle weight logging.
- Active working face with periodic compaction by earthmoving equipment (bulldozers/compactors).
- Periodic intermediate soil cover applied over deposited waste cells, without a formal schedule.
- Rudimentary surface drainage through perimeter channels and leachate settling ponds around the landfill cells; no engineered leachate collection or treatment system is in place.
- Recycling facility with segregation of plastics, metals, paper, and cardboard, featuring an installed processing capacity of 30 tonnes per hour on the COPARM sorting line and 15 tonnes per hour on the BOROTECH line, which processes pre-sorted materials.
- Medical waste incineration facility with a processing capacity of 500 kg per hour (treating 290.95 tonnes in 2025 from Santiago and Puerto Plata under safe environmental conditions).
- No gas collection wells, headers, condensate systems, flares, blowers, or biogas utilization equipment. Only cement vent pipes installed in certain landfill cells were observed, providing passive landfill gas venting.

### 2. Types and levels of services

The sole service provided was MSW disposal: receiving, depositing, and partially covering approximately 300,000 (in 2019) to 679,798.14 tonnes of mixed MSW in 2025. The site produced no energy output, no industrial heat, and no gas or material product. In 2025, CILPEN's material recovery facility recovered and valorized 15.6 thousand tons of waste (39.6% cardboard, 37.0% plastics, 14.2% RDF, 6.6% paper, and 2.7% metals), strengthening the circular economy.

Out of the 679,798.14 tonnes received in 2025, approximately 50% (339,899 t) went through integrated recovery workflows. The waste composition averaged 46.9% organic waste, 17.3% yard waste, 12.2% paper and cardboard, 11.2% plastics, 5.1% other streams, 3.1% glass, and 2.0% textiles. Primary municipal streams came from Santiago (44.8%), La Vega (18.8%), Tamboril (6.6%), Santiago Oeste (3.7%), Hato del Yaque (2.9%), Villa González (2.6%), Navarrete (2.4%), San Francisco de Jacagua (2.3%), Moca (1.6%), Puñal (1.1%), Canabacoa (0.8%), Gurabo (0.4%), Canca la Reina (0.04%), and others (1.9%). Additionally, CILPEN supports 55+ private corporations in tracking EPR targets, managing 38,699.48 tonnes of private industrial waste in 2025. External interactions were restricted to collection delivery vectors.

### 3. Arrangement of existing facilities

Operations route incoming loads to either the sorting line or directly to unlined/minimally lined cells in active filling zones. Main access stems from the south via the Autopista Duarte corridor. No LFG capture or combustion infrastructure exists anywhere on-site. Passive concrete vertical chimneys provide local venting with no interception.

### 4. Age and average lifetime of existing equipment

Open disposal dates back to 1989, accumulating over 30+ years of legacy waste. The current engineered landfill operational zone layout has an age of ~4 years, with surrounding plots under evaluation for cell expansions. No active gas recovery equipment exists, making manufacturer lifetime limits inapplicable.

### 5. Installed capacities, load factors and efficiencies

No active gas collection, mechanical blowers, flares, or energy conversion units are installed. Efficiencies and load factors for LFG capture remain at 0% in the pre-project scenario.

## 6. Energy and mass flows

The baseline mass and energy loop is completely open-ended. Based on a disposal rate of 780,000 t/yr, waste undergoes anaerobic decomposition (MCF = 0.70, adopted as a conservative reduction below the applicable A6.4-AMT-003 default of 0.8 for a poorly managed semi-aerobic SWDS) generating biogas composed of 50-55% CH<sub>4</sub>, 40-45% CO<sub>2</sub> and minor trace fractions (H<sub>2</sub>S, NMVOCs). This gas migrates as fugitive atmospheric emissions. No thermal or electrical energy is captured and the energy content of the gas is entirely lost, generating high-GWP climate impacts (GWP = 28). Diverted recyclables represent approximately 2.3% of total gross mass, while the remaining mass proceeds to long-term final anaerobic containment.

## 7. Monitoring equipment

No LFG instrumentation, flow elements, or gas analyzers are present. Systematic data collection is confined to calibrated gate-scales situated at the facility's main access point, monitored and maintained by CILPEN.

**Baseline scenario summary:** The baseline is the continued uncontrolled venting of LFG from the total accumulated and ongoing waste mass at Rafey in the absence of any collection, destruction or utilization system. Waste deposition and periodic soil cover continue; LFG migrates freely through the waste body and cover layer with no interception. Methane generation follows first-order kinetics (A6.4-AMT-003 FOD model) with waste-type-specific decay constants for the Tropical / Wet climate zone (mean annual precipitation above 1,000 mm/yr). The downward-adjusted baseline is estimated ex-ante at 1,164,774 tCO<sub>2</sub>e over the crediting period, of which 1,040,192 tCO<sub>2</sub>e correspond to the methane component and 124,582 tCO<sub>2</sub>e to the supply component. All values are ex-ante and subject to final parameter confirmation.

### b) Conditions in the absence of policies formally integrating the A6.4 mechanism

The Dominican Republic lacks any policy framework that mandates LFG extraction for existing municipal landfills. While Law 57-07 outlines fiscal incentives for voluntary renewable setups and Law 225-20 regulates modern landfill operation parameters under the PLANGIR guidelines, neither tool requires active biogas collection or sets binding schedules for LFG investment at the Rafey site. Without A6.4 carbon revenues, the project fails to meet minimum investment requirements, making the continuation of open atmospheric release the only viable financial outcome.

## A.4.2. Technologies and/or measures to be employed and/or implemented by the project

The project deploys: (1) Gas collection: horizontal and vertical extraction wells connected via piping to a central collection header; (2) Gas treatment: condensate removal, moisture separation and gas conditioning; (3) Blower and flare station: a forced-draft blower to maintain negative pressure in the collection network, and an enclosed flare used during commissioning, for surplus or off-specification gas, and as a safety and back-up device throughout the crediting period; (4) Biogas processing (upgrading) unit: the project design includes a biogas processing facility to upgrade the captured landfill gas, as that term is defined in A6.4-AMM-001-v01.0; (5) Biogas utilization: following commissioning, the captured gas is directed to beneficial use through the supply of landfill gas or biomethane to consumers at a neighbouring industrial facility; the delivery mode will be fixed prior to validation. Flaring is the initial operating mode of the project and thereafter its back-up mode, covering periods when the utilization equipment is not operating and any gas captured in excess of the capacity of the utilization equipment. All of the above applications fall within the applications listed in paragraph 12 of A6.4-AMM-001-v01.0. Age and average lifetime of equipment: the final procurement may comprise new or refurbished units. For any second-hand unit selected, its age at installation and its remaining lifetime will be documented on the basis of the manufacturer's specifications and industry standards, and provided to the designated operational entity prior to validation. The capture, flaring and utilization infrastructure is designed to operate over the 15-year operational lifetime of the activity, with any replacements undertaken during the crediting period as required to maintain that performance. Installed capacities, load factors and efficiencies: the enclosed flare under evaluation has an indicative capacity of 1,800 m<sup>3</sup>/h of landfill gas; the final model and its rated capacity will be selected prior to validation, and the manufacturer's operating instructions will be provided to the designated operational entity in accordance with paragraph 14 of A6.4-

AMT-004. The methane destruction efficiency applied is 90 per cent, the default for enclosed flares under A6.4-AMT-004. The LFG collection efficiency and the availability of the biogas processing and supply system applied in the ex-ante estimate are those reported in Appendix 3. The blower station is sized to the design collection flow of the gas collection network; its electrical consumption is metered and reported as part of on-site electricity consumption. The nominal capacity of the biogas processing unit, and the final selection of the blower, will be confirmed with the detailed engineering and as the off-take arrangement is concluded, together with the final configuration of the utilization component.

## A.5. Parties and activity participants

(Add/remove rows as necessary)

| Type of Party             | Name of the Party  | Activity participant(s) |
|---------------------------|--------------------|-------------------------|
| Other participating Party | Dominican Republic | Equiterria Capital LLC  |

## SECTION B. Application of mechanism methodologies, methodological tools and standardized baselines

### B.1. References to mechanism methodologies, methodological tools and standardized baselines

Primary (A6.4 native): A6.4-AMM-001-v01.0, "Flaring or use of landfill gas" (Version 01.0), approved by the A6.4 Supervisory Body. Supporting tools: am-tool-06-v4.0 (project emissions from LFG flaring); am-tool-04 (emissions from solid waste disposal sites, IPCC FOD model). Alternative for parallel voluntary track: ACM0001 v19, "Flaring or use of landfill gas" (Version 19, CDM/Verra VCS).

| Reference number | Title                                     | Version |
|------------------|-------------------------------------------|---------|
| A6.4-AMM-001     | Flaring or use of landfill gas            | 01.0    |
| A6.4-AMT-003     | Emissions from solid waste disposal sites | 01.0    |
|                  |                                           |         |

### B.2. Applicability of mechanism methodologies, methodological tools and standardized baselines

(Insert the UNFCCC reference number, title and version of the mechanism methodology, other methodological regulatory documents including methodological tool, standardized baseline approved by the Supervisory Body, or the methodological requirements specified by the host Party)

#### A6.4-AMM-001, Flaring or use of landfill gas (v01.0)

This methodology is applicable to the project due to the following reasons:

(1) project captures/destroys LFG from MSW disposal site (within AMM-001 scope); (2) covers the applications applied by the activity (flaring and supply of LFG or biomethane to consumers); (3) DR Law 225-20 does not mandate LFG capture -- regulatory surplus confirmed; (4) waste input data available for IPCC Tier 1 FOD baseline calculations. Full applicability demonstration in table below and Appendix 2.

| Applicability condition of methodological regulatory document or methodological requirement specified by the host Party | Demonstration of compliance of the project with the applicability condition of methodological regulatory document or methodological requirement specified by the host Party |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The mechanism methodology is applicable to Article 6.4 activities that involve: (a) The installation of a new           | Condition (a) is met: the Article 6.4 activity installs a new active LFG capture system where                                                                               |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>LFG capture system in an existing or new (greenfield) SWDS where no LFG capture system was installed prior to the implementation of the Article 6.4 activity (except for legal or contractual requirements) or would be installed in the absence of the Article 6.4 activity; or (b) Upgrading an existing (active or passive) LFG capture system to increase the recovery rate, where the captured LFG prior to the implementation of the Article 6.4 activity was flared and not used, and: (i) The amount of LFG captured by the existing system is collected and measured separately from the upgrade implemented as part of the Article 6.4 activity; or (ii) The efficiency of the existing system is not impacted by the upgrade implemented as part of the Article 6.4 activity, and historical data on the amount of LFG captured and flared is available (if such historical data is not available, no A6.4 ERs can be claimed). (Paragraph 11)</p> | <p>none existed, and Dominican Republic Law 225-20 imposes no legal obligation to capture or flare LFG, confirming additionality of the installation.</p>                                                                                                                                                                                                                                                 |
| <p>The mechanism methodology is only applicable to activities that meet the requirements of paragraph 11 above and that collect the LFG under the Article 6.4 activity exclusively for one or more of the following applications: (a) Flaring; (b) Generating electricity; (c) Generating heat in a boiler, air heater or kiln (brick firing only) or glass melting furnace; (d) Supplying the biomethane produced from the LFG to consumers through a natural gas distribution network; (e) Supplying the LFG or the biomethane produced from the LFG to consumers via trucks; (f) Supplying the LFG or the biomethane produced from the LFG to consumers through a dedicated pipeline. (Paragraph 12)</p>                                                                                                                                                                                                                                                      | <p>The captured LFG will be used exclusively for flaring (a) and, once the off-take arrangement is confirmed, for the supply of the landfill gas, or of the biomethane produced from it, to consumers, either via trucks (application (e)) or through a dedicated pipeline (application (f)); the delivery mode will be fixed prior to validation. No use outside the listed applications is planned.</p> |
| <p>The mechanism methodology is only applicable if the project does not reduce the amount of organic waste that would be recycled in the absence of the Article 6.4 activity. (Paragraph 13)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>The project installs a gas capture system only; it does not alter waste reception, processing, or diversion operations at Rafey. No recyclable waste stream is affected. Condition confirmed.</p>                                                                                                                                                                                                      |
| <p>For the methane contained in the LFG component: (i) For Article 6.4 activities developed in an existing SWDS, the most plausible baseline scenario is that the methane contained in the LFG generated in the SWDS would be either released to the atmosphere or captured and destroyed through flaring to comply with legal or contractual requirements, to address safety and odour concerns, or for other reasons. (Paragraph 14(a)(i))</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>Rafey is an existing SWDS with no active LFG capture. In the absence of the project, methane would continue to be released to the atmosphere through passive venting. No legal or contractual requirement mandates capture or flaring. Condition confirmed.</p>                                                                                                                                        |
| <p>For the heat generation component: (i) If the heat generated by the Article 6.4 activity is replacing heat generated in existing equipment located within the project boundary (e.g., a boiler, air heater, glass melting furnace or brick kiln), the most plausible baseline scenario is the continued generation of heat in the existing equipment using the same fuel. (Paragraph 14(c)(i))</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>The heat generation component is not applied in this project. The energy use of the captured landfill gas is pursued through the supply of landfill gas or biomethane to consumers component under paragraph 14(d) below. Paragraph 14(c)(i) therefore does not apply to this activity, and no existing heat generation equipment is replaced.</p>                                                     |
| <p>For the supply of LFG or biomethane to consumers through trucks or dedicated pipeline, or the supply of biomethane through natural gas dedicated network (hereinafter referred to as "supply of LFG or biomethane to consumers component"), the most plausible baseline scenario is the consumption of</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <p>The supply of landfill gas or biomethane to consumers component is applied. The captured gas is supplied to an industrial consumer. The delivery mode (trucks under paragraph 12(e) or dedicated pipeline under paragraph 12(f)) will be fixed prior to validation, with the corresponding</p>                                                                                                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| natural gas from an existing natural gas network. (Paragraph 14(d))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | project emission source under A6.4-AMM-001 section 8.1.3 or 8.1.4. In accordance with paragraph 14(d), the baseline scenario applied is the consumption of natural gas from an existing natural gas network, and the corresponding natural gas emission factor is applied to the energy supplied. The actual fuel displaced at the consumer facility may have a higher emission factor than natural gas; in accordance with paragraph 14(d) the natural gas emission factor is nevertheless applied, which is conservative. A cement plant in the vicinity of the site, which currently operates on fossil fuel, is under evaluation as the off-taker and was identified as such in the information package made available for the local stakeholder consultation. Discussions with the prospective off-taker are ongoing. The identity and sector of the consumer, and the metering arrangement at the point of delivery, will be confirmed prior to validation. |
| If the Article 6.4 activity involves heat generation and results in existing heat generation equipment being replaced as per paragraph 14(c)(i) above, then activity participants shall demonstrate that: (a) The existing heat generation equipment that is replaced is scrapped, and provide evidence of the scrapping to the DOE performing the validation or at first verification; or (b) The existing heat generation equipment is used outside of the activity boundary and has a higher efficiency than any equipment it may replace. Evidence of the efficiency of the replaced heat generation equipment outside of the activity boundary shall be provided to the DOE performing the validation. If activity participants cannot demonstrate that a higher efficiency equipment is replacing a lower efficiency equipment, then the mechanism methodology is not applicable. (Paragraph 15) | The activity does not include a heat-generation component under paragraph 14(c)(i) and no existing heat generation equipment is replaced. Paragraph 15 is therefore not triggered. If the project design changes to include equipment replacement, scrapping evidence will be provided per (a) or efficiency demonstrated per (b).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| This mechanism methodology is only applicable as a standalone methodology and cannot be applied in combination with other methodologies. (Paragraph 16)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A6.4-AMM-001 is the sole mechanism methodology applied in this PDD. No other methodology is combined with it. Condition confirmed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| This mechanism methodology is not applicable if the management of the SWDS in the Article 6.4 activity scenario is changed in a manner that increases methane generation compared to the situation prior to the implementation of the Article 6.4 activity (for example by recirculating the leachate in the project scenario which was not done in the baseline), unless the change is implemented due to legal requirements. (Paragraph 17)                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No changes will be made to waste disposal operations, leachate management, or any other landfill operational practices that could increase methane generation. The landfill gas capture system will be installed in a representative landfill cell operating under existing conditions, without altering waste disposal practices, waste composition, compaction rates, leachate management, or any other parameters that may affect landfill gas generation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| The applicability conditions included in the methodological tools referred to in paragraph 9 above also apply. (Paragraph 19)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Applicability conditions of A6.4-AMT-001, A6.4-AMT-003, A6.4-AMT-004, and A6.4-AMT-005 are addressed in the corresponding tables below. Condition confirmed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

#### A6.4-AMT-003, Emissions from solid waste disposal sites (v01.0)

| Applicability condition of methodological regulatory document or methodological requirement specified by the host Party                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Demonstration of compliance of the project with the applicability condition of methodological regulatory document or methodological requirement specified by the host Party                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| This methodological tool may be used by mechanism methodologies related to emission reductions. (Paragraph 8)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | The Rafey LFG project is an emission reductions activity. AMM-001-v01.0 references AMT-003 for the ex-ante estimation of baseline CH <sub>4</sub> emissions from the SWDS. Condition met.                                                                                                                    |
| This version of the methodological tool applies only to Article 6.4 projects and may be amended in the future to cover activities at other scales (e.g., programmes of activities, policies, sectoral approaches) once the adopted standards for the development of mechanism methodologies (e.g., additionality standard, baseline-setting standard) are revised to incorporate other scales. (Paragraph 9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | The Rafey LFG project is a single-site Article 6.4 project, not a programme of activities. Condition met.                                                                                                                                                                                                    |
| This methodological tool may be used to determine methane emissions from a SWDS for the following types of applications: (a) Application A: The Article 6.4 activity mitigates methane emissions from an existing specific SWDS. Methane emissions are mitigated by capturing and flaring or combusting the methane. The methane is generated from waste disposed in the past, including waste disposed prior to the start of the Article 6.4 activity. In these cases, this methodological tool is only applied for an ex-ante estimation of emissions in the project design document (PDD). Emissions shall then be monitored during the crediting period using the applicable approaches in the relevant mechanism methodologies (e.g. measuring the amount of methane captured from the SWDS); (b) Application B: The Article 6.4 activity avoids or involves the disposal of waste at a SWDS. This applies, for example, where municipal solid waste (MSW) is treated under an Article 6.4 activity using an alternative waste treatment measure, such as composting or anaerobic digestion, and thus prevented from being disposed of in a SWDS. The methane is generated from waste disposed of, or avoided from disposal, during the crediting period. In these cases, the methodological tool shall be applied for both ex-ante and ex-post estimation of emissions. Under this application, activity participants may apply the simplified approach detailed in section 5.1 below when calculating baseline emissions. (Paragraph 10) | Application A applies. Rafey is an existing SWDS with decades of accumulated waste. The project captures and destroys LFG generated from historical waste decomposition. AMT-003 is applied ex-ante only in this PDD; ex-post monitoring uses metered LFG capture data per AMM-001 Section 7. Condition met. |
| If (a) different types of residual waste are disposed of or prevented from disposal; or (b) both MSW and residual waste(s) are prevented from disposal, then this methodological tool shall be applied separately to each residual waste type and to MSW. (Paragraph 12)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Rafey SWDS receives mixed municipal solid waste as its single waste category. No separate residual waste streams are co-disposed. The tool is applied once, to the MSW stream only. Condition met.                                                                                                           |
| This methodological tool may also be applied for: (a) Monitoring the flux of methane leaving the surface a SWDS; and/or (b) Determining the fraction of methane in the landfill gas (LFG) that is oxidized in the soil or other material covering the waste in the SWDS (OXY). (Paragraph 13)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | A6.4-AMM-001-v01.0 applies this tool to determine OX <sub>y</sub> for the SWDS soil cover, using the Option 3 default value of 0.384, applied once in Equation (1). Surface flux monitoring per (a) is not required by A6.4-AMM-001 for Application A. Condition met.                                        |
| Mechanism methodologies intending to use this methodological tool shall include a reference to this                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | AMM-001-v01.0 references AMT-003 and specifies: (a) applied to baseline SWDS                                                                                                                                                                                                                                 |

