Sun Siyam Care

SUN SIYAM
VILU REEF
MALDIVES

Food Waste Reduction and Carbon Impact Report 2025/2026

Reporting Period: November 2025 – April 2026
Reporting Date: 25 May 2026
Framework: PLEDGE™ on Food Waste | Sun Siyam Care Sustainability Strategy

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Executive Summary

Sun Siyam Vilu Reef continues to strengthen its commitment to sustainable hospitality through the structured implementation of food waste reduction initiatives under the globally recognised PLEDGE™ on Food Waste framework, aligned with the broader Sun Siyam Care strategy.

During the reporting period from November 2025 to April 2026, the resort adopted a data-driven and operationally integrated approach to measure, analyse, and reduce food waste across all key food production and service areas within the operational boundary of Aqua Restaurant.

December 2025 was established as the baseline month, following the introduction of systematic waste tracking and standardised measurement methodologies via Smart Kitchen monitoring system. Food waste was categorised into:

- Preparation Waste
- Buffet Waste
- Plate Waste
- Spoilage

A cross-functional operational structure—aligned with best practices seen in sister properties—enabled coordinated action across:

- Kitchen Operations
- Food and Beverage Service
- Stewarding
- Procurement
- Sustainability Team

1. Strategic Target

Sun Siyam Vilu Reef has committed to: **Reducing food waste by 20% by 31 December 2026 (from November 2025 baseline levels)**

2. Key Achievements

- Full implementation of daily food waste tracking
- Introduction of waste-per-cover KPI
- Improved production planning and forecasting accuracy
- Rollout of batch cooking and controlled replenishment
- Expansion of live cooking stations
- Strengthened inventory and spoilage control systems
- Increased Team Member awareness and accountability

These combined efforts have delivered measurable waste reduction improvements while maintaining high culinary standards and guest satisfaction.

3. Food Waste Performance Results

Operational Data Summary Overview

Summary Metric	Value
Total covers served (Nov 2025 – Apr 2026)	54,970
Total actual food waste	21,293.66 kg
Total waste rescued vs. baseline	695.88 kg (positive months)
Total CO_2 offset achieved	1.74 t CO_2e
CO_2 offset per kg rescued	2.5 kg CO_2e / kg
Reduction: baseline vs. latest	0.38 → 0.36 kg/cover (−5.3%)
Preparation waste reduction (Dec→Apr)	0.22 → 0.16 kg/cover (−27.3%)

Performance Analysis

- **Baseline (Nov 2025):** 0.38 kg per cover
- **Peak Waste:** December 2025 (0.47 kg per cover) — seasonal demand fluctuation
- **Best Performance:** February 2026 (0.34 kg per cover)
- **Latest:** Reduced to 0.36 kg per cover

Key Insights

- Waste levels stabilised after initial spike, indicating effective corrective actions
- Significant improvement achieved through better forecasting and buffet control
- Operational efficiency improved despite variability in occupancy levels

Cumulative Performance

- **Total Covers Served:** 54,970
- **Total Food Waste Generated:** 21,293.66 kg
- **Average Waste Intensity:** 0.39 kg per cover

Overall, the performance demonstrates a clear transition toward more efficient, demand-driven food production systems.

4. Key Initiatives and Operational Improvements

1. Smart Measurement and Monitoring

Aligned with PLEDGE™ methodology, a structured system for tracking food waste was implemented by embracing the Smart Kitchen tool.

Figure 1. Smart Kitchen Monitoring System

Achievements

- Daily waste logging across all categories
- Monthly performance tracking and reporting
- Data-driven decision-making processes

2. Buffet Optimisation and Demand-Based Production

Buffet systems were redesigned to minimise overproduction while preserving guest experience.

Achievements

- Batch cooking implementation
- Controlled, demand-based replenishment
- Expansion of live cooking stations
- Reduction in end-of-service waste

3. Kitchen Efficiency and Preparation Control

Focus areas included improving ingredient utilisation and reducing avoidable losses.

Achievements

- Standardised cutting techniques
- Yield optimisation practices
- Alignment between menu planning and procurement

4. Team Member Engagement and Behavioural Change

A culture of accountability was developed through structured engagement.

Figure 2. Team Member Awareness Sessions

Figure 3. Food Lover's Committee Meetings

Achievements

- Continuous training and awareness sessions
- Integration of waste KPIs into operations
- Increased ownership across departments

5. Waste Segregation and Data Accuracy

Improved segregation ensured better measurement precision.

Figure 4. Waste Segregation Guide

Achievements

- Clear categorisation of waste streams
- Enhanced spoilage tracking
- Improved quality of reporting data

5. Carbon Impact Assessment

Methodology

The carbon impact assessment follows the PLEDGE™ emission factor approach, as adopted across Sun Siyam properties:

- Baseline: December 2025
- Expected waste calculated using baseline waste intensity
- Variance between expected vs actual = Food waste avoided (rescued)
- Conversion factor:
    - 1 kg food waste avoided = 2.5 kg CO_2e avoided

Figure 5. Plant-based bliss

Carbon Reduction Performance

Month	Rescued Waste (kg)	CO_2 Offset (kg CO_2e)
Jan-26	109.60	274.00
Feb-26	507.60	1,269.00
Apr-26	78.68	196.70
Total	**695.88**	**1,739.70**

Total Environmental Impact

- **Total Rescued Waste:** 695.88 kg
- **Total CO_2 Offset:** 1,739.70 kg CO_2e

Key Insights

- February delivered the highest environmental benefit
- Carbon reduction directly correlates with operational discipline improvements
- Food waste reduction represents a high-impact Scope 3 emissions mitigation pathway

6. Governance, Future Commitments and Conclusion

Governance Approach

In alignment with best practices demonstrated across the Sun Siyam portfolio, food waste reduction initiatives are supported by a structured, cross-functional model similar to a Food Waste Taskforce / Committee approach.

