

NET ZERO ACTION PLAN 2050

Swami Rama Himalayan University (SRHU)

1. Introduction

Swami Rama Himalayan University (SRHU) recognizes climate change as a critical global challenge and acknowledges the responsibility of higher educational institutions to lead by example.

This Net Zero Action Plan 2050 serves as SRHU's official institutional roadmap to systematically reduce greenhouse