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| <p>tool within the mechanism methodology and shall specify: (a) Whether the methodological tool shall be applied by activity participants to determine methane emissions from SWDS and, if so: (i) For which emission sources the tool shall be applied; (ii) Which of the application cases in paragraph 10 above apply; and (iii) Whether the simplified or regular approach shall be used; (b) Whether the methodological tool shall be applied by activity participants to determine the fraction of methane in the landfill gas (LFG) that is oxidized in the soil or other material covering the waste in the SWDS and, if so, for which purposes this parameter is determined; and/or (c) Whether the methodological tool shall be applied by activity participants to determine the flux of methane leaving the surface a SWDS and, if so, for which purposes the flux is determined. (Paragraph 14)</p> | <p>methane emissions, Application A, regular approach; (b) applied to determine OXy for the soil cover oxidation fraction; (c) surface flux monitoring not required. Condition met.</p>                                   |
| <p>Mechanism methodologies may specify additional provisions for the application of this methodological tool in relation to the mitigation activity types they cover. Where the mechanism methodology referring to this tool specifies approaches that differ from those described in this tool, the requirements contained in the mechanism methodology shall take precedence. (Paragraph 15)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <p>AMM-001-v01.0 specifies additional provisions including use of the regular FOD approach and ex-ante application only for Application A. Where AMM-001 and AMT-003 differ, AMM-001 takes precedence. Condition met.</p> |

#### A6.4-AMT-004, Project emissions from flaring (v01.0)

| <p><b>Applicability condition of methodological regulatory document or methodological requirement specified by the host Party</b></p>                                                                                                                                                                                                                                                                                                                         | <p><b>Demonstration of compliance of the project with the applicability condition of methodological regulatory document or methodological requirement specified by the host Party</b></p>                                                                                                                                                                                                                                       |
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| <p>Mechanism methodologies intending to use this methodological tool shall include a reference to this tool within the mechanism methodology and shall specify for which residual gases it shall be applied. (Paragraph 9)</p>                                                                                                                                                                                                                                | <p>AMM-001-v01.0 references AMT-004 and specifies that it applies to LFG as the residual gas. Condition met.</p>                                                                                                                                                                                                                                                                                                                |
| <p>This tool may be used by mechanism methodologies related to emission reductions. (Paragraph 10)</p>                                                                                                                                                                                                                                                                                                                                                        | <p>The Rafey LFG project is an emission reductions activity. Condition met.</p>                                                                                                                                                                                                                                                                                                                                                 |
| <p>This version of the methodological tool applies only to Article 6.4 projects and may be amended in the future to cover activities at other scales (e.g., programmes of activities, policies, sectoral approaches) once the adopted standards for the development of mechanism methodologies (e.g., additionality standard, baseline-setting standard) are revised to incorporate other scales. (Paragraph 11)</p>                                          | <p>The Rafey LFG project is a single-site Article 6.4 project, not a programme of activities. Condition met.</p>                                                                                                                                                                                                                                                                                                                |
| <p>This methodological tool is applicable to the flaring of flammable greenhouse gases in the project scenario where: (a) Methane is the component with the highest concentration in the flammable residual gas; (b) The source of the residual gas is biogenic (e.g., biogas, landfill gas, or wastewater treatment gas); and (c) Electric igniters in the flare are only used for start-up or flame recovery in case of flame quenching. (Paragraph 12)</p> | <p>(a) LFG at Rafey has a typical CH<sub>4</sub> concentration of 50-55% (v/v), the highest single-component concentration in the gas stream. (b) The residual gas is landfill gas of biogenic origin from decomposition of organic municipal solid waste. (c) The enclosed flare will use electric igniters solely for start-up and flame recovery, consistent with manufacturer specifications. All three conditions met.</p> |

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| This methodological tool is not applicable to the use of auxiliary fuels; therefore, the residual gas must contain sufficient flammable gas to sustain combustion. (Paragraph 13)                                                                                                                                                                                            | At a CH <sub>4</sub> concentration of 50-55% (v/v), the LFG at Rafey contains sufficient flammable gas to sustain self-supporting combustion without auxiliary fuels. No auxiliary fuel will be used in the flare. Condition met.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| In the case of an enclosed flare, this methodological tool is applicable only if the flare is operated in line with the operating instructions specified by the manufacturer. (Paragraph 14)                                                                                                                                                                                 | The project will install an enclosed flare operated strictly in accordance with the manufacturer's operating instructions. This requirement will be documented in the operations and maintenance manual and verified by the DOE. Condition met.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| The provisions in paragraphs 12 to 14 above shall be demonstrated in the PDD and assessed at the validation. Moreover, the same provisions shall be demonstrated in each monitoring report and be assessed at each verification. (Paragraph 15)                                                                                                                              | Paragraphs 12 to 14 are demonstrated in this PDD and will be assessed at validation. The same provisions will be demonstrated in each monitoring report and assessed at each verification by the DOE. Condition met.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Mechanism methodologies may specify additional provisions for the application of this tool in relation to the mitigation activity types they cover. Where the mechanism methodology referring to this tool specifies approaches that differ from those described in this tool, the requirements contained in the mechanism methodology shall take precedence. (Paragraph 17) | AMM-001-v01.0 determines project emissions from flaring by reference to the flaring tool (A6.4-AMT-004). The project uses an enclosed flare. The methane destruction efficiency is determined under Option A of A6.4-AMT-004, paragraph 30, applying the default value of 90 per cent when the flare temperature and the residual gas flow are within the manufacturer's operating specification and the flame is detected in the minute concerned, and zero otherwise. This is a conservative choice: the manufacturer specification for the selected flare indicates a destruction efficiency of 99 per cent. Option B (measurement of the destruction efficiency) may be applied in future monitoring periods. Condition met. |

#### A6.4-AMT-005, Mass flow of a greenhouse gas in a gaseous stream (v01.0)

| <b>Applicability condition of methodological regulatory document or methodological requirement specified by the host Party</b>                                                                                                                                                                                                       | <b>Demonstration of compliance of the project with the applicability condition of methodological regulatory document or methodological requirement specified by the host Party</b>                                               |
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| Mechanism methodologies intending to use this methodological tool shall include a reference to this tool within the mechanism methodology and shall specify to which gaseous stream and which greenhouse gases in the gaseous streams it shall be applied. (Paragraph 9)                                                             | AMM-001-v01.0 references AMT-005 and specifies that it applies to the LFG gaseous stream and to CH <sub>4</sub> as the greenhouse gas whose mass flow is to be determined. Condition met.                                        |
| This methodological tool is used to measure the mass flow of greenhouse gases in gaseous streams under Article 6.4 baseline or project scenarios and may be used by mechanism methodologies related to emission reductions and/or net removals. (Paragraph 10)                                                                       | The tool is applied in the project scenario to determine the mass flow of CH <sub>4</sub> in the LFG stream sent to flaring and/or end-use equipment, for the purpose of calculating project emission reductions. Condition met. |
| This version of the methodological tool applies only to Article 6.4 projects and may be amended in the future to cover activities at other scales (e.g., programmes of activities, policies, sectoral approaches) once the adopted standards for the development of mechanism methodologies (e.g., additionality standard, baseline- | The Rafey LFG project is a single-site Article 6.4 project, not a programme of activities. Condition met.                                                                                                                        |

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| setting standard) are revised to incorporate other scales. (Paragraph 11)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                 |
| This methodological tool applies to ideal gases only and shall be updated in the future to incorporate CO <sub>2</sub> under non-ideal gases condition (e.g., for geological storage). (Paragraph 12)                                                                                                                                                                                                                                                                                                                                                                                                                     | LFG is treated as an ideal gas binary mixture of water vapour and dry gas components under the operating conditions of the Rafey project (moderate temperature and pressure). The total concentration of non-methane, non-CO <sub>2</sub> components in Rafey LFG is below 1% (v/v), consistent with the tool's assumption for landfill gas as stated in footnote 3 of the tool. Condition met. |
| Mechanism methodologies intending to use this methodological tool shall include a reference to it and shall specify: (a) The gaseous streams to which the methodological tool shall be applied to; (b) The greenhouse gas for which the mass flow shall be determined; (c) The time intervals at which the flow of the gaseous stream shall be measured; and (d) Situations where the simplification offered for calculating the molecular mass of the gaseous stream (Equations (3) or (17)) is not valid (e.g., where the gaseous stream is predominantly composed of a gas other than N <sub>2</sub> ). (Paragraph 13) | AMM-001-v01.0 specifies: (a) applied to the LFG stream at the capture header; (b) mass flow of CH <sub>4</sub> ; (c) continuous flow measurement per monitoring plan; (d) the N <sub>2</sub> molecular mass simplification is valid for LFG where non-CH <sub>4</sub> , non-CO <sub>2</sub> components are below 1% (v/v). Condition met.                                                       |
| The provisions in paragraph 13 above shall be demonstrated in the Project Design Document (PDD) and in each monitoring report and be assessed at the validation and at each verification. (Paragraph 14)                                                                                                                                                                                                                                                                                                                                                                                                                  | The specifications of Paragraph 13 are demonstrated in this PDD (Sections B.7 and B.8) and will be demonstrated in each monitoring report and assessed at validation and at each verification by the DOE. Condition met.                                                                                                                                                                        |
| Mechanism methodologies may specify additional provisions for the application of this tool in relation to the mitigation activity types they cover. Where the mechanism methodology referring to this tool specifies approaches that differ from those described in this tool, the requirements contained in the mechanism methodology shall take precedence. (Paragraph 15)                                                                                                                                                                                                                                              | AMM-001-v01.0 specifies additional provisions including measurement frequency and equipment calibration requirements for LFG flow meters. Where AMM-001 and AMT-005 differ, AMM-001 takes precedence. Condition met.                                                                                                                                                                            |

#### A6.4-AMT-001 — Common practice analysis (v01.0)

| <b>Applicability condition of methodological regulatory document or methodological requirement specified by the host Party</b>                                                                                      | <b>Demonstration of compliance of the project with the applicability condition of methodological regulatory document or methodological requirement specified by the host Party</b>                                                                                                                                                                                      |
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| This methodological tool is applicable to Article 6.4 activities that involve emission reductions and/or net removals where its use is explicitly referenced in the applicable mechanism methodology. (Paragraph 9) | The Rafey LFG project is an emission reductions activity. AMM-001-v01.0 explicitly references AMT-001 for the common practice analysis step of the additionality demonstration. Condition met.                                                                                                                                                                          |
| The methodological tool may only be used if recent data on common practice is available as further elaborated in paragraph 21 below. (Paragraph 10)                                                                 | Recent and verifiable data on LFG capture practices in the Dominican Republic is available through the PLANGIR 2025-2035 baseline assessment (Decreto 302-25) and national solid waste management inventories. As documented in section B.6, 0 of 243 active solid waste disposal sites in the Dominican Republic currently operate LFG capture systems. Condition met. |

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| <p>This methodological tool is applicable to Article 6.4 activities implemented at the project level. The methodological tool may be amended in the future to also cover activities implemented at other scales (e.g. programmes of activities, policies, sectoral approaches, etc.). (Paragraph 11)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p>The Rafey LFG project is a single-site Article 6.4 project implemented at the project level, not a programme of activities. Condition met.</p>                                                                                                                                                                                                                                                                                                                                    |
| <p>This methodological tool may be used by mechanism methodologies related to both emission reductions and net removals. (Paragraph 12)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>The Rafey LFG project is an emission reductions activity. The tool is used exclusively for emission reductions purposes. Condition met.</p>                                                                                                                                                                                                                                                                                                                                       |
| <p>Mechanism methodologies intending to use this methodological tool shall include a reference to this methodological tool within the mechanism methodology and shall specify: (a) Which of the following two Approaches shall be used by the activity participants to conduct the common practice analysis, as further elaborated in paragraph 21 and section 7.1 below: (i) Approach A: which is based on the identification of existing comparable activities and differentiation between similar and different activities and is generally suited for discrete, large-scale activities; or (ii) Approach B: which is based on the determination of a target market size and the market penetration of the relevant technology, measure or practice and is generally suited for highly distributed small-scale technologies and practices. (Paragraph 13)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p>AMM-001-v01.0 references AMT-001 and specifies Approach A for the common practice analysis, using a count-based indicator and a 5% market penetration threshold at the host-country level. Condition met.</p>                                                                                                                                                                                                                                                                     |
| <p>For both Approaches A and B, the mechanism methodology shall specify the following: (a) Whether the indicator of common practice to be used by activity participants when conducting the common practice analysis is: (i) Count-based (i.e., based on the number of units); or (ii) Capacity/output-based (e.g., based on kilowatt hours of electricity produced or megawatt of capacity installed). (b) Whether a stock-based approach (e.g., considering all installed plants to date, or all operational devices to date) or a time-bound approach (e.g., assessing uptake or sales within a defined recent period) is used to assess common practice. If a time-bound approach is selected, the mechanism methodology shall clearly define the applicable reference period (e.g., the most recent three years) to be used for assessing common practice; (c) How the applicable geographical area for the common practice analysis shall be determined by activity participants (e.g., global, host country, or sub-national jurisdiction); (d) Whether the scale of output or capacity of the technology, measure, or practice shall be considered for identifying comparable activities under Approach A, or for determining target market size under Approach B and, if so, the mechanism methodology shall specify the output or capacity range to be applied on such cases, or provide clear guidance for how activity participants shall determine such a range and the appropriate justification; (e) What common practice threshold shall be applied to assess whether a technology, measure or practice is considered common practice; (f) Which activities other than the Article 6.4 activity shall be considered comparable to the Article 6.4 activity under Approach A and, within this cohort of comparable activities, which activities shall be considered similar to the Article 6.4</p> | <p>AMM-001-v01.0 specifies for Approach A: (a) count-based indicator; (b) stock-based approach, all installed LFG capture systems to date; (c) host-country geographical area (Dominican Republic); (d) no output or capacity range applied; (e) 5% market penetration threshold; (f) comparable activities are active LFG capture and destruction/utilization systems at existing SWDSs in the Dominican Republic; (g) not applicable (Approach B not selected). Condition met.</p> |

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| activity and which activities shall be considered different from the Article 6.4 activity (see definitions above), including relevant parameters for such differentiation, in line with the requirements and guidance provided in this methodological tool; (g) How, in the case of Approach B, the market penetration of a given technology, measure or practice and the target market size shall be determined, as further outlined in section 7.6. below. (Paragraph 14) |                                                                                                                                               |
| Mechanism methodologies may specify additional provisions for the application of this methodological tool in relation to the mitigation activity types they cover. These may include sector-specific parameters, methodological considerations, or data requirements relevant to conducting the common practice analysis. (Paragraph 15)                                                                                                                                    | AMM-001-v01.0 specifies the comparable activity definition for LFG capture and the host-country geographic scope. Condition met.              |
| Where the mechanism methodology referring to this methodological tool specifies approaches for conducting the common practice analysis that differ from those described in this methodological tool, the requirements contained in the mechanism methodology shall take precedence. (Paragraph 16)                                                                                                                                                                          | AMM-001-v01.0 takes precedence where its requirements for the common practice analysis differ from those described in AMT-001. Condition met. |

### B.3. Addressing double counting due to overlapping claims between different Article 6.4 mechanism activities, due to overlap with domestic mitigation schemes and due to overlap with other frameworks or environmental markets

Project registered exclusively under A6.4. No concurrent or prior registration under any other GHG crediting scheme (VCS, Gold Standard, CDM, CAR, ACR, or domestic DR scheme) exists for these reductions. Corresponding adjustments will be applied to all A6.4 ERs as agreed with the DR DNA (entity account AR64D6495EBF). Any future parallel voluntary track will be strictly structured to avoid double counting.

### B.4. Project boundary, sources, sinks, greenhouse gases and reservoirs

Project boundary: (1) Rafey landfill waste mass -- source of baseline CH<sub>4</sub>; (2) LFG collection, treatment, and combustion/utilization infrastructure on-site; (3) for fuel substitution end-use, downstream fossil fuel displacement at off-taker facilities. Key GHGs: CH<sub>4</sub> (primary, baseline and project), CO<sub>2</sub> biogenic (excluded per IPCC), fossil CO<sub>2</sub> credited for fuel switch. Full GHG source/sink table per AMM-001 boundary matrix follows in sections B.4.1-B.4.3.