The committee, known as the Food Lovers Committee, consists of the following key leaders, ensuring:

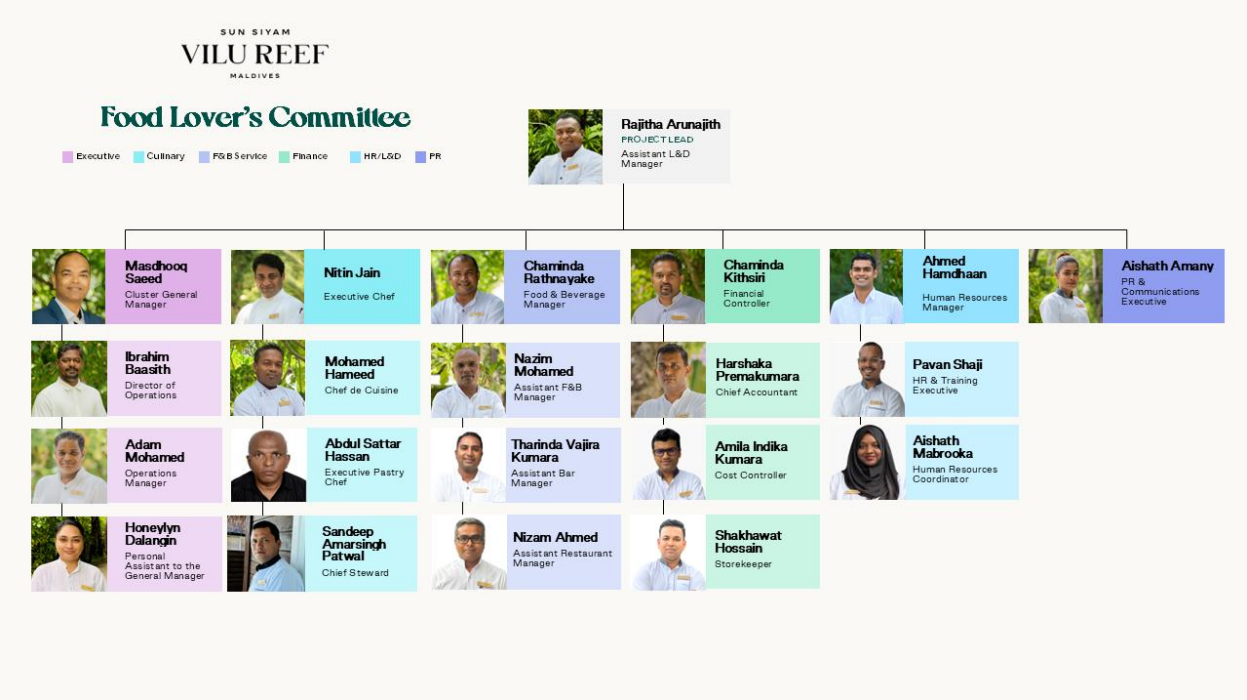

Figure 6. FLC Committee

- Accountability across operational departments
- Continuous monitoring and reporting
- Alignment with sustainability strategy

Future Commitments

To achieve the 20% reduction target by 31 December 2026, the resort will focus on:

- Further reduction of preparation waste
- Advanced forecasting using occupancy analytics
- Expansion of digital waste tracking tools
- Continuation of low-waste / zero-waste menu concepts
- Enhancement of waste diversion solutions (composting)
- Continuation of Team Member training and awareness programmes

7. Conclusion

Between November 2025 and April 2026, Sun Siyam Vilu Reef has successfully:

- Established a fully measurable food waste management system
- Improved operational efficiency across culinary operations
- Reduced food waste intensity from baseline levels
- Generated an estimated 1.74 tonnes CO_2e reduction

This report demonstrates that structured measurement, operational optimisation, and team engagement can deliver meaningful environmental impact while maintaining exceptional guest experience.

Sun Siyam Vilu Reef remains committed to advancing sustainable hospitality practices and contributing to long-term environmental stewardship and climate action.

Appendices

CO_2 Offset Calculation from Food Waste Data

Month	No. of Covers	Waste per Cover (kg/cover)	Baseline W/C (kg/cover)	Expected Waste (kg)	Actual Waste (kg)	Rescued Waste (kg)	CO_2 Offset (kg CO_2e)	Total CO_2 Offset (t CO_2e)
Nov-25	9,834	0.38	0.38	3,736.92	3,736.92	0.00	0.00	0.000
Dec-25	9,573	0.47	0.38	3,637.74	4,499.31	-861.57	0.00	0.000
Jan-26	10,960	0.37	0.38	4,164.80	4,055.20	109.60	274.00	0.274
Feb-26	12,690	0.34	0.38	4,822.20	4,314.60	507.60	1,269.00	1.269
Mar-26	7,979	0.41	0.38	3,032.02	3,271.39	-239.37	0.00	0.000
Apr-26	3,934	0.36	0.38	1,494.92	1,416.24	78.68	196.70	0.197