#### B.4.1. Baseline emissions/removals

| Source/sink reservoir/pool          | GHG             |                                                                                       | Type                                                                                                         | Justification/Explanation                                                                                                                                                                                                            |
|-------------------------------------|-----------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Source/ sink/ and reservoir/pool 01 | CO <sub>2</sub> | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related | CO <sub>2</sub> from anaerobic decomposition of organic waste is not accounted for, as it is also released during LFG combustion in the project scenario. Biogenic CO <sub>2</sub> excluded per IPCC guidelines and AMM-001 Table 1. |

|                                    |                  |                                                                                       |                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------|------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                    | CH <sub>4</sub>  | <input checked="" type="checkbox"/> Included<br><input type="checkbox"/> Not included | <input checked="" type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related | PRIMARY emission source. CH <sub>4</sub> generated from anaerobic decomposition of organic waste in the Rafey SWDS. Ex-ante LFG capture (A6.4-AMM-001 v5 model): ~15.4 million m <sup>3</sup> /year on average over the crediting period, front-loaded along the first-order-decay profile (peak ~35 million m <sup>3</sup> /year in 2028-2029; ~1,750 m <sup>3</sup> /h average, ~3,990 m <sup>3</sup> /h peak), at ~50% CH <sub>4</sub> content. Captured and destroyed under the project. |
|                                    | N <sub>2</sub> O | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | N <sub>2</sub> O emissions from solid waste disposal sites are small relative to CH <sub>4</sub> emissions. Exclusion is conservative and consistent with AMM-001 Table 1.                                                                                                                                                                                                                                                                                                                   |
|                                    | -----            | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | No other significant GHG sources identified for the SWDS decomposition source.                                                                                                                                                                                                                                                                                                                                                                                                               |
| Source/ sink and reservoir/pool 02 | CO <sub>2</sub>  | <input checked="" type="checkbox"/> Included<br><input type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input checked="" type="checkbox"/> Related | CO <sub>2</sub> from natural gas combustion displaced at the off-taker by the landfill gas or biomethane supplied to the consumer. Major baseline source once the supply component is in operation. Per AMM-001 Table 1: 'Related to'.                                                                                                                                                                                                                                                       |
|                                    | CH <sub>4</sub>  | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Excluded for simplification and conservativeness per AMM-001 Table 1.                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                    | N <sub>2</sub> O | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Excluded for simplification and conservativeness per AMM-001 Table 1.                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                    | -----            | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | No other significant GHG sources associated with the displaced natural gas.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| -----                              | CO <sub>2</sub>  | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Not applicable. No additional emission sources identified in the baseline project boundary beyond the SWDS decomposition and displaced fossil fuel components.                                                                                                                                                                                                                                                                                                                               |
|                                    | CH <sub>4</sub>  | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Not applicable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                    | N <sub>2</sub> O | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Not applicable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                    | -----            | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Not applicable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

## B.4.2. Project emissions/removals

| Source/sink/reservoir /pool        | GHG              |                                                                                       | Type                                                                                                                    | Justification/Explanation                                                                                                                                                                               |
|------------------------------------|------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Source/ sink and reservoir/pool 01 | CO <sub>2</sub>  | <input checked="" type="checkbox"/> Included<br><input type="checkbox"/> Not included | <input checked="" type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related | CO <sub>2</sub> from on-site fossil fuel consumption (diesel generators, vehicles, auxiliary equipment). Significant emission source per AMM-001 Table 1.                                               |
|                                    | CH <sub>4</sub>  | <input checked="" type="checkbox"/> Included<br><input type="checkbox"/> Not included | <input checked="" type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related | CH <sub>4</sub> included in CO <sub>2</sub> -equivalent emission factor for on-site fossil fuel combustion per AMM-001 Table 1.                                                                         |
|                                    | N <sub>2</sub> O | <input checked="" type="checkbox"/> Included<br><input type="checkbox"/> Not included | <input checked="" type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related | N <sub>2</sub> O included in CO <sub>2</sub> -equivalent emission factor for on-site fossil fuel combustion per AMM-001 Table 1.                                                                        |
|                                    | ----             | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | No other GHG sources from on-site fossil fuel combustion.                                                                                                                                               |
| Source/ sink and reservoir/pool 02 | CO <sub>2</sub>  | <input checked="" type="checkbox"/> Included<br><input type="checkbox"/> Not included | <input checked="" type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related | CO <sub>2</sub> from on-site electricity consumption (blowers, pumps, compressors, monitoring and control equipment). Significant emission source per AMM-001 Table 1.                                  |
|                                    | CH <sub>4</sub>  | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Excluded for simplification per AMM-001 Table 1.                                                                                                                                                        |
|                                    | N <sub>2</sub> O | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Excluded for simplification per AMM-001 Table 1.                                                                                                                                                        |
|                                    | ----             | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | No other GHG sources from on-site electricity consumption.                                                                                                                                              |
| ----                               | CO <sub>2</sub>  | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | CO <sub>2</sub> from LFG flaring is biogenic (derived from organic waste decomposition). Not accounted per IPCC guidelines and AMM-001 Table 1.                                                         |
|                                    | CH <sub>4</sub>  | <input checked="" type="checkbox"/> Included<br><input type="checkbox"/> Not included | <input checked="" type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related | CH <sub>4</sub> from incomplete combustion in primary flare or end-use equipment. Significant emission source. Quantified using am-tool-06-v4.0 (Project emissions from flaring) per AMM-001 Section 8. |
|                                    | N <sub>2</sub> O | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Excluded for simplification per AMM-001 Table 1.                                                                                                                                                        |

|  |       |                                                                                       |                                                                                                              |                                        |
|--|-------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------|
|  | ----- | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related | No other GHG sources from LFG flaring. |
|--|-------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------|

## B.4.3. Leakage emissions

| Source/sink/reservoir/pool         | GHG              |                                                                                       | Type                                                                                                                    | Justification/Explanation                                                                                                                                                                                                            |
|------------------------------------|------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Source/ sink and reservoir/pool 01 | CO <sub>2</sub>  | <input checked="" type="checkbox"/> Included<br><input type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input checked="" type="checkbox"/> Affected<br><input type="checkbox"/> Related | CO <sub>2</sub> upstream (lifecycle) emissions associated with the Article 6.4 activity (e.g., manufacturing of equipment, fuel for transportation). Included in LCA analysis as 'Affected by' emission source per AMM-001 Appendix. |
|                                    | CH <sub>4</sub>  | <input checked="" type="checkbox"/> Included<br><input type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input checked="" type="checkbox"/> Affected<br><input type="checkbox"/> Related | CH <sub>4</sub> upstream (lifecycle) emissions. Included in LCA analysis as 'Affected by' emission source per AMM-001 Appendix.                                                                                                      |
|                                    | N <sub>2</sub> O | <input checked="" type="checkbox"/> Included<br><input type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input checked="" type="checkbox"/> Affected<br><input type="checkbox"/> Related | N <sub>2</sub> O upstream (lifecycle) emissions. Included in LCA analysis as 'Affected by' emission source per AMM-001 Appendix.                                                                                                     |
|                                    | -----            | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | No other upstream GHG sources identified.                                                                                                                                                                                            |
| Source/ sink and reservoir/pool 02 | CO <sub>2</sub>  | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Not applicable. No second leakage source identified for this project.                                                                                                                                                                |
|                                    | CH <sub>4</sub>  | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Not applicable.                                                                                                                                                                                                                      |
|                                    | N <sub>2</sub> O | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Not applicable.                                                                                                                                                                                                                      |
|                                    | -----            | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Not applicable.                                                                                                                                                                                                                      |
| -----                              | CO <sub>2</sub>  | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Not applicable.                                                                                                                                                                                                                      |
|                                    | CH <sub>4</sub>  | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related            | Not applicable.                                                                                                                                                                                                                      |
|                                    | N <sub>2</sub> O | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected                                                | Not applicable.                                                                                                                                                                                                                      |

|  |       |                                                                                       |                                                                                                              |                 |
|--|-------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------|
|  |       |                                                                                       | <input type="checkbox"/> Related                                                                             |                 |
|  | ----- | <input type="checkbox"/> Included<br><input checked="" type="checkbox"/> Not included | <input type="checkbox"/> Controlled<br><input type="checkbox"/> Affected<br><input type="checkbox"/> Related | Not applicable. |

## B.5. Establishment and description of baseline scenario

### B.5.1. Identification of the baseline scenario

The baseline scenario is continued uncontrolled anaerobic decomposition of organic waste at Rafey SWDS, with methane-rich LFG escaping as fugitive surface emissions — as occurred throughout the 40+ year operational history of the site. DR Law 225-20 does not mandate LFG capture or flaring; no voluntary LFG investment has been undertaken absent this project. The most plausible baseline is therefore uncontrolled atmospheric release, consistent with AMM-001 para. 14(a)(i).

Baseline methane generation is estimated ex-ante using A6.4-AMT-003 Application A (regular FOD approach, Section 5.2), with  $OX_y = 0.384$  (Option 3 default, existing SWDS with soil cover, applied once in Equation (1)),  $GWP_{CH4} = 28$  (AR5),  $MCF = 0.70$  and a waste disposal series of 553,000 tonnes in 2024 and 780,000 tonnes per year from 2025. All values are ex-ante estimates; baseline emissions are determined ex-post from the quantity of methane actually captured, in accordance with paragraph 79 of A6.4-AMM-001.

### B.5.2. Identification of the Business-as-usual (BAU) scenario

The conservative BAU scenario is identical to the baseline: continued waste disposal in existing and new cells without LFG capture, with active disposal expected until ~2031 and residual gas generation from accumulated waste continuing through the crediting period (2028–2042). No market signal, regulatory driver, or financing mechanism would cause LFG capture to be installed in the absence of A6.4 carbon revenue.

The conservative BAU equals continued uncontrolled venting of the accumulated waste mass. The downward-adjusted methane baseline applied in the ER calculation (1,040,192 tCO<sub>2</sub>e over the crediting period) is lower than the conservative BAU, confirming conservativeness (A6.4-AMM-001 Section 7.5). The BAU series will be regenerated from the current ex-ante model prior to validation.

## B.6. Demonstration of additionality

### B.6.1. Regulatory analysis

DR Law 225-20 (General Waste Management) mandates proper waste disposal but does NOT require LFG capture, destruction, or utilization at landfills. No national or subnational regulation mandates biogas recovery or methane destruction at Rafey or any comparable DR facility. Project activity demonstrably exceeds legal requirements -- regulatory surplus criterion under A6.4-AMM-001-v01.0 is satisfied. Law 57-07 provides fiscal incentives for qualifying renewables but does not create a legal obligation for LFG capture.

### B.6.2. Analysis of lock-in risk

No lock-in risk: LFG capture is applied to legacy waste already in the landfill. The project does not extend the landfill's operational life or stimulate additional waste generation. All LFG utilization equipment has operational lifetimes within or shorter than the maximum potential crediting period of 15 years, comprising an initial five-year period renewable twice. The project displaces fossil fuels with captured biogas — no long-lived fossil fuel infrastructure is installed.

**B.6.3. Investment Analysis or Barrier analysis**

☒ Investment analysis      ☐ Barrier analysis

*(Select one option)*

The benchmark analysis is applied in accordance with A6.4-AMT-002. The financial indicator is the project internal rate of return, calculated on a pre-financing basis and excluding transaction costs. The financial benchmark applied is the entity-specific minimum accepted internal rate of return of 18 per cent; the net present value is calculated at a discount rate of 12 per cent, being the weighted average cost of capital identified in paragraph 7.6.4 of A6.4-AMT-002 as an appropriate benchmark for a project internal rate of return. Both values are documented in the investment memorandum presented to the entity's management and to prospective investors, as required by paragraph 7.6.2, and remain subject to confirmation as the financing is concluded. A market benchmark will be determined in accordance with paragraph 7.6.3 of A6.4-AMT-002 prior to validation. Without revenues from A6.4ERs the activity yields no positive internal rate of return and a net present value of minus USD 10.45 million, and it remains non-viable under all single-parameter variations of plus or minus 10 and 20 per cent in the biomethane price, CAPEX and OPEX. Even under the simultaneous best case the project internal rate of return of 5.0 per cent remains far below both the 18 per cent benchmark and the 12 per cent discount rate. Revenue from A6.4ERs is therefore decisive for the viability of the activity, which is accordingly additional. The investment analysis and the sensitivity analysis required by paragraph 7.8 of A6.4-AMT-002 will be made available to the designated operational entity for validation. They will be provided as a spreadsheet with readable formulas and unprotected cells, in accordance with paragraph 5.2.3 of A6.4-AMT-002. Commercially sensitive elements may be marked as confidential in accordance with the activity standard, in which case a redacted version will be provided for the public record.

**B.6.4. Common practice analysis**

*(This section is to be filled if the financial additionality or barrier analysis in the previous sub-section is followed for demonstrating additionality)*

LFG capture is not common practice in the Dominican Republic: 0 of 243 active dumpsites and landfills operate LFG capture systems (stock-based, count indicator, host-country geographic area per AMM-001 and AMT-001. Market penetration = 0%, well below the 5% threshold specified in AMM-001. Common practice criterion is satisfied.

**B.6.5. Performance-based approach**

Not applicable: the performance-based approach is not used for this project.

**B.7. Addressing non-permanence and risks of reversals****B.7.1. Reversals risk assessment**

Not applicable. The proposed project involves emission reductions from LFG capture and combustion only. It does not involve net GHG removals and is not an emission reduction activity with reversal risks as defined in the A6.4 Activity Standard. AMM-001 does not prescribe reversal risk provisions for LFG capture activities.

**B.7.2. Reversals risk mitigation plan**

Not applicable. The proposed project involves emission reductions from LFG capture and combustion only. It does not involve net GHG removals and is not an emission reduction activity with reversal risks as defined in the A6.4 Activity Standard. AMM-001 does not prescribe reversal risk provisions for LFG capture activities.

**B.7.3. Calculation of an overall percentage-based risk**

Not applicable. The proposed project involves emission reductions from LFG capture and combustion only. It does not involve net GHG removals and is not an emission reduction activity with reversal risks as defined in the A6.4 Activity Standard. AMM-001 does not prescribe reversal risk provisions for LFG capture activities.

### B.7.4. Remediation of reversals

Not applicable. The proposed project involves emission reductions from LFG capture and combustion only. It does not involve net GHG removals and is not an emission reduction activity with reversal risks as defined in the A6.4 Activity Standard. AMM-001 does not prescribe reversal risk provisions for LFG capture activities.

## B.8. Estimation of emission reductions and/or net removals

### B.8.1. Calculation of baseline emissions and/or removals

#### B.8.1.1. Calculation of unadjusted baseline emissions and/or removals

Unadjusted baseline emissions ( $BE_{CH_4,raw,y}$ ) — first-order-decay methane baseline (A6.4-AMT-003) before the Section 7.4 downward adjustment, in tCO<sub>2</sub>e:

Baseline methane generation from the SWDS is estimated ex ante with the first-order decay (FOD) model of A6.4-AMT-003 (Equation 1):

$$BE_{CH_4,SWDS,y} = \phi_y \times (1 - f_y) \times GWP_{CH_4} \times (1 - OX_y) \times (16/12) \times F \times MCF_y \times \sum_{x=1 \rightarrow y} \sum_j [W_{j,x} \times DOC_{f,j} \times DOC_j \times e^{(-k_j \cdot (y-x))} \times (1 - e^{(-k_j)})]$$

where  $\phi_y$  = model correction factor (0.75);  $f_y$  = 0;  $GWP_{CH_4}$  = 28;  $OX_y$  = 0.384;  $F$  = 0.50;  $MCF_y$  = 0.70;  $W_{j,x}$  = waste type  $j$  disposed in year  $x$ ;  $DOC_j$ ,  $DOC_{f,j}$  = degradable organic carbon and its decomposable fraction;  $k_j$  = decay rate (A6.4-AMT-003 Table 10, Tropical / Wet). Full parameter and waste tables are given in Appendix 3.

The baseline emissions of methane from the SWDS are then determined per A6.4-AMM-001 (Equation 1):

$$BE_{CH_4,y} = [F_{CH_4,PJ,capt,y} \times (1 - OX_y) - F_{CH_4,BL,y}] \times GWP_{CH_4}$$

where  $F_{CH_4,PJ,capt,y}$  = methane captured and sent to flare and to beneficial use under the project (tCH<sub>4</sub>/yr);  $F_{CH_4,BL,y}$  = methane that would be destroyed in the baseline (= 0; DR Law 225-20 imposes no LFG-capture requirement);  $OX_y$  = 0.384;  $GWP_{CH_4}$  = 28. Ex ante,  $F_{CH_4,PJ,capt,y}$  is estimated in accordance with Equation (14) of A6.4-AMM-001 as  $\eta_{PJ} \times BE_{CH_4,SWDS,y} / GWP_{CH_4}$ , and is capped by the combined destruction and utilization capacity of the installed equipment. The efficiency of the LFG capture system ( $\eta_{PJ}$ ) is taken as the default value of 50 per cent provided in Data / Parameter table 4 of A6.4-AMM-001, which applies where technical specifications of the capture system to be installed are not yet available; the methodology assigns an uncertainty of plus or minus 50 per cent to this default. Equation (14) is used for the ex-ante estimate only: during the crediting period, baseline emissions are determined from the quantity of methane actually captured, in accordance with paragraph 79 and Equation (1) of A6.4-AMM-001.

The unadjusted ex-ante baseline (before the Section 7.4 downward adjustment) is set out in the table below.

| Year | Ex-ante emission reductions $ER_y$ (tCO <sub>2</sub> e) |
|------|---------------------------------------------------------|
| 2028 | 75,693                                                  |
| 2029 | 78,908                                                  |
| 2030 | 80,809                                                  |
| 2031 | 81,752                                                  |
| 2032 | 81,982                                                  |
| 2033 | 88,778                                                  |
| 2034 | 88,038                                                  |
| 2035 | 86,955                                                  |
| 2036 | 85,589                                                  |
| 2037 | 79,749                                                  |
| 2038 | 77,632                                                  |
| 2039 | 64,505                                                  |
| 2040 | 53,159                                                  |
| 2041 | 44,484                                                  |
| 2042 | 37,662                                                  |

|                      |                  |
|----------------------|------------------|
| <b>Total (15 yr)</b> | <b>1,105,694</b> |
|----------------------|------------------|

### B.8.1.2. Calculation of downward adjusted baseline emissions and/or removals

#### B.8.1.2.1. Downward adjustment at the calendar year of the start date of the first crediting period

Downward adjustment — year 1 (2028): pure-flaring commissioning year;  $DA = 10\% \times BE_{\text{raw},2028} = 21,131 \text{ tCO}_2\text{e}$  (A6.4-AMM-001 Section 7.4.1).

Methodology procedure (A6.4-AMM-001 §7.4.1): for an existing SWDS the methane component receives an initial downward adjustment determined through Steps 1–6 — (1) identify components subject to adjustment; (2)–(3) determine the minimum downward-adjusted baseline; (4) determine the downward adjustment based on uncertainty; (5)–(6) set  $DA_{i,y1}$  as the greater of the two. The value applied in this ex-ante model ( $DA = 10\% \times BE_{\text{raw},2028} = 21,131 \text{ tCO}_2\text{e}$ ) is an indicative proxy; the full Step 1–6 §7.4.1 calculation will be completed prior to validation.

#### B.8.1.2.1.1. Downward adjustment at the subsequent years

Downward adjustment — subsequent years (2029–2042): energy-use configuration;  $DA = 0$  (A6.4-AMM-001 Section 7.4.2).

Per A6.4-AMM-001 §7.4.2, the downward adjustment in subsequent years is determined separately by component (for this activity: the methane component and the LFG-supply component) with an annual increase in the downward-adjustment factor. The energy-use configuration applied here sets  $DA = 0$  for 2029–2042 as an indicative proxy, to be replaced by the §7.4.2 component-wise calculation prior to validation.

#### B.8.1.2.1.2. Calculation of downward adjusted baseline emissions and/or removals

Downward-adjusted baseline emissions ( $BE_{\text{adj},y}$ ) = adjusted methane baseline (after DA) plus the displaced-fuel term of the LFG-supply component (from 2029), in  $\text{tCO}_2\text{e}$ :

| Year                 | Adjusted methane baseline<br>$BE_{\text{CH}_4,\text{adj}}$ | Supply component<br>$BE_{\text{NG}}$ | Total baseline<br>$BE_{\text{adj}}$ | Project emissions<br>PE | Leakage LE   |
|----------------------|------------------------------------------------------------|--------------------------------------|-------------------------------------|-------------------------|--------------|
| 2028                 | 72,755                                                     | 5,832                                | 78,587                              | 2,502                   | 393          |
| 2029                 | 76,072                                                     | 5,768                                | 81,840                              | 2,523                   | 409          |
| 2030                 | 78,065                                                     | 5,703                                | 83,767                              | 2,540                   | 419          |
| 2031                 | 79,092                                                     | 5,638                                | 84,730                              | 2,555                   | 424          |
| 2032                 | 79,401                                                     | 5,573                                | 84,974                              | 2,567                   | 425          |
| 2033                 | 82,645                                                     | 11,179                               | 93,824                              | 4,577                   | 469          |
| 2034                 | 81,977                                                     | 11,114                               | 93,091                              | 4,587                   | 465          |
| 2035                 | 80,962                                                     | 11,049                               | 92,011                              | 4,596                   | 460          |
| 2036                 | 79,661                                                     | 10,984                               | 90,646                              | 4,604                   | 453          |
| 2037                 | 73,790                                                     | 10,920                               | 84,709                              | 4,537                   | 424          |
| 2038                 | 71,680                                                     | 10,855                               | 82,535                              | 4,490                   | 413          |
| 2039                 | 59,256                                                     | 9,646                                | 68,902                              | 4,052                   | 345          |
| 2040                 | 48,935                                                     | 7,966                                | 56,901                              | 3,457                   | 285          |
| 2041                 | 41,049                                                     | 6,682                                | 47,731                              | 3,009                   | 239          |
| 2042                 | 34,852                                                     | 5,673                                | 40,526                              | 2,661                   | 203          |
| <b>Total (15 yr)</b> | <b>1,040,192</b>                                           | <b>124,582</b>                       | <b>1,164,774</b>                    | <b>53,256</b>           | <b>5,824</b> |

**B.8.1.3. Conservative BAU baseline (Section 7.5): continued uncontrolled venting equals the unadjusted methane baseline. The downward-adjusted baseline is compared against BAU below.**

| Year | Conservative BAU — continued uncontrolled venting ( $\text{tCO}_2\text{e}$ ) |
|------|------------------------------------------------------------------------------|
|------|------------------------------------------------------------------------------|

|                                                        |                                                                                                                                                                                                   |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2028                                                   | 211,307                                                                                                                                                                                           |
| 2029                                                   | 216,241                                                                                                                                                                                           |
| 2030                                                   | 168,552                                                                                                                                                                                           |
| 2031                                                   | 134,990                                                                                                                                                                                           |
| 2032                                                   | 111,005                                                                                                                                                                                           |
| 2033                                                   | 93,540                                                                                                                                                                                            |
| 2034                                                   | 80,540                                                                                                                                                                                            |
| 2035                                                   | 70,619                                                                                                                                                                                            |
| 2036                                                   | 62,845                                                                                                                                                                                            |
| 2037                                                   | 56,585                                                                                                                                                                                            |
| 2038                                                   | 51,412                                                                                                                                                                                            |
| 2039                                                   | 47,032                                                                                                                                                                                            |
| 2040                                                   | 43,247                                                                                                                                                                                            |
| 2041                                                   | 39,917                                                                                                                                                                                            |
| 2042                                                   | 36,946                                                                                                                                                                                            |
| <b>Total (15 yr)</b>                                   | <b>1,424,779</b>                                                                                                                                                                                  |
| <b>Parameter</b>                                       | <b>tCO<sub>2</sub>e (15-yr)</b>                                                                                                                                                                   |
| Downward-adjusted methane baseline component (applied) | 1,040,192                                                                                                                                                                                         |
| Conservative BAU — continued uncontrolled venting      | 1,424,778                                                                                                                                                                                         |
| Result                                                 | Adjusted methane baseline (1,040,192 tCO <sub>2</sub> e) is lower than the conservative BAU, so the adjusted baseline is the more conservative and is applied (A6.4-AMM-001 Section 7.4 and 7.5). |

Conservative BAU baseline emissions (BAU\_cons,y) are determined in accordance with A6.4-AMM-001 Section 7.5 as the continued uncontrolled venting of the methane generated by the accumulated waste mass, that is, the unadjusted first-order-decay methane baseline before the Section 7.4 downward adjustment. The resulting values are applied in the comparison presented below, and the full year-by-year series is provided in Appendix 3.

#### **B.8.1.4. Comparison between the downward adjusted baseline and the conservative BAU baseline emissions and/or removals**

Per A6.4-AMM-001 section 7.5, the downward-adjusted baseline is compared against the conservative BAU (continued uncontrolled venting, numerically the unadjusted methane baseline). The applied methane-destruction baseline component (1,040,192 tCO<sub>2</sub>e over the crediting period) is lower than the conservative BAU; therefore the downward-adjusted baseline is the more conservative and is applied. The downward adjustment is determined separately by component in accordance with section 7.4.2.

#### **B.8.2. Calculation of project emissions and/or removals**

Project emissions are determined in accordance with Equation (44) of A6.4-AMM-001 and comprise electricity consumption (PE\_EC), on-site fossil fuel consumption (PE\_FC), road transport of biomethane to consumers (PE\_DT) and physical leakage from the supply infrastructure (PE\_SP). Purified biomethane is compressed and transported by road (virtual pipeline) to an industrial off-taker located approximately 14 km from the site; transport emissions are determined under Option B of section 8.1.3.1 using default emission factors for heavy-duty road freight, and the option selected will not be changed during the crediting period. Emissions from incomplete combustion in the flare are not a project emission term: in accordance with Equations (4) and (5) they are netted from the methane credited.

$PE_y = PE_{EC,y} + PE_{FC,y} + PE_{DT,y} + PE_{SP,y}$  (A6.4-AMM-001, Equation (44))

$FCH_{4,flared,y} = FCH_{4,sent-flare,y} \times DE$  (A6.4-AMM-001, Equations (4) and (5);  $DE = 0.90$  per A6.4-AMT-004 for enclosed flares)

Total project emissions over the crediting period = 53,256 tCO<sub>2</sub>e. The annual values are reported in Appendix 3 and are ex-ante estimates that will be confirmed through monitoring.

### B.8.3. Addressing of leakage

#### B.8.3.1. Sources of leakage

Leakage is limited to upstream/lifecycle effects of equipment manufacture and transport, and any physical leakage in the LFG supply chain. Per A6.4-AMM-001 §9 these are conservatively covered by a default leakage factor.

#### B.8.3.2. Description of how leakage is avoided, minimized or addressed

LFG is conveyed through enclosed HDPE piping with condensate management; there is no venting between capture and combustion/use. Physical leakage in the supply component is minimized through sealed conveyance and dedicated transport equipment. Residual effects are conservatively addressed via the methodology default leakage factor.

#### B.8.3.3. Calculation of leakage emissions

$LE_y = 0.005 \times BE_{adj,y}$  (A6.4-AMM-001 section 9, Equation (54); default 0.5% of the downward-adjusted baseline). Total leakage over the crediting period = 5,824 tCO<sub>2</sub>e.

#### B.8.4. Calculation of emission reductions and/or net removals

$ER_y = BE_{adj,y} - PE_y - LE_y$  (A6.4-AMM-001 section 10, Equation (55)). Ex-ante emission reductions over the maximum potential crediting period of 15 years, comprising an initial five-year period renewable twice (2028-2042) = 1,105,694 tCO<sub>2</sub>e, an annual average of approximately 73,713 tCO<sub>2</sub>e.

#### B.8.5. Data and parameters fixed ex ante

(Copy this table for each piece of data or parameter)

| Data/parameter                                       | φ (phi)                                                                                                                                                        |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description                                          | Model correction factor of the FOD model                                                                                                                       |
| Data unit                                            | dimensionless                                                                                                                                                  |
| Equations referred                                   | A6.4-AMT-003 Eq.(1)                                                                                                                                            |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied                                     | 0.75                                                                                                                                                           |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                            |
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                                                                   |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: A6.4-AMT-003 Table 5 (Application A, tropical wet).                                               |
| Additional comments                                  | Default; conservative                                                                                                                                          |

| Data/parameter | MCF                                                  |
|----------------|------------------------------------------------------|
| Description    | Methane correction factor (SWDS aeration/management) |

|                                                      |                                                                                                                                                                |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data unit                                            | dimensionless                                                                                                                                                  |
| Equations referred                                   | A6.4-AMT-003 Eq.(1)                                                                                                                                            |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied                                     | 0.70                                                                                                                                                           |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                            |
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                                                                   |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: A6.4-AMT-003 Table 8 (unmanaged/unknown SWDS pre-2019).                                           |
| Additional comments                                  | Conservative                                                                                                                                                   |

|                                                      |                                                                                                                                                                |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data/parameter</b>                                | F                                                                                                                                                              |
| Description                                          | CH <sub>4</sub> volume fraction in LFG                                                                                                                         |
| Data unit                                            | m <sup>3</sup> /m <sup>3</sup>                                                                                                                                 |
| Equations referred                                   | A6.4-AMT-003 Eq.(1)                                                                                                                                            |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied                                     | 0.50                                                                                                                                                           |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                            |
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                                                                   |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: A6.4-AMT-003 Table 3 (default 50% ±5%).                                                           |
| Additional comments                                  | Default                                                                                                                                                        |

|                       |                                                                                                                                                                |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data/parameter</b> | OX                                                                                                                                                             |
| Description           | Oxidation factor (CH <sub>4</sub> oxidized in cover)                                                                                                           |
| Data unit             | dimensionless                                                                                                                                                  |
| Equations referred    | A6.4-AMT-003 Eq.(1); A6.4-AMM-001 Eq.(1)                                                                                                                       |
| Purpose of data       | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied      | 0.384                                                                                                                                                          |
| Source of data        | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                            |

|                                                      |                                                                                                                         |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                            |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: A6.4-AMT-003 Table 6 (existing SWDS, soil cover 20–30 cm). |
| Additional comments                                  | —                                                                                                                       |

|                                                      |                                                                                                                                                                |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data/parameter</b>                                | GWP_CH <sub>4</sub>                                                                                                                                            |
| Description                                          | Global warming potential of methane                                                                                                                            |
| Data unit                                            | tCO <sub>2</sub> e/tCH <sub>4</sub>                                                                                                                            |
| Equations referred                                   | A6.4-AMT-003 Eq.(1); A6.4-AMM-001 Eq.(1)                                                                                                                       |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied                                     | 28                                                                                                                                                             |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                            |
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                                                                   |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: IPCC AR5, GWP-100.                                                                                |
| Additional comments                                  | —                                                                                                                                                              |

|                                                      |                                                                                                                                                                |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data/parameter</b>                                | k (food & organic)                                                                                                                                             |
| Description                                          | First-order decay rate (food & organic)                                                                                                                        |
| Data unit                                            | yr <sup>-1</sup>                                                                                                                                               |
| Equations referred                                   | A6.4-AMT-003 Eq.(1)                                                                                                                                            |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied                                     | 0.40                                                                                                                                                           |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                            |
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                                                                   |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: A6.4-AMT-003 Table 10 (tropical wet, rapidly degrading).                                          |
| Additional comments                                  | —                                                                                                                                                              |

|                       |                                            |
|-----------------------|--------------------------------------------|
| <b>Data/parameter</b> | k (paper & cardboard)                      |
| Description           | First-order decay rate (paper & cardboard) |

|                                                      |                                                                                                                                                                |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data unit                                            | yr <sup>-1</sup>                                                                                                                                               |
| Equations referred                                   | A6.4-AMT-003 Eq.(1)                                                                                                                                            |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied                                     | 0.07                                                                                                                                                           |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                            |
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                                                                   |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: A6.4-AMT-003 Table 10.                                                                            |
| Additional comments                                  | Proxy for biodegradable inorganic fraction                                                                                                                     |

|                                                      |                                                                                                                                                                |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data/parameter</b>                                | DOC <sub>j</sub> (food & organic)                                                                                                                              |
| Description                                          | Degradable organic carbon (food & organic)                                                                                                                     |
| Data unit                                            | fraction                                                                                                                                                       |
| Equations referred                                   | A6.4-AMT-003 Eq.(1)                                                                                                                                            |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied                                     | 0.15                                                                                                                                                           |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                            |
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                                                                   |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: A6.4-AMT-003 Table 4.                                                                             |
| Additional comments                                  | —                                                                                                                                                              |

|                       |                                                                                                                                                                |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data/parameter</b> | DOC <sub>j</sub> (paper & cardboard)                                                                                                                           |
| Description           | Degradable organic carbon (paper & cardboard)                                                                                                                  |
| Data unit             | fraction                                                                                                                                                       |
| Equations referred    | A6.4-AMT-003 Eq.(1)                                                                                                                                            |
| Purpose of data       | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied      | 0.40                                                                                                                                                           |
| Source of data        | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                            |

|                                                      |                                                                                    |
|------------------------------------------------------|------------------------------------------------------------------------------------|
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                       |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: A6.4-AMT-003 Table 4. |
| Additional comments                                  | —                                                                                  |

|                                                      |                                                                                                                                                                |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data/parameter</b>                                | DOC <sub>f,j</sub> (food & organic)                                                                                                                            |
| Description                                          | Fraction of DOC that decomposes (food & organic)                                                                                                               |
| Data unit                                            | fraction                                                                                                                                                       |
| Equations referred                                   | A6.4-AMT-003 Eq.(1)                                                                                                                                            |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied                                     | 0.70                                                                                                                                                           |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                            |
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                                                                   |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: A6.4-AMT-003.                                                                                     |
| Additional comments                                  | —                                                                                                                                                              |

|                                                      |                                                                                                                                                                |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data/parameter</b>                                | DOC <sub>f,j</sub> (paper & cardboard)                                                                                                                         |
| Description                                          | Fraction of DOC that decomposes (paper & cardboard)                                                                                                            |
| Data unit                                            | fraction                                                                                                                                                       |
| Equations referred                                   | A6.4-AMT-003 Eq.(1)                                                                                                                                            |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied                                     | 0.50                                                                                                                                                           |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                            |
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                                                                   |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: A6.4-AMT-003.                                                                                     |
| Additional comments                                  | —                                                                                                                                                              |

|                       |                                                  |
|-----------------------|--------------------------------------------------|
| <b>Data/parameter</b> | fy                                               |
| Description           | Fraction of CH <sub>4</sub> captured in FOD tool |

|                                                      |                                                                                                                                                                |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data unit                                            | dimensionless                                                                                                                                                  |
| Equations referred                                   | A6.4-AMT-003 Eq.(1)                                                                                                                                            |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied                                     | 0                                                                                                                                                              |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                            |
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                                                                   |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: A6.4-AMM-001 §7.3.2.1(a) (capture accounted via F_CH4,PJ,capt,y).                                 |
| Additional comments                                  | —                                                                                                                                                              |

|                                                      |                                                                                                                                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data/parameter</b>                                | DE                                                                                                                                                                        |
| Description                                          | Flare CH <sub>4</sub> destruction efficiency                                                                                                                              |
| Data unit                                            | fraction                                                                                                                                                                  |
| Equations referred                                   | A6.4-AMT-004; A6.4-AMM-001 §8                                                                                                                                             |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input checked="" type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied                                     | 0.90                                                                                                                                                                      |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                                       |
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                                                                              |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: A6.4-AMT-004 (enclosed flare).                                                                               |
| Additional comments                                  | —                                                                                                                                                                         |

|                       |                                                                                                                                                                           |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data/parameter</b> | NCV_CH <sub>4</sub>                                                                                                                                                       |
| Description           | Net calorific value of methane                                                                                                                                            |
| Data unit             | GJ/tCH <sub>4</sub>                                                                                                                                                       |
| Equations referred    | A6.4-AMM-001 (supply component)                                                                                                                                           |
| Purpose of data       | <input checked="" type="checkbox"/> Baseline emissions/removals <input checked="" type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied      | 50.4                                                                                                                                                                      |
| Source of data        | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                                       |

|                                                      |                                                                                            |
|------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                               |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: IPCC 2006 GL Vol.2 Table 1.2. |
| Additional comments                                  | —                                                                                          |

|                                                      |                                                                                                                                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data/parameter</b>                                | EF_CO <sub>2</sub> ,NG                                                                                                                                                    |
| Description                                          | CO <sub>2</sub> emission factor of displaced natural gas                                                                                                                  |
| Data unit                                            | tCO <sub>2</sub> /GJ                                                                                                                                                      |
| Equations referred                                   | A6.4-AMM-001 Eq.(23) (BE_NG)                                                                                                                                              |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input checked="" type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied                                     | 0.0561 (= 56.1 tCO <sub>2</sub> /TJ)                                                                                                                                      |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                                       |
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                                                                              |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: IPCC 2006 GL Vol.2 Table 2.2.                                                                                |
| Additional comments                                  | —                                                                                                                                                                         |

|                                                      |                                                                                                                                                                |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data/parameter</b>                                | 0.0504                                                                                                                                                         |
| Description                                          | Conversion factor (LFG supply → NG displaced)                                                                                                                  |
| Data unit                                            | TJ/tCH <sub>4</sub>                                                                                                                                            |
| Equations referred                                   | A6.4-AMM-001 Eq.(23)                                                                                                                                           |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions |
| Value(s) applied                                     | 0.0504                                                                                                                                                         |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                            |
| Treatment of uncertainty                             | Default/fixed value — no uncertainty applied                                                                                                                   |
| Choice of data or measurement methods and procedures | Default value from the referenced methodology/tool — Source: A6.4-AMM-001 Eq.(23).                                                                             |
| Additional comments                                  | Fixed methodology value                                                                                                                                        |

|                       |                           |
|-----------------------|---------------------------|
| <b>Data/parameter</b> | η <sub>PJ</sub>           |
| Description           | LFG collection efficiency |

|                                                      |                                                                                                                                                                                                                                                   |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data unit                                            | fraction                                                                                                                                                                                                                                          |
| Equations referred                                   | A6.4-AMM-001 Equation (14) (ex-ante estimate)                                                                                                                                                                                                     |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input checked="" type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions                                                                         |
| Value(s) applied                                     | 0.50                                                                                                                                                                                                                                              |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                                                                                                               |
| Treatment of uncertainty                             | Plus or minus 50 per cent, as assigned to the default value in Data / Parameter table 4 of A6.4-AMM-001                                                                                                                                           |
| Choice of data or measurement methods and procedures | Default value of A6.4-AMM-001, Data / Parameter table 4: applied because the technical specifications of the LFG capture system to be installed are not yet available. To be replaced by the system specifications once procurement is concluded. |
| Additional comments                                  | Used for the ex-ante estimate only (Equation (14)); ex-post the baseline is determined from the methane actually captured (paragraph 79).                                                                                                         |

|                                                      |                                                                                                                                                                                                                                            |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data/parameter</b>                                | p_supply                                                                                                                                                                                                                                   |
| Description                                          | Share of the captured LFG allocated to biomethane supply                                                                                                                                                                                   |
| Data unit                                            | fraction                                                                                                                                                                                                                                   |
| Equations referred                                   | A6.4-AMM-001 Eq.(23) (BE_NG)                                                                                                                                                                                                               |
| Purpose of data                                      | <input checked="" type="checkbox"/> Baseline emissions/removals <input type="checkbox"/> Project emissions/removals <input type="checkbox"/> Leakage emissions                                                                             |
| Value(s) applied                                     | Annual series determined by the installed upgrading capacity: 0.466 (2028), 0.425 (2029), 0.396 (2030), 0.375 (2031), 0.358 (2032), 0.646 (2033), 0.625 (2034), 0.608 (2035), 0.592 (2036), 0.748 (2037), 0.921 (2038), 1.000 (2039-2042). |
| Source of data                                       | <input type="checkbox"/> Measured <input checked="" type="checkbox"/> Other sources                                                                                                                                                        |
| Treatment of uncertainty                             | To be determined per A6.4-AMT-005 / monitoring                                                                                                                                                                                             |
| Choice of data or measurement methods and procedures | Project estimate, to be confirmed — Source: Project-specific; cement sector under evaluation, not yet contracted.                                                                                                                          |
| Additional comments                                  | —                                                                                                                                                                                                                                          |

#### B.8.6. Summary of ex-ante estimates of emission reductions and/or net removals

| Year          | Baseline emissions/removals (tCO <sub>2</sub> e) | Project emissions/removals (tCO <sub>2</sub> e) | Leakage emissions (tCO <sub>2</sub> e) | Emission reductions/Net removals (tCO <sub>2</sub> e) |
|---------------|--------------------------------------------------|-------------------------------------------------|----------------------------------------|-------------------------------------------------------|
| Year 1 (2028) | 78,587                                           | 2,502                                           | 393                                    | 75,693                                                |

|                                                      |                                                              |        |       |           |
|------------------------------------------------------|--------------------------------------------------------------|--------|-------|-----------|
| Year 2 (2029)                                        | 81,840                                                       | 2,523  | 409   | 78,908    |
| Year 3 (2030)                                        | 83,767                                                       | 2,540  | 419   | 80,809    |
| Year 4 (2031)                                        | 84,730                                                       | 2,555  | 424   | 81,752    |
| Year 5 (2032)                                        | 84,974                                                       | 2,567  | 425   | 81,982    |
| Year 6 (2033)                                        | 93,824                                                       | 4,577  | 469   | 88,778    |
| Year 7 (2034)                                        | 93,091                                                       | 4,587  | 465   | 88,038    |
| Year 8 (2035)                                        | 92,011                                                       | 4,596  | 460   | 86,955    |
| Year 9 (2036)                                        | 90,646                                                       | 4,604  | 453   | 85,589    |
| Year 10 (2037)                                       | 84,709                                                       | 4,537  | 424   | 79,749    |
| Year 11 (2038)                                       | 82,535                                                       | 4,490  | 413   | 77,632    |
| Year 12 (2039)                                       | 68,902                                                       | 4,052  | 345   | 64,505    |
| Year 13 (2040)                                       | 56,901                                                       | 3,457  | 285   | 53,159    |
| Year 14 (2041)                                       | 47,731                                                       | 3,009  | 239   | 44,484    |
| Year 15 (2042)                                       | 40,526                                                       | 2,661  | 203   | 37,662    |
| Total                                                | 1,164,774                                                    | 53,256 | 5,824 | 1,105,694 |
| <b>Total number of years in the crediting period</b> | 15                                                           |        |       |           |
| <b>Annual average</b>                                | baseline 105,493 · project 228 · leakage 527 · net ER 73,713 |        |       |           |

## B.9. Monitoring Plan

### B.9.1. Data and parameters to be monitored

(Copy this table for each piece of data or parameter)

|                                               |                                                                                                                                                                               |                                                   |  |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|--|
| Data/parameter                                | V_LFG,y                                                                                                                                                                       |                                                   |  |
| Description                                   | LFG flow captured                                                                                                                                                             |                                                   |  |
| Data unit                                     | m³/yr (normal conditions)                                                                                                                                                     |                                                   |  |
| Equations referred                            | A6.4-AMM-001 §7–10; A6.4-AMT-005 (mass-flow tool)                                                                                                                             |                                                   |  |
| Purpose of data                               | <input checked="" type="checkbox"/> Baseline emissions / removals <input checked="" type="checkbox"/> Project emissions / removals <input type="checkbox"/> Leakage emissions |                                                   |  |
| Measurement methods and procedures            | Continuous flow meter, normalized by temperature & pressure (mass-flow tool A6.4-AMT-005).                                                                                    |                                                   |  |
| Entity/person responsible for the measurement | Equiterra (O&M)                                                                                                                                                               |                                                   |  |
| Measuring instrument(s)                       | Type of instrument                                                                                                                                                            | Continuous flow meter (mass-flow, A6.4-AMT-005)   |  |
|                                               | Accuracy class                                                                                                                                                                | Per supplier specification and A6.4-AMT-005       |  |
|                                               | Calibration requirements                                                                                                                                                      | Calibrated per supplier and A6.4-AMT-005          |  |
|                                               | Location                                                                                                                                                                      | Per monitoring plan (site instrumentation layout) |  |
| Measurement intervals                         | Continuous; recorded ≥ monthly                                                                                                                                                |                                                   |  |

|                          |                                                                                            |
|--------------------------|--------------------------------------------------------------------------------------------|
| QA/QC procedures         | Calibrated per supplier and A6.4-AMT-005; cross-check vs flare and supply-delivery records |
| Treatment of uncertainty | Per A6.4-AMT-005 (instrument accuracy + error propagation)                                 |
| Additional comment       | —                                                                                          |

|                                               |                                                                                                                                                                    |                                                                      |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| <b>Data/parameter</b>                         | wCH <sub>4,y</sub>                                                                                                                                                 |                                                                      |
| Description                                   | CH <sub>4</sub> concentration in LFG                                                                                                                               |                                                                      |
| Data unit                                     | % v/v                                                                                                                                                              |                                                                      |
| Equations referred                            | A6.4-AMM-001 §7–10; A6.4-AMT-005 (mass-flow tool)                                                                                                                  |                                                                      |
| Purpose of data                               | <input checked="" type="checkbox"/> Baseline emissions / removals <input type="checkbox"/> Project emissions / removals <input type="checkbox"/> Leakage emissions |                                                                      |
| Measurement methods and procedures            | Continuous online CH <sub>4</sub> gas analyzer.                                                                                                                    |                                                                      |
| Entity/person responsible for the measurement | Equiterra (O&M)                                                                                                                                                    |                                                                      |
| Measuring instrument(s)                       | <i>Type of instrument</i>                                                                                                                                          | Online CH <sub>4</sub> gas analyzer                                  |
|                                               | <i>Accuracy class</i>                                                                                                                                              | Per supplier specification and A6.4-AMT-005                          |
|                                               | <i>Calibration requirements</i>                                                                                                                                    | Calibration with certified reference gas per supplier / A6.4-AMT-005 |
|                                               | <i>Location</i>                                                                                                                                                    | Per monitoring plan (site instrumentation layout)                    |
| Measurement intervals                         | Continuous; recorded ≥ monthly                                                                                                                                     |                                                                      |
| QA/QC procedures                              | Calibration with certified reference gas per supplier / A6.4-AMT-005                                                                                               |                                                                      |
| Treatment of uncertainty                      | Per A6.4-AMT-005 (instrument accuracy + error propagation)                                                                                                         |                                                                      |
| Additional comment                            | —                                                                                                                                                                  |                                                                      |

|                                               |                                                                                                                                                                               |                                                                  |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| <b>Data/parameter</b>                         | F_CH <sub>4,flared,y</sub> / F_CH <sub>4,NG,y</sub>                                                                                                                           |                                                                  |
| Description                                   | Methane flared / methane supplied to consumers                                                                                                                                |                                                                  |
| Data unit                                     | tCH <sub>4</sub> /yr                                                                                                                                                          |                                                                  |
| Equations referred                            | A6.4-AMM-001 §7–10, Eq.(2)–(5); A6.4-AMT-005 (mass-flow tool)                                                                                                                 |                                                                  |
| Purpose of data                               | <input checked="" type="checkbox"/> Baseline emissions / removals <input checked="" type="checkbox"/> Project emissions / removals <input type="checkbox"/> Leakage emissions |                                                                  |
| Measurement methods and procedures            | Calculated from V_LFG, wCH <sub>4</sub> , T & P (mass-flow tool A6.4-AMT-005), Eq.(2)–(5).                                                                                    |                                                                  |
| Entity/person responsible for the measurement | Equiterra (O&M)                                                                                                                                                               |                                                                  |
| Measuring instrument(s)                       | <i>Type of instrument</i>                                                                                                                                                     | Calculated (mass-flow tool A6.4-AMT-005) — not directly measured |
|                                               | <i>Accuracy class</i>                                                                                                                                                         | Per A6.4-AMT-005 (error propagation)                             |

|                          |                                                                   |                                                                |
|--------------------------|-------------------------------------------------------------------|----------------------------------------------------------------|
|                          | <i>Calibration requirements</i>                                   | Derived from calibrated V_LFG and wCH <sub>4</sub> instruments |
|                          | <i>Location</i>                                                   | Per monitoring plan (site instrumentation layout)              |
| Measurement intervals    | Continuous (computed)                                             |                                                                |
| QA/QC procedures         | Per A6.4-AMT-005; uncertainty via error propagation / Monte Carlo |                                                                |
| Treatment of uncertainty | Per A6.4-AMT-005 (instrument accuracy + error propagation)        |                                                                |
| Additional comment       | —                                                                 |                                                                |

|                                               |                                                                                                                                                                    |                                               |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>Data/parameter</b>                         | Op_j,h,y                                                                                                                                                           |                                               |
| Description                                   | Operating hours of the flare and of the supply system                                                                                                              |                                               |
| Data unit                                     | hours                                                                                                                                                              |                                               |
| Equations referred                            | A6.4-AMM-001 §7–10; A6.4-AMT-005 (mass-flow tool)                                                                                                                  |                                               |
| Purpose of data                               | <input type="checkbox"/> Baseline emissions / removals <input checked="" type="checkbox"/> Project emissions / removals <input type="checkbox"/> Leakage emissions |                                               |
| Measurement methods and procedures            | Flare thermocouple and/or flame scanner.                                                                                                                           |                                               |
| Entity/person responsible for the measurement | Equiterra (O&M)                                                                                                                                                    |                                               |
| Measuring instrument(s)                       | <i>Type of instrument</i>                                                                                                                                          | Thermocouple and/or flame scanner             |
|                                               | <i>Accuracy class</i>                                                                                                                                              | Per supplier specification                    |
|                                               | <i>Calibration requirements</i>                                                                                                                                    | Instrument maintenance per supplier           |
|                                               | <i>Location</i>                                                                                                                                                    | Flare and supply system (per monitoring plan) |
| Measurement intervals                         | Every minute (temperature/flame)                                                                                                                                   |                                               |
| QA/QC procedures                              | Minimum threshold justified in PDD; instrument maintenance per supplier                                                                                            |                                               |
| Treatment of uncertainty                      | Per A6.4-AMT-005 (instrument accuracy + error propagation)                                                                                                         |                                               |
| Additional comment                            | Destruction hours (project)                                                                                                                                        |                                               |

|                                               |                                                                                                                                                                                           |  |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Data/parameter</b>                         | NCV_LFG,y                                                                                                                                                                                 |  |
| Description                                   | Net calorific value of the gas supplied                                                                                                                                                   |  |
| Data unit                                     | GJ/tCH <sub>4</sub>                                                                                                                                                                       |  |
| Equations referred                            | A6.4-AMM-001 §7–10 (supply component)                                                                                                                                                     |  |
| Purpose of data                               | <input checked="" type="checkbox"/> Baseline emissions / removals <input type="checkbox"/> Project emissions / removals <input type="checkbox"/> Leakage emissions                        |  |
| Measurement methods and procedures            | Determined from the measured methane content and the net calorific value of methane (IPCC 2006 Guidelines, 50.4 GJ/tCH <sub>4</sub> ), or by direct calorimetry at the point of delivery. |  |
| Entity/person responsible for the measurement | Equiterra + off-taker                                                                                                                                                                     |  |

|                          |                                                                                           |                                                                                          |
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Measuring instrument(s)  | <i>Type of instrument</i>                                                                 | Methane analyser and delivery metering at the point of supply                            |
|                          | <i>Accuracy class</i>                                                                     | Per methane analyser specification; per calorimeter specification if calorimetry is used |
|                          | <i>Calibration requirements</i>                                                           | Methane analyser calibrated with certified reference gas per supplier and A6.4-AMT-005   |
|                          | <i>Location</i>                                                                           | Point of supply (off-taker connection)                                                   |
| Measurement intervals    | Monthly                                                                                   |                                                                                          |
| QA/QC procedures         | Cross-checked against the off-taker delivery records and the methane content measurements |                                                                                          |
| Treatment of uncertainty | Per A6.4-AMT-005 (instrument accuracy + error propagation)                                |                                                                                          |
| Additional comment       | —                                                                                         |                                                                                          |

|                                               |                                                                                                                                                                    |                                                                     |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>Data/parameter</b>                         | Quantity of LFG or biomethane supplied to consumers                                                                                                                |                                                                     |
| Description                                   | Basis for baseline emissions of the supply component (displaced natural gas)                                                                                       |                                                                     |
| Data unit                                     | TJ/yr or fuel units                                                                                                                                                |                                                                     |
| Equations referred                            | A6.4-AMM-001 §7–10 (supply component)                                                                                                                              |                                                                     |
| Purpose of data                               | <input checked="" type="checkbox"/> Baseline emissions / removals <input type="checkbox"/> Project emissions / removals <input type="checkbox"/> Leakage emissions |                                                                     |
| Measurement methods and procedures            | Metering of the LFG or biomethane delivered at the point of supply. Baseline emission factor: natural gas, per A6.4-AMM-001 paragraph 14(d).                       |                                                                     |
| Entity/person responsible for the measurement | Equiterra + off-taker                                                                                                                                              |                                                                     |
| Measuring instrument(s)                       | <i>Type of instrument</i>                                                                                                                                          | Gas flow meter with methane-content analyser at the point of supply |
|                                               | <i>Accuracy class</i>                                                                                                                                              | Per supplier specification                                          |
|                                               | <i>Calibration requirements</i>                                                                                                                                    | Per supplier; cross-check with off-taker fuel-purchase records      |
|                                               | <i>Location</i>                                                                                                                                                    | Off-taker site                                                      |
| Measurement intervals                         | Continuous; monthly                                                                                                                                                |                                                                     |
| QA/QC procedures                              | Cross-checked with off-taker fuel-purchase records                                                                                                                 |                                                                     |
| Treatment of uncertainty                      | Per A6.4-AMT-005 (instrument accuracy + error propagation)                                                                                                         |                                                                     |
| Additional comment                            | —                                                                                                                                                                  |                                                                     |

|                       |                                                                                                                                                                    |  |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Data/parameter</b> | EC_grid,y                                                                                                                                                          |  |
| Description           | On-site electricity consumed                                                                                                                                       |  |
| Data unit             | MWh/yr                                                                                                                                                             |  |
| Equations referred    | A6.4-AMM-001 §7–10; A6.4-AMT-005 (mass-flow tool)                                                                                                                  |  |
| Purpose of data       | <input type="checkbox"/> Baseline emissions / removals <input checked="" type="checkbox"/> Project emissions / removals <input type="checkbox"/> Leakage emissions |  |

|                                               |                                                                    |                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------|
| Measurement methods and procedures            | Electricity meter at consumption source.                           |                                                                    |
| Entity/person responsible for the measurement | Equiterra (O&M)                                                    |                                                                    |
| Measuring instrument(s)                       | <i>Type of instrument</i>                                          | Electricity meter                                                  |
|                                               | <i>Accuracy class</i>                                              | Per supplier / national requirements                               |
|                                               | <i>Calibration requirements</i>                                    | Meter maintenance/calibration per supplier / national requirements |
|                                               | <i>Location</i>                                                    | Consumption source (per monitoring plan)                           |
| Measurement intervals                         | Continuous; $\geq$ monthly                                         |                                                                    |
| QA/QC procedures                              | Meter maintenance/calibration per supplier / national requirements |                                                                    |
| Treatment of uncertainty                      | Per A6.4-AMT-005 (instrument accuracy + error propagation)         |                                                                    |
| Additional comment                            | —                                                                  |                                                                    |

|                                               |                                                                                                                                                                    |                                                     |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| <b>Data/parameter</b>                         | FC <sub>i,y</sub>                                                                                                                                                  |                                                     |
| Description                                   | On-site diesel consumed                                                                                                                                            |                                                     |
| Data unit                                     | litre/yr                                                                                                                                                           |                                                     |
| Equations referred                            | A6.4-AMM-001 §7–10; A6.4-AMT-005 (mass-flow tool)                                                                                                                  |                                                     |
| Purpose of data                               | <input type="checkbox"/> Baseline emissions / removals <input checked="" type="checkbox"/> Project emissions / removals <input type="checkbox"/> Leakage emissions |                                                     |
| Measurement methods and procedures            | Volume meter or calibrated ruler gauge on daily tank; cross-check invoices.                                                                                        |                                                     |
| Entity/person responsible for the measurement | Equiterra (O&M)                                                                                                                                                    |                                                     |
| Measuring instrument(s)                       | <i>Type of instrument</i>                                                                                                                                          | Volume meter or calibrated ruler gauge (daily tank) |
|                                               | <i>Accuracy class</i>                                                                                                                                              | Per supplier specification                          |
|                                               | <i>Calibration requirements</i>                                                                                                                                    | Ruler gauge calibrated $\geq$ annually              |
|                                               | <i>Location</i>                                                                                                                                                    | Daily fuel tank (per monitoring plan)               |
| Measurement intervals                         | Per shift / day                                                                                                                                                    |                                                     |
| QA/QC procedures                              | Ruler gauge calibrated $\geq$ annually; annual energy-balance cross-check; cross-check invoices                                                                    |                                                     |
| Treatment of uncertainty                      | Per A6.4-AMT-005 (instrument accuracy + error propagation)                                                                                                         |                                                     |
| Additional comment                            | —                                                                                                                                                                  |                                                     |

|                       |                                   |
|-----------------------|-----------------------------------|
| <b>Data/parameter</b> | Management of the SWDS            |
| Description           | Confirm SWDS management unchanged |

|                                               |                                                                                                                                                                    |                                        |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Data unit                                     | —                                                                                                                                                                  |                                        |
| Equations referred                            | A6.4-AMT-003 (MCF determination)                                                                                                                                   |                                        |
| Purpose of data                               | <input checked="" type="checkbox"/> Baseline emissions / removals <input type="checkbox"/> Project emissions / removals <input type="checkbox"/> Leakage emissions |                                        |
| Measurement methods and procedures            | Review of site design and O&M specifications.                                                                                                                      |                                        |
| Entity/person responsible for the measurement | CILPEN + Equiterra                                                                                                                                                 |                                        |
| Measuring instrument(s)                       | Type of instrument                                                                                                                                                 | Documentary review (not an instrument) |
|                                               | Accuracy class                                                                                                                                                     | N/A                                    |
|                                               | Calibration requirements                                                                                                                                           | N/A                                    |
|                                               | Location                                                                                                                                                           | SWDS site                              |
| Measurement intervals                         | Annually                                                                                                                                                           |                                        |
| QA/QC procedures                              | Evidence of unchanged cover/management                                                                                                                             |                                        |
| Treatment of uncertainty                      | Per A6.4-AMT-005 (instrument accuracy + error propagation)                                                                                                         |                                        |
| Additional comment                            | Baseline parameter (MCF)                                                                                                                                           |                                        |

|                                               |                                                                                                                                                                    |                                        |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <b>Data/parameter</b>                         | Amount of organic fraction recycled                                                                                                                                |                                        |
| Description                                   | Confirm project does not reduce organic disposal                                                                                                                   |                                        |
| Data unit                                     | t/yr                                                                                                                                                               |                                        |
| Equations referred                            | A6.4-AMT-003 (waste sampling)                                                                                                                                      |                                        |
| Purpose of data                               | <input checked="" type="checkbox"/> Baseline emissions / removals <input type="checkbox"/> Project emissions / removals <input type="checkbox"/> Leakage emissions |                                        |
| Measurement methods and procedures            | Waste tonnage × organic fraction (sampling).                                                                                                                       |                                        |
| Entity/person responsible for the measurement | CILPEN + Equiterra                                                                                                                                                 |                                        |
| Measuring instrument(s)                       | Type of instrument                                                                                                                                                 | Weighbridge records and waste sampling |
|                                               | Accuracy class                                                                                                                                                     | Per A6.4-AMT-003 sampling              |
|                                               | Calibration requirements                                                                                                                                           | Per A6.4-AMT-003                       |
|                                               | Location                                                                                                                                                           | SWDS intake (weighbridge)              |
| Measurement intervals                         | ≥ Annually                                                                                                                                                         |                                        |
| QA/QC procedures                              | Waste sampling per A6.4-AMT-003                                                                                                                                    |                                        |
| Treatment of uncertainty                      | Per A6.4-AMT-005 (instrument accuracy + error propagation)                                                                                                         |                                        |
| Additional comment                            | —                                                                                                                                                                  |                                        |

|                                                      |                                                                                                                                                                    |                                                     |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| <b>Data/parameter</b>                                | wc,i,y and p_i,y                                                                                                                                                   |                                                     |
| <b>Description</b>                                   | Carbon fraction and density of project fuel                                                                                                                        |                                                     |
| <b>Data unit</b>                                     | wc: mass fraction; p: kg/L                                                                                                                                         |                                                     |
| <b>Equations referred</b>                            | A6.4-AMM-001 §7–10 (project fuel emissions)                                                                                                                        |                                                     |
| <b>Purpose of data</b>                               | <input type="checkbox"/> Baseline emissions / removals <input checked="" type="checkbox"/> Project emissions / removals <input type="checkbox"/> Leakage emissions |                                                     |
| <b>Measurement methods and procedures</b>            | Supplier values or IPCC 2006 defaults.                                                                                                                             |                                                     |
| <b>Entity/person responsible for the measurement</b> | Equiterra / fuel supplier                                                                                                                                          |                                                     |
| <b>Measuring instrument(s)</b>                       | <i>Type of instrument</i>                                                                                                                                          | Laboratory analysis (if measured) or default values |
|                                                      | <i>Accuracy class</i>                                                                                                                                              | ISO 17025 laboratory if measured                    |
|                                                      | <i>Calibration requirements</i>                                                                                                                                    | ISO 17025 laboratory if measured                    |
|                                                      | <i>Location</i>                                                                                                                                                    | Fuel supply / laboratory                            |
| <b>Measurement intervals</b>                         | Per delivery / annually                                                                                                                                            |                                                     |
| <b>QA/QC procedures</b>                              | ISO 17025 laboratory if measured                                                                                                                                   |                                                     |
| <b>Treatment of uncertainty</b>                      | Per A6.4-AMT-005 (instrument accuracy + error propagation)                                                                                                         |                                                     |
| <b>Additional comment</b>                            | Project fuel emissions                                                                                                                                             |                                                     |

**Monitored parameters - summary. Per-parameter detail to be completed prior to validation.** Monitoring intervals are those prescribed by the applied methodological tools: for the flare, the methane mass flow in the residual gas is averaged over each minute *m* and the methane destruction efficiency is determined for each minute *m* (A6.4-AMT-004, paragraphs 23(d), 24 and 30), with temperature and flame detection measured instantaneously at least every minute; for the equipment consuming the landfill gas, the methane mass flow is calculated on an hourly basis for each hour *h* (A6.4-AMM-001, paragraph 84). In accordance with A6.4-AMM-001, Data/Parameter table 19, a value of zero is assigned for the whole hour *h* if any temperature measurement is missing or below the minimum threshold in that hour, or if the flame is not detected continuously in that hour.

| <b>Parameter (unit)</b>                                             | <b>Description and purpose</b>                                                                                  | <b>Measurement method and instrument</b>                                                                                 | <b>Interval</b>                        | <b>QA/QC and calibration</b>                                                                  | <b>Responsible</b> |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------|--------------------|
| V_LFG,y - LFG flow captured (m <sup>3</sup> /yr, normal conditions) | Physical basis for the methane mass flow (per mass-flow tool AMT-005). Purpose: baseline and project emissions. | Continuous flow measurement with an LFG flow meter, normalized by temperature and pressure sensors (AMT-005). Instrument | Continuous; recorded at least monthly. | Calibrated per supplier and AMT-005; cross-checked against flare and supply-delivery records. | Equiterra (O&M)    |

|                                                                                                                                    |                                                                                                                                                             |                                                                                                                                                                                           |                                        |                                                                                            |                       |
|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------|-----------------------|
|                                                                                                                                    |                                                                                                                                                             | model to be confirmed.                                                                                                                                                                    |                                        |                                                                                            |                       |
| wCH <sub>4</sub> ,y - CH <sub>4</sub> concentration in LFG (% v/v)                                                                 | Methane fraction of the captured LFG (per AMT-005). Purpose: baseline emissions.                                                                            | Continuous online CH <sub>4</sub> gas analyzer. Instrument and accuracy to be confirmed.                                                                                                  | Continuous; recorded at least monthly. | Calibration with certified reference gas per supplier / AMT-005.                           | Equiterra (O&M)       |
| FCH <sub>4</sub> ,supply,y and FCH <sub>4</sub> ,flare,y - methane supplied to consumers and methane flared (tCH <sub>4</sub> /yr) | Core credited flows: methane supplied to consumers and methane destroyed in the flare. Eq. (2),(20),(4); table 15. Purpose: baseline and project emissions. | Calculated from V_LFG, wCH <sub>4</sub> , temperature and pressure per the mass-flow tool AMT-005.                                                                                        | Continuous (computed).                 | Per AMT-005; uncertainty via error propagation / Monte Carlo (2019 IPCC Refinement).       | Equiterra (O&M)       |
| Op_j,h - operation of the flare and of the supply system (hours)                                                                   | Determines destruction hours (table 19); Op=0 if temperature is below threshold or no flame is detected in the hour. Purpose: project emissions.            | Flare thermocouple and flame scanner; delivery metering records for the supply system. Minimum temperature threshold per manufacturer, documented in the PDD.                             | Every minute (temperature / flame).    | Threshold justified in the PDD; instrument maintenance per supplier.                       | Equiterra (O&M)       |
| NCV_LFG,y - net calorific value of the gas supplied (GJ/tCH <sub>4</sub> )                                                         | Converts the quantity of gas supplied into the energy basis for the supply component baseline. Purpose: baseline emissions.                                 | Determined from the measured methane content and the net calorific value of methane (IPCC 2006 Guidelines, 50.4 GJ/tCH <sub>4</sub> ), or by direct calorimetry at the point of delivery. | Monthly.                               | Cross-checked against the off-taker delivery records and the methane content measurements. | Equiterra + off-taker |

|                                                              |                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                |                                        |                                                                                             |                       |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------|-----------------------|
| Quantity of LFG or biomethane supplied to consumers (TJ/yr)  | Basis for baseline emissions of the supply component (displaced natural gas) (displaced fossil fuel). Purpose: baseline emissions. | Metering of the landfill gas or biomethane delivered at the point of supply, with methane content determined per A6.4-AMT-005. The baseline emission factor applied is that of natural gas, fixed by A6.4-AMM-001 paragraph 14(d). The metering arrangement at the point of delivery will be confirmed with the off-taker prior to validation. | Continuous; recorded monthly.          | Cross-checked with off-taker fuel-purchase records.                                         | Equiterra + off-taker |
| EC <sub>grid,y</sub> - on-site electricity consumed (MWh/yr) | Project emissions from electricity consumption. Eq. (46); table 21. Purpose: project emissions.                                    | Electricity meter at the consumption source.                                                                                                                                                                                                                                                                                                   | Continuous; recorded at least monthly. | Meter maintenance/calibration per supplier / national requirements; cross-check with bills. | Equiterra (O&M)       |
| FC <sub>i,y</sub> - on-site diesel consumed (litre/yr)       | Project emissions from on-site fuel combustion. Eq. (47); table 22. Purpose: project emissions.                                    | Volume meter or calibrated ruler gauge on the daily tank; cross-check invoices.                                                                                                                                                                                                                                                                | Continuous; recorded per shift / day.  | Ruler gauge calibrated at least annually; annual energy-balance cross-check.                | Equiterra (O&M)       |
| Management of the SWDS (-)                                   | Confirm the SWDS management is not deliberately changed to increase methane (e.g., no leachate                                     | Review of site design, O&M specifications and regulations; documentary evidence provided to the DOE.                                                                                                                                                                                                                                           | Annually.                              | Evidence of unchanged cover/management provided to the DOE at verification.                 | CILPEN + Equiterra    |

|                                                                  |                                                                                                                                |                                                                                                                             |                          |                                                                             |                           |
|------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------|---------------------------|
|                                                                  | recirculation) versus the pre-project situation, and that the cover type is unchanged. Table 13. Purpose: applicability.       |                                                                                                                             |                          |                                                                             |                           |
| Amount of organic fraction recycled (t or %)                     | Confirm the project does not reduce organic-waste recycling that would occur in its absence. Table 14. Purpose: applicability. | Waste tonnage x organic fraction (per AMT-003), with waste sampling at least annually; review of local recycling practices. | At least annually.       | Waste sampling per AMT-003; interviews / statistics / expert opinion.       | CILPEN + Equiterra        |
| wc,i,y and rho_i,y - carbon fraction and density of on-site fuel | For project fuel emissions. Tables 25/26. Purpose: project emissions.                                                          | Supplier values or IPCC 2006 defaults; laboratory measurement per fuel standards if needed.                                 | Per delivery / annually. | ISO 17025 laboratory if measured; verify within the IPCC uncertainty range. | Equiterra / fuel supplier |

### B.9.2. Sampling plan

Sampling applies to (i) the periodic determination of waste composition used in the FOD baseline — fractions  $p_j$  and the associated  $DOC_j$ ,  $DOC_{f,j}$ ,  $k_j$  per A6.4-AMT-003 — and (ii) periodic characterization of the captured LFG ( $CH_4$  content and flow, obtained through the continuous instruments in Section B.9.1). Waste-composition sampling is conducted at the Rafey working face/gate at least annually, stratified by load type, with sample size and precision per A6.4-AMT-003 guidance; LFG characterization is obtained via the continuous flow meter and online  $CH_4$  analyzer. The sampling design is set out in accordance with the Article 6.4 standard for sampling and surveys.

### B.9.3. Monitoring management system

Roles and responsibilities: Equiterra Capital operates and maintains the LFG capture, flaring and utilization system and is responsible for data collection, instrument calibration, QA/QC and reporting; CILPEN provides site access and waste/operational records. Data flow: field measurements (LFG flow,  $CH_4$  concentration, equipment operating hours, on-site fuel and electricity) are recorded by the data-logging/SCADA system, reconciled monthly and archived. QA/QC: instrument calibration per supplier specifications and A6.4-AMT-005; cross-checks against flare and supply-delivery records and against off-taker fuel-purchase records; documented monitoring procedures and periodic internal review; trained O&M personnel. A designated monitoring manager oversees the system. Monitoring records are retained for at least two years after the end of the crediting period (or the last issuance of A6.4 emission reductions), consistent with the A6.4 Activity Standard.

**B.9.4. Post-crediting period monitoring plan**

Not applicable. The Rafey activity is an emission-reduction activity (methane destruction and displacement of fossil fuels), not a removal activity, and involves no long-term carbon storage or reversal risk. Under the A6.4 Activity Standard, no post-crediting-period monitoring obligations apply. If the crediting period is renewed, monitoring continues as set out in Section B.9 for the renewed period.

**SECTION C. Start date, crediting period type and duration****C.1. Project start date**

Expected: first quarter of 2027. The project start date will be the date on which the activity participants commit to expenditure for the construction of the landfill gas collection and flaring infrastructure, determined in accordance with paragraph 80 of A6.4-STAN-AC-002. The schedule presented in this PDD is indicative and the exact start date will be confirmed in the PDD submitted for validation.

**C.2. Expected operational lifetime of the project**

Rafey has been active 40+ years. Active disposal expected until ~2031; residual LFG generation continues 15-20 years post-closure. LFG infrastructure designed for 15-year operational lifetime aligned with the crediting period.

**C.3. Project crediting period****C.3.1. Type of crediting period approved by the host Party**
☒ Renewable

☐ Fixed
**C.3.2. Start date of the crediting period**

03 January 2028

**C.3.3. Duration of the crediting period**

First crediting period: 5 years (03 January 2028 to 02 January 2033), renewable up to two times for a maximum total length of 15 years (to 02 January 2043), in accordance with paragraph 83(a)(i) of A6.4-STAN-AC-002.

**SECTION D. Environmental impacts, social impacts and sustainable development impacts****D.1. Environmental and social impacts and sustainable development impacts as per the Article 6.4 sustainable development tool****D.1.1. Summary of the environmental and social risk analysis and applicable mitigation measures**

The full environmental and social safeguards risk assessment is provided in form A6.4-FORM-AC-015, attached as Appendix 6, and the corresponding mitigation and management measures in form A6.4-FORM-AC-016, attached as Appendix 7. Principal environmental risks: (a) hydrogen sulphide and volatile organic compounds from biogas handling, managed through enclosed piping, gas treatment and continuous monitoring; (b) residual odours, managed through well design and operation and maintenance

procedures; (c) fire and explosion risk, managed through the safety flare, pressure relief and hazardous area classification. Principal social risks: (a) informal waste pickers working at the landfill surface, addressed through the local stakeholder consultation, at which the Association of Waste Pickers was formally invited and represented, and through a livelihood transition assessment; (b) community air quality, for which a net positive impact is expected from the reduction of fugitive methane and volatile organic compounds. A community grievance mechanism, separate from the workers' grievance mechanism, was formally constituted at the local stakeholder consultation held on 2 September 2026 and remains open for the duration of the crediting period. The Cometas de Esperanza education centre is recorded as a receptor in the vicinity of the site; its specific assessment will be integrated into the Environmental Impact Assessment currently in process under Law 64-00.

(The full assessment is provided in form A6.4-FORM-AC-015, attached as Appendix 6.)

The eleven safeguard elements of the A6.4 SD Tool were assessed for the Rafey LFG project as follows. The project presents no high-risk findings across any element.

- E1 – Energy: No adverse effect on energy availability for other users. The project converts waste gas into useful renewable energy for an end use yet to be determined: supply of landfill gas or biomethane to a neighbouring industrial consumer. Operational measures will ensure reliable supply to the end user, and it shall be assured an alternative supplier as contingency during maintenance periods or operational interruptions.
- E2 – Air, Land and Water: The principal environmental benefit is the elimination of uncontrolled LFG surface migration, which currently releases pollutants such as methane, H<sub>2</sub>S, and volatile organic compounds into the atmosphere in Santiago. Proper maintenance to equipment will be delivered including backup flaring capacity and gas quality controls to ensure the elimination of those pollutants. No alteration to leachate management systems. Residual combustion emissions (CO<sub>2</sub>, minor NO<sub>x</sub>) are subject to monitoring and handled in compliance with Dominican Republic environmental law.
- E3 – Ecology and Natural Resources: All infrastructure is installed within the existing Rafey landfill boundary. No natural ecosystems, protected areas, or land-use change are involved.
- E4 – Human Rights: The project improves ambient conditions for surrounding communities — reduced odor, gas migration, and fire risk — and does not restrict access to any resources, services, or livelihoods.
- E5 – Labour: Prior to this project, CILPEN initiated a formalization program for informal waste pickers operating at the Rafey site to incorporate them as registered workers at the on-site materials recovery facility, within the facility's processing capacity, with formal labour contracts, social security enrolment, and occupational health protections. The LFG project itself creates additional skilled formal employment in gas collection and compression operations. All workers are engaged under Dominican labour law (Law 16-92). No forced labour, child labour, or restrictions on freedom of association are present or permitted.
- E6 – Health and Safety: An occupational H&S plan covering LFG handling, compression, and combustion is maintained throughout the crediting period with standard engineering controls for gas hazards (enclosed headers, pressure relief, gas detectors, operator training).
- E7 – Gender Equality: Recruitment is non-discriminatory. The waste picker formalization initiative includes women, who represent a significant portion of the informal workforce at Rafey, extending social security and maternal health coverage to them.
- E8 – Land Acquisition and Involuntary Resettlement: Not applicable. All infrastructure is within the existing CILPEN-operated landfill boundary. No acquisition or displacement occurs.
- E9 – Indigenous Peoples: Not applicable. No legally recognized indigenous communities exist in the project area under Dominican law or ILO Convention 169.
- E10 – Corruption: The project complies with Dominican Republic anti-corruption legislation (Laws 155-17 and 120-01) and Equiterra Capital LLC's internal compliance policy. An integrity declaration is submitted separately to the DOE per A6.4-STAN-AC-002.
- E11 – Cultural Heritage: No archaeological or cultural heritage assets are located within or adjacent to the project boundary under Dominican Republic Law 318-68 or UNESCO conventions.

### **D.1.2. Summary of the sustainable development impacts evaluation**

SDG contributions identified in form A6.4-FORM-AC-017: SDG 5 (Gender Equality) - the project applies CILPEN's Gender Equality Policy and the equal-pay requirements of the Dominican Labour Code (Law 16-92), monitored through the female share of the project workforce and the gender pay equity ratio. SDG 8 (Decent Work and Economic Growth) - creation and maintenance of direct full-time equivalent jobs under formal employment conditions compliant with Dominican labour law, including occupational health and safety and social security coverage. SDG 12 (Responsible Consumption and Production) - recovery and beneficial management of landfill gas that is currently released to the atmosphere, monitored as the annual volume of gas recovered and routed to destruction or energy recovery. SDG 13 (Climate Action) - verified annual greenhouse gas emission reductions from the capture and destruction or utilization of landfill gas, independently verified under the Article 6.4 mechanism. The full form A6.4-FORM-AC-017 is attached as Appendix 8.

(Full measures in A6.4-FORM-AC-016)

No high-risk environmental or social impacts were identified that require structural mitigation beyond standard operational controls. The following measures are implemented:

For air emissions, continuous LFG collection ensures that gas is routed to the combustion system rather than venting to atmosphere; combustion units are sized and maintained to achieve complete oxidation. For worker health and safety, occupational H&S protocols are enforced throughout the LFG infrastructure, including confined space entry procedures, gas detection systems, and mandatory personal protective equipment. For labour rights, all employment is governed by formal contracts under Dominican labor law; a project-level grievance mechanism is accessible to all workers, including MRF employees formerly from the informal sector. For gender equity, the waste picker formalization program ensures that women transitioning from informal work receive equivalent contractual terms and access to social security. No mitigation measures are required for elements E3, E8, E9, or E11, which were assessed as not applicable or presenting no risk.

## **D.2. Environmental and social impacts as per the host Party regulations**

### **D.2.1. Summary of host Party requirements**

Applicable DR requirements: (1) Law 64-00: EIA required for landfill infrastructure modifications; (2) Law 225-20: updated site management plan required; (3) Law 57-07: applicable if electricity generation selected -- compliance assessment underway (key driver for prioritizing gas supply to consumers); (4) Ministry of Environment operational permits.

### **D.2.2. Summary and conclusion of the assessment**

Project is compatible with DR requirements subject to: (a) EIA completion under Law 64-00; (b) Law 57-07 compliance analysis if electricity end-use selected (supply of gas to consumers avoids this complexity); (c) Rafey operational permit update. All processes to be completed before construction commencement.

## **SECTION E. Local stakeholder consultation**

### **E.1. Scope of the consultation**

The consultation addressed, as a minimum, the potential direct positive and negative impacts of the proposed project, as required by paragraph 1 of Appendix 2 of A6.4-STAN-AC-002. Positive impacts presented: reduction of fugitive methane and of hydrogen sulphide odours affecting neighbouring communities; local employment and technical training; contribution to the Host Party's climate commitments; and displacement of imported fossil fuel through beneficial use of the captured gas. Negative impacts presented: noise, dust and traffic during construction of wells and pipelines; point-source odours during drilling; flare emissions; condensate management; occupational risks for workers; and safety risks for persons circulating within the landfill. The scope also covered the environmental and social risk assessment, the mitigation and management measures, and the sustainable development

contribution of the project, as set out in forms A6.4-FORM-AC-015, A6.4-FORM-AC-016 and A6.4-FORM-AC-017, summarised in non-technical language in the Project Information Package distributed with the invitation.

## **E.2. Stakeholders invited**

Formal written invitations were issued by the activity participants on CILPEN Global Business, S.R.L. letterhead and delivered against signed or stamped acknowledgement of receipt to thirteen stakeholders: the Designated National Authority (National Council for Climate Change, Mr Max Puig); the Provincial Governor of Santiago; the Mayor of the Municipality of Santiago; the Alcalde Pedaneo of Santiago; the Provincial Health Directorate Santiago I; the Cibao Central Regional Directorate of the National Police; the Regional Directorate of Civil Defence in Santiago; the Fire Brigade of Santiago; the President of the Association of Waste Pickers, representing the informal recyclers working at the site; the President of the neighbourhood association; the Director of the Cometas de Esperanza education centre; the parish priest of San Pedro Nolasco; and the pastor of the Tabernaculo Evangelistico church. A public notice was additionally posted addressed to the residents of the Cienfuegos, Rafey and Santa Lucia sectors and to the general public. Evidence of the invitations and of their receipt is provided as supporting documentation. No indigenous peoples were identified in the project area of influence. In accordance with paragraph 3 of Appendix 2, the following is recorded. Invitations were addressed to the Municipality of Santiago and to the Alcalde Pedaneo of Santiago; no invitation was addressed to the Santiago Oeste Municipal District, and the activity participants acknowledged this omission during the session. Notwithstanding, three of the five members of the district council attended the public hearing, intervened and signed the attendance list: the President of the Council of Members and two Council Members. Their comments are recorded in the summary report of comments received and are addressed in this PDD. A follow-up meeting with community representatives of the Santiago Oeste sectors was held on 9 September 2026, followed by a joint field visit on 10 September 2026. Engagement with the district authorities continues and the corresponding evidence will be provided in the validation package. The consultation was conducted under the Host Party public hearing procedure by an environmental services provider registered with the Ministry of Environment and Natural Resources (registration 01-051), and the record of the hearing is filed with the Ministry in accordance with national procedure. Evidence of the invitations and of their receipt is provided in the supporting document "Acuses de recibo vista publica.pdf", comprising thirteen invitation letters each bearing a signed or stamped acknowledgement of receipt.

## **E.3. Modalities for the consultation**

The consultation was conducted in accordance with Host Party practice for public hearings and with Appendix 2 of A6.4-STAN-AC-002. A written call to the local stakeholder consultation was issued on 12 August 2026, accompanied by a Project Information Package describing the project, its duration, its area of influence and its direct positive and negative impacts in simple, non-technical language, together with a summary of the three completed A6.4 sustainable development tool forms and the means available to submit comments. Invitations and the Information Package were delivered against acknowledgement of receipt between 18 and 28 August 2026, and a public notice was posted for the general public. The public hearing was held on Wednesday 2 September 2026 from 10:00 a.m. at the Juan Pablo Duarte Hall of the Municipality of Santiago, conducted by an independent sociologist registered with the Ministry of Environment and Natural Resources (registration 01-051), with the project presented orally in non-technical language and an open question-and-answer session. The session was recorded and transcribed verbatim, and an attendance list was circulated. Comments could be submitted orally or in writing at the session, by electronic mail to two published addresses, by physical letter, or through the Designated National Authority, until 17 September 2026. A follow-up meeting with community representatives was held at the premises of the activity participants on 9 September 2026, followed by a joint field visit on 10 September 2026. The two electronic mail addresses remain open as a permanent channel for the duration of the crediting period. The invitation letters and the Project Information Package were delivered against acknowledgement of receipt; both the letter and the cover page of the Information Package bear the signature or stamp of each recipient, as evidenced in the supporting document "Acuses de recibo vista publica.pdf". The Project Information Package is provided as "Documento2\_Paquete\_Informativo\_Rafey\_1.pdf". The verbatim record of the hearing is provided as "20260909-VP Vertedero Rafey.pdf" (79 pages) and the minutes of the hearing as "Acta de Vista Pública y Bitácora de Quejas - Biogás Rafey 2026.pdf". The attendance list is provided as the supporting

document "Listado de asistencia vista publica 2-9-2026.pdf". A representative of the Designated National Authority, the National Council for Climate Change, attended the public hearing, as recorded in the attendance list.

#### **E.4. Summary of comments received**

A summary report of the comments received is provided as supporting documentation, together with the minutes of the public hearing, the verbatim transcription, the attendance list and the evidence of invitations. Sixteen distinct comments were recorded from fourteen identified participants at the public hearing of 2 September 2026, and six further comments were recorded at the follow-up meeting of 9 September 2026, all within the comment period. The principal themes were: the absence of a formal invitation to the authorities of the Santiago Oeste Municipal District; express opposition to the project by three participants; a request for a minimum buffer distance between operations and dwellings; confusion between waste incineration and controlled flaring of landfill gas; the proximity of a newly enabled tipping area to a watercourse and to dwellings; concern over a local temperature increase from the flare; a suggestion to adopt modular energy generation in addition to flaring; requests for community benefits and compensation; leachate reaching watercourses; respiratory conditions attributed to the landfill; restricted site access and the absence of a continuous dialogue channel; the tonnage of waste received; the scope of the existing environmental permit; the proximity of a school; the venue of the hearing and insufficient prior communication; and deterioration of local roads. It is recorded that a group of seven persons accompanying one participant declined to register on the attendance list and withdrew after her intervention; their comments are nonetheless recorded in the transcription and in the summary report. The summary report is provided as the supporting document "260923\_Informe\_Comentarios\_LSC\_Rafey\_v1.pdf". A request was submitted to the Designated National Authority, in accordance with paragraph 11 of Appendix 2, to forward to the activity participants any comments on the project received from local stakeholders through its official channels. No comments had been received through that channel as at the date of this PDD.

#### **E.5. Consideration of comments received**

All comments received have been recorded and considered by the activity participants. Eleven of the comments raised at the public hearing were answered during the session itself and the answers are recorded verbatim in the transcription: the confusion between waste incineration and the controlled flaring of landfill gas was rectified in the session; the validity and scope of the existing environmental permit were clarified; it was confirmed that the tonnage of waste received at the site does not increase as a result of the project, which recovers landfill gas from waste already in place; the concerns regarding respiratory conditions were addressed by reference to the situation prior to the control of landfill fires and to primary healthcare records; the express opposition voiced by three participants was addressed by presenting the counterfactual, namely that in the absence of the project the accumulated methane continues to be vented without control; and the omission of a formal invitation to the authorities of the Santiago Oeste Municipal District was expressly acknowledged by the activity participants during the session. Several comments have been incorporated into the project arrangements. A community grievance mechanism, separate from the workers' mechanism, was formally constituted in the minutes of the public hearing, with a register recording the date, source, channel, substance and corrective measure for each matter raised; this mechanism remains open for the duration of the crediting period. A standing dialogue arrangement was agreed between the activity participants, the municipal and district authorities and the leaders of the neighbourhood associations of Santa Lucia, Rafey, Cienfuegos and Ensanche La Fe, covering odour and dust control, leachate and the buffer strip. A community spokesperson was designated by the participating organisations and maintains direct contact with the site management, and a permanent messaging channel was established. Following the hearing, a joint field visit was carried out on 10 September 2026 to assess the location of the newly enabled tipping area in response to the concern regarding its proximity to dwellings and to the watercourse, and a green barrier between the waste mass and the community was agreed, with community participation in its planting and subsequent monitoring. The request for a minimum buffer distance between operations and dwellings has been referred to the standing dialogue arrangement, within whose agreed scope the buffer strip expressly falls. The suggestion to adopt modular energy generation in addition to flaring has been noted; the energy use of the captured gas is contemplated in later project phases and the applicable technology will be defined once the results of the initial gas testing phase are available. The proximity of the Cometas de Esperanza education centre has

been recorded; the centre is a receptor in the vicinity of the site and its specific assessment will be integrated into the Environmental Impact Assessment currently in process. The comments concerning leachate reaching watercourses, the deterioration of local roads and the stability of the waste mass relate to the operation of the landfill and fall outside the scope of the A6.4 activity, which is limited to the capture, destruction and beneficial use of landfill gas; they have not been incorporated into the project design for that reason, and have been recorded and channelled to the community grievance mechanism and to the standing dialogue arrangement for treatment by the site operator. The request for community benefits and compensation was answered at the hearing by reference to the expected environmental, employment and energy benefits of the project; no commitment to monetary compensation was made, and the matter has been recorded in the community grievance mechanism. In respect of the comment concerning the absence of a direct invitation to the authorities of the Santiago Oeste Municipal District, the activity participants acknowledged the omission during the session, recorded it in the community grievance register annexed to the minutes of the public hearing, and undertook to convene a formal meeting with the district authorities. In response, a meeting with community representatives of the Santiago Oeste sectors was held at the premises of the activity participants on 9 September 2026, followed by a joint field visit on 10 September 2026. At that meeting a community spokesperson was designated and a direct communication channel with site management was established, and commitments were recorded on both sides. Engagement with the district authorities continues. The community grievance register is annexed to the minutes of the public hearing as entries BTC-2026-001 to BTC-2026-003. The record of the follow-up meeting is provided as the supporting document "260909\_Notas reunión Santiago Oeste.pdf".

## SECTION F. Double or revived registration

### F.1.1. Declaration related to the existence of a former project in the same geographical location

The Rafey landfill has not previously hosted a registered carbon project under CDM, VCS, Gold Standard, or any other GHG crediting scheme. No LFG capture project has been developed, registered, or credited at this location. This is the first carbon project development activity at the Rafey site. Confirmed by CILPEN and Equiterria Capital LLC.

### F.1.2. Declaration related to registration under the A6.4 mechanism or other crediting schemes

|                        |                                                                                                                                                                                                   |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A 6.4 mechanism</b> | <input checked="" type="checkbox"/> The proposed A6.4 project has not been already registered as an A6.4 project.                                                                                 |
|                        | <input checked="" type="checkbox"/> The proposed A6.4 project has not been already included as a component project (CP) in a registered Article 6.4 mechanism programme of activities (A6.4 PoA). |
|                        | <input checked="" type="checkbox"/> The proposed A6.4 project has not been previously deregistered from the Article 6.4 mechanism.                                                                |
|                        | >> <i>Tick all the three boxes above as a confirmation of compliance with mandatory requirements.</i>                                                                                             |
|                        | <input checked="" type="checkbox"/> The proposed A6.4 project has not been excluded from a registered A6.4 PoA.                                                                                   |
|                        | <i>Tick the box if applicable.</i>                                                                                                                                                                |

|       |                                         |                                                                                                                                                                                                                                                                                                                                                  |
|-------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other | <input checked="" type="checkbox"/>     | The proposed A6.4 project is not currently registered or pursuing registration, or covered by a programme, under any other international, regional, national, subnational or sector-wide GHG mitigation crediting scheme.                                                                                                                        |
|       | <input type="checkbox"/>                | The proposed A6.4 project was previously registered under or covered by a programme under any other international, regional, national, or subnational or sector-wide GHG mitigation crediting scheme but deregistered or excluded from the other crediting scheme before fully exhausting the crediting period under the other crediting scheme. |
|       | <input type="checkbox"/>                | The proposed A6.4 project is currently registered or covered by other international, regional, national, subnational or sector-wide GHG mitigation crediting scheme.                                                                                                                                                                             |
|       | >> <i>Tick only one applicable box.</i> |                                                                                                                                                                                                                                                                                                                                                  |

## Appendix 1. Contact information of activity participants

(Copy this table for each activity participant)

|                                |                                                                                       |
|--------------------------------|---------------------------------------------------------------------------------------|
| <b>Organization name</b>       | Equiterra Capital LLC                                                                 |
| <b>Legal entity identifier</b> | <a href="#">EIN: 41-4264040</a>                                                       |
| <b>Country</b>                 | <a href="#">United States of America</a>                                              |
| <b>Address</b>                 | 2600 SOUTH DOUGLAS ROAD SUITE 913<br>CORAL GABLES, FL 33134, United States of America |
| <b>Telephone</b>               | +57 322 2098737                                                                       |
| <b>Mobile</b>                  | +57 322 2098737                                                                       |
| <b>E-mail</b>                  | <a href="mailto:rafey@equiterra.capital">rafey@equiterra.capital</a>                  |
| <b>Website</b>                 | <a href="https://equiterra.capital/">https://equiterra.capital/</a>                   |
| <b>Contact person</b>          | Alexis Ludwig Leroy                                                                   |

## Appendix 2. Applicability of mechanism methodologies and standardized baselines

This appendix provides supplementary background to Section B.2 on the rationale for selecting the applied methodology and tools, site classification decisions, and key applicability parameters.

Selection of A6.4-AMM-001 v01.0 as primary methodology

A6.4-AMM-001-v01.0 ("Flaring or use of landfill gas") is the only A6.4 Supervisory Body-approved mechanism methodology applicable to landfill gas capture projects. The methodology was selected because: (1) it is explicitly designed for activities involving the capture and destruction or beneficial use of LFG from solid waste disposal sites; (2) it covers the applications applied by the Rafey project — flaring and supply of LFG or biomethane to consumers — without requiring a methodology deviation; and (3) it incorporates the Article 6.4-specific baseline adjustment framework (Sections 7.4–7.6 of AMM-001), which is mandatory for A6.4 activities and has no equivalent in CDM or VCS methodologies.

The CDM methodology ACM0001 v19 was considered for reference during pre-feasibility analysis. It was not selected as the primary mechanism methodology because the Rafey project is being registered exclusively under the Article 6.4 mechanism, not under the CDM or VCS/Verra framework.

Site classification under A6.4-AMT-003 v01.0

The Rafey Solid Waste Disposal Site (SWDS) is classified as follows per IPCC 2006 Guidelines and AMT-003 parameters:

SWDS type: the site is classified as "Managed poorly - semi-aerobic" under A6.4-AMT-003, for which the applicable default methane correction factor is  $MCF = 0.8$ . The classification is based on the passive degasification chimneys (slotted HDPE pipe in clean gravel, 50 m spacing), the daily and closure cover, the geomembrane-lined base of the new disposal cells and the controlled tipping fronts with weighing and admission control documented in the site operations manual, together with the absence of a leachate treatment system, which the same manual identifies as a precondition for further height increase. The site does not qualify as an anaerobic managed SWDS, for which A6.4-AMT-003 requires that no scavenging activities be reported, because waste picking is carried out at the site. A value of  $MCF = 0.7$  is adopted as a conservative reduction below the applicable default.

Climate category: Tropical / Wet, as defined in A6.4-AMT-003 Table 10 (mean annual precipitation above 1,000 mm/yr). Santiago de los Caballeros records a mean annual precipitation of approximately 1,080

mm (Oficina Nacional de Meteorología, ONAMET), placing the site in this zone. The decay rate constants ( $k_j$ ) applied are therefore those of the Tropical / Wet zone.

Application: Application A of AMT-003 (para. 10a) — existing SWDS with accumulated historical waste. Methane is generated from legacy organic waste disposed prior to and during the project activity.

#### Selection of the parameters applied in the FOD model

The waste composition applied in the FOD model is taken from the characterization carried out by the site operator and documented in the supporting document "LFG site characterization questionnaire.pdf". The fractions of degradable organic carbon (DOC<sub>j</sub>) and their decomposable fractions (DOC<sub>f,j</sub>) are the default values of A6.4-AMT-003, and the decay rate constants ( $k_j$ ) are those of A6.4-AMT-003 Table 10 for the Tropical / Wet climate zone, consistent with A6.4-AMM-001 Section 6.2. The Dominican Republic has no published national waste characterization study. A further site-specific waste composition survey may be carried out prior to validation; any resulting change will be introduced conservatively, that is, only where it results in lower or equivalent baseline emission estimates.

Degradable organic carbon decay rates ( $k$ , yr<sup>-1</sup>) — tropical wet climate

Per A6.4-AMT-003 Table 10 (tropical wet climate), the following decay rates ( $k$ ) and DOC parameters are applied:

| Waste category (j)                                 | Fraction $p_j$    | DOC <sub>j</sub> | DOC <sub>f,j</sub> | $k_j$ (1/yr) |
|----------------------------------------------------|-------------------|------------------|--------------------|--------------|
| Food & organic                                     | 30.00%            | 0.15             | 0.70               | 0.40         |
| Paper & cardboard (proxy, biodegradable inorganic) | 22.82%            | 0.40             | 0.50               | 0.07         |
| Garden, wood, plastics, metals, glass, inert       | 0% (conservative) | 0 / inert        | —                  | —            |

Waste composition fractions are based on available references for Dominican Republic MSW composition (MIMARENA/PLANGIR baseline assessment, 2023) and will be verified with Rafey-specific characterization data during PDD finalization.

Fraction of DOC that decomposes (DOCF)

DOC<sub>f</sub> is applied per waste fraction (0.70 food/organic; 0.50 paper/cardboard) per A6.4-AMT-003; other fractions treated as inert (conservative).

Oxidation factor (OX)

OX = 0.384 is applied, the Option 3 default of A6.4-AMT-003 for an existing SWDS with soil cover in a non-LDC and non-SIDS host Party, and it is applied once in Equation (1). Although shallow soil cover exists at portions of the Rafey site, no engineered daily cover or engineered soil oxidation layer is consistently maintained, so no higher oxidation credit is claimed.

Fraction of CH<sub>4</sub> in LFG (F)

F = 0.50 is applied (Tier 1 IPCC default) for the ex-ante calculation. This is conservative relative to field measurements at comparable tropical MSW sites, which typically yield 52–55% CH<sub>4</sub>. Site-specific gas quality measurements will be performed during the gas extraction system commissioning phase.

GWP of CH<sub>4</sub>

GWP<sub>100</sub> = 28 (IPCC AR5, as required by A6.4 Supervisory Body guidance for A6.4 activities registered after the adoption of the A6.4 activity standard v03.0).

AMT-001 (Common practice analysis): data sources

Common practice data for the Dominican Republic was obtained from: (1) PLANGIR 2025–2035 national solid waste management plan (Decreto 302-25), which inventories 243 active solid waste disposal sites nationwide; (2) MIMARENA operational registry; and (3) cross-check against UNFCCC CDM, Verra VCS,

and Gold Standard project registries — confirmed: zero registered or validated LFG capture projects in the Dominican Republic exist as of June 2026. The Rafey project represents the first LFG capture installation in the country.

### Appendix 3. Further background information on ex ante calculation of emission reductions and/or net removals

This appendix provides the methodological framework, key parameter values, and indicative ex-ante estimates underpinning the calculations described in Section B.8. Full year-by-year calculations, waste cohort decomposition tables, and sensitivity analysis will be provided in the Excel workbook attached to the final PDD submission.

#### 1. Baseline emissions — IPCC 2006 FOD model (AMT-003, Application A)

Baseline CH<sub>4</sub> generation in year y is estimated using the first-order decay (FOD) model per AMT-003 para. 21:

$$BE_{CH_4,y} = (1 - OX) \times (16/12) \times F \times MCF \times \sum_x \{ DOC_x \times DOCF_x \times \sum_t [W_{\{x,t\}} \times k_x \times e^{(-k_x \times (y - t))}] \}$$

where:

y = year of calculation (2028 to 2042)

t = year of waste deposition (1990 to y)

x = waste type (food, paper, textile, wood, garden)

W<sub>{x,t}</sub> = mass of waste type x deposited in year t (tonnes dry weight)

All other parameters as defined in Appendix 2 above

#### Consolidated ex-ante parameters (A6.4-AMM-001 v5 model):

| Parameter                                          | Value                    | Source / basis                                                                                                                                                                          |
|----------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model correction factor (phi)                      | 0.75                     | A6.4-AMT-003 Table 5 (Application A, tropical wet)                                                                                                                                      |
| Methane correction factor (MCF)                    | 0.70                     | A6.4-AMT-003: applicable default 0.8 (managed poorly, semi-aerobic); 0.7 adopted as a conservative reduction                                                                            |
| CH <sub>4</sub> fraction in LFG (F)                | 0.50                     | A6.4-AMT-003 Table 3 (default 50% v/v)                                                                                                                                                  |
| Oxidation factor (OX)                              | 0.384                    | A6.4-AMT-003 Option 3, Data/Parameter Table 2 (existing SWDS with soil cover); applied once in Equation (1)                                                                             |
| GWP <sub>CH4</sub>                                 | 28                       | IPCC AR5, GWP-100                                                                                                                                                                       |
| LFG capture system efficiency (eta <sub>PJ</sub> ) | 0.50                     | A6.4-AMM-001 Data / Parameter table 4, Equation (14): default value of 50 per cent (+/- 50 per cent uncertainty), applied where the capture system specifications are not yet available |
| Flare destruction efficiency (DE)                  | 0.90                     | A6.4-AMT-004 (enclosed flare)                                                                                                                                                           |
| NCV of CH <sub>4</sub>                             | 50.4 GJ/tCH <sub>4</sub> | IPCC 2006 GL Table 1.2                                                                                                                                                                  |

|                                 |                                                                                                     |                                                                                                                                                                |
|---------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CH4 density                     | 0.716 kg/m <sup>3</sup>                                                                             | Standard conditions (0 C, 1 atm)                                                                                                                               |
| Downward adjustment 2028 (DA)   | 10% x BE_raw,2028                                                                                   | A6.4-AMM-001 section 7.4.1                                                                                                                                     |
| Downward adjustment 2029-2042   | Determined separately by component                                                                  | A6.4-AMM-001 section 7.4.2: +1%/yr for the utilized methane and for back-up flaring up to 10% of it (Eq. 32); +10%/yr for flaring above that share (Eq. 28-29) |
| Leakage factor                  | 0.5% of BE_adj                                                                                      | A6.4-AMM-001 section 9, Eq. 54                                                                                                                                 |
| Displaced-fuel EF (natural gas) | 0.0561 tCO <sub>2</sub> /GJ                                                                         | IPCC 2006 GL Table 2.2                                                                                                                                         |
| LFG-use allocation              | Annual series: 0.466 in 2028, declining to 0.358 in 2032, 0.646 from 2033, reaching 1.000 from 2039 | Determined by the installed upgrading capacity (800 Nm <sup>3</sup> /h from 2028; 1,500 Nm <sup>3</sup> /h from 2033)                                          |

Conversion to tCO<sub>2</sub>e:

$$BE_{CO_2e,y} = BE_{CH_4,y} \times GWP_{CH_4} = BE_{CH_4,y} \times 28$$

## 2. Waste input data — historical reconstruction

The waste disposal series is modelled from 2024 onwards, the period for which the site operator maintains documented operational control of waste reception, weighing and admission at the site. Waste disposed of before 2024 is not quantified in this assessment. This is a conservative simplification: it excludes the residual methane generation of the earlier waste mass and therefore understates both the baseline methane generation and the resulting emission reductions.

| Period      | Source                                                     | Method                                                    |
|-------------|------------------------------------------------------------|-----------------------------------------------------------|
| 2024-2036   | CILPEN operational control, weighing and admission records | Recorded data 2024-2026; planned disposal rate thereafter |
| Before 2024 | Not quantified                                             | Excluded from the assessment (conservative)               |

Disposal rate applied: 780,000 tonnes per year, equivalent to 65,000 tonnes per month, consistent with the rate reported in the site operations manual (Chapter 12, Advance Plan and Estimated Remaining Life, August 2026). The series assumes waste reception until 2036. The same manual reports a remaining capacity of 4,091,702 m<sup>3</sup> as of the LiDAR survey of 22 July 2026, equivalent to approximately 4.7 years at that rate, and contemplates a further increase in height above the 219 m level subject to a stability study and to the implementation of a leachate treatment system, which is not quantified. The 2036 horizon is therefore an ex-ante assumption that extends beyond the remaining capacity currently documented, and will be confirmed with the site operator and revised as the advance plan is updated. Baseline emissions are determined ex-post from the quantity of methane actually captured, in accordance with paragraph 79 of A6.4-AMM-001.

| Year      | Waste disposed (t/yr) | Basis                                                                   |
|-----------|-----------------------|-------------------------------------------------------------------------|
| 2019-2023 | 0                     | Not quantified; excluded from the assessment                            |
| 2024      | 553,000               | Site operator records                                                   |
| 2025-2036 | 780,000 per year      | 65,000 t/month per the site operations manual (Chapter 12, August 2026) |

## 3. Unadjusted baseline emission estimates (indicative)

Applying the FOD model with the parameters above and the downward adjustment determined by component in accordance with A6.4-AMM-001 section 7.4, the ex-ante adjusted methane baseline is estimated as follows. Values are ex-ante; baseline emissions are determined ex-post from the quantity of methane actually captured, per paragraph 79 of A6.4-AMM-001.

| Crediting year | Calendar year    | Adjusted methane baseline<br>BE <sub>CH4,adj</sub> (tCO <sub>2e</sub> ) |
|----------------|------------------|-------------------------------------------------------------------------|
| 1              | 2028             | 72,755                                                                  |
| 2              | 2029             | 76,072                                                                  |
| 3              | 2030             | 78,065                                                                  |
| 4              | 2031             | 79,092                                                                  |
| 5              | 2032             | 79,401                                                                  |
| 6              | 2033             | 82,645                                                                  |
| 7              | 2034             | 81,977                                                                  |
| 8              | 2035             | 80,962                                                                  |
| 9              | 2036             | 79,661                                                                  |
| 10             | 2037             | 73,790                                                                  |
| 11             | 2038             | 71,680                                                                  |
| 12             | 2039             | 59,256                                                                  |
| 13             | 2040             | 48,935                                                                  |
| 14             | 2041             | 41,049                                                                  |
| 15             | 2042             | 34,852                                                                  |
| <b>Total</b>   | <b>2028-2042</b> | <b>1,040,192</b>                                                        |

Note: consistent with the Basic Information headline - 1,105,694 tCO<sub>2e</sub> over the maximum potential crediting period of 15 years, an annual average of approximately 73,713 tCO<sub>2e</sub>. The methane component and the supply component are reported separately above. The PCN (reference 21752) reported a methane-only basis of 1,400,000 tCO<sub>2e</sub>, determined on the parameters available at that time.

#### 4. Downward adjustment calculation (preliminary)

Per A6.4-AMM-001 sections 7.4.1 and 7.4.2, the downward adjustment is determined separately for each component of the activity and is applied annually.

Year 1 (2028): a downward adjustment of 10 per cent is applied, in accordance with section 7.4.1. Rafey is an existing SWDS and is not exempt from the adjustment.

Subsequent years: the incremental downward adjustment factor (INDA) of section 7.4.2 is applied separately by component, as follows.

Per AMM-001 Section 7.4.2, an additional incremental downward adjustment factor (INDA) is applied annually. The applicable INDA depends on the confirmed end-use:

Methane utilized (supplied to consumers), and methane sent to the back-up flare up to 10 per cent of the methane utilized: INDA = 0.01 per year (A6.4-AMM-001, Equation (32)).

Methane sent to the flare in excess of 10 per cent of the methane utilized: INDA = 0.10 per year (A6.4-AMM-001, Equations (28) and (29)).

The downward-adjusted baseline in year y:

BE<sub>adj,y</sub> is determined in accordance with Equation (33). Because the installed upgrading capacity utilizes only part of the captured gas in the early years, the greater part of the flared methane falls in the second band above and its contribution to the baseline declines rapidly over the crediting period.

Displaced-fuel baseline term (from 2029): BENG<sub>y</sub> = NCV<sub>CH4</sub> × p<sub>supply</sub> × FCH<sub>4,capt,y</sub> × EF<sub>NG</sub>.

#### 5. Project emissions

Project emissions (PE<sub>y</sub>) are determined per A6.4-AMM-001 section 8.1 and the referenced tools, in accordance with Equation (44):

| Source | Annual PE (tCO <sub>2e</sub> ) | Basis |
|--------|--------------------------------|-------|
|--------|--------------------------------|-------|

|                                         |                               |                                                                      |
|-----------------------------------------|-------------------------------|----------------------------------------------------------------------|
| Electricity consumption (PE_EC)         | Reported in the ex-ante model | A6.4-AMM-001 Equation (45)                                           |
| On-site fossil fuel consumption (PE_FC) | Reported in the ex-ante model | A6.4-AMM-001 Equations (46)-(49)                                     |
| Road transport of biomethane (PE_DT)    | Reported in the ex-ante model | A6.4-AMM-001 section 8.1.3, Option B                                 |
| <b>Total over crediting period</b>      | <b>53,256</b>                 | <b>Equation (44); the flare is not a PE term (Equations (4)-(5))</b> |

#### 6. Leakage emissions

Leakage emissions (LE<sub>y</sub>) for the Rafey LFG project are limited to upstream lifecycle emissions associated with equipment manufacturing and transport per AMM-001 Appendix. These are estimated to be minor (< 100 tCO<sub>2</sub>e/yr) and will be quantified per the lifecycle assessment procedures referenced in AMM-001.

#### 7. Summary of ex-ante net emission reductions (indicative)

Net ER<sub>y</sub> = BE<sub>adj,y</sub> – PE<sub>y</sub> – LE<sub>y</sub>

| Crediting year        | BE <sub>adj</sub> (tCO <sub>2</sub> e) | PE (tCO <sub>2</sub> e) | LE (tCO <sub>2</sub> e) | Net ER (tCO <sub>2</sub> e) |
|-----------------------|----------------------------------------|-------------------------|-------------------------|-----------------------------|
| 1 (2028)              | 78,587                                 | 2,502                   | 393                     | 75,693                      |
| 2 (2029)              | 81,840                                 | 2,523                   | 409                     | 78,908                      |
| 3 (2030)              | 83,767                                 | 2,540                   | 419                     | 80,809                      |
| 4 (2031)              | 84,730                                 | 2,555                   | 424                     | 81,752                      |
| 5 (2032)              | 84,974                                 | 2,567                   | 425                     | 81,982                      |
| 6 (2033)              | 93,824                                 | 4,577                   | 469                     | 88,778                      |
| 7 (2034)              | 93,091                                 | 4,587                   | 465                     | 88,038                      |
| 8 (2035)              | 92,011                                 | 4,596                   | 460                     | 86,955                      |
| 9 (2036)              | 90,646                                 | 4,604                   | 453                     | 85,589                      |
| 10 (2037)             | 84,709                                 | 4,537                   | 424                     | 79,749                      |
| 11 (2038)             | 82,535                                 | 4,490                   | 413                     | 77,632                      |
| 12 (2039)             | 68,902                                 | 4,052                   | 345                     | 64,505                      |
| 13 (2040)             | 56,901                                 | 3,457                   | 285                     | 53,159                      |
| 14 (2041)             | 47,731                                 | 3,009                   | 239                     | 44,484                      |
| 15 (2042)             | 40,526                                 | 2,661                   | 203                     | 37,662                      |
| <b>Total (15 yr)</b>  | <b>1,164,774</b>                       | <b>53,256</b>           | <b>5,824</b>            | <b>1,105,694</b>            |
| <b>Annual average</b> | <b>77,652</b>                          | <b>3,550</b>            | <b>388</b>              | <b>73,713</b>               |

Note: These estimates are preliminary and indicative. The final net emission reductions depend on: (a) confirmed end-use and applicable INDA factor; (b) Tier 2 waste characterization data; (c) actual gas flow and CH<sub>4</sub> concentration at commissioning; and (d) final DR grid emission factor. The full calculation Excel workbook will be attached to the final PDD prior to DOE validation submission.

#### 8. Sensitivity considerations

The key sources of uncertainty and their directional impacts on net ER are:

Waste input growth rate (higher than assumed): increases baseline emissions → conservative (existing approach does not project growth beyond 2025 base)

CH<sub>4</sub> content in LFG (lower than 50%): decreases baseline; current conservative assumption at F = 0.50

MCF: set at 0.80 (unmanaged/unknown SWDS, AMT-003 Table 8); conservative

UNC\_BE downward adjustment: currently 30%; Tier 2 waste characterization could reduce uncertainty and therefore reduce the downward adjustment, increasing net ER

Flare destruction efficiency: set at 90 per cent, the default value for enclosed flares under Option A of A6.4-AMT-004 paragraph 30. The manufacturer specification for the selected flare indicates 99 per cent; no upward revision has been applied, so the value used is conservative.

#### **Appendix 4. Summary of post-registration changes**

This version of the Project Design Document (PDD) constitutes the initial submission of project activity. Therefore, no post-registration changes are being proposed in this version of the PDD, and no history of post-registration changes exists.

This section will be updated in future PDD versions if and when post-registration changes are proposed to and approved by the A6.4 Supervisory Body, in accordance with the applicable activity standard and the rules and procedures of the Article 6.4 mechanism.

#### **Appendix 5. Further background information on monitoring plan**

This version of the Project Design Document (PDD) constitutes the initial submission of project activity. Therefore, no further background information on monitoring plan is proposed in this version of the PDD.

#### **Appendix 6. A6.4 Environmental and Social Safeguards Risk Assessment Form (A6.4-FORM-AC-015)**

Included in the 'A6.4 Environmental and Social Safeguards Risk Assessment Form' as per the Article 6.4 sustainable development tool. File name "A6\_4-FORM-AC-015\_Rafey.xlsx".

#### **Appendix 7. A6.4 Environmental and Social Management Plan Form (A6.4-FORM-AC-016)**

Included in the 'A6.4 Environmental and Social Management Plan Form' as per the Article 6.4 sustainable development tool. File name "A6\_4-FORM-AC-016\_Rafey.xlsx".

#### **Appendix 8. A6.4 Sustainable Development Impact Form (A6.4-FORM-AC-017)**

Included in the 'A6.4 Sustainable Development Impact Form' as per the Article 6.4 sustainable development tool. File name "A6\_4-FORM-AC-017\_Rafey.xlsx".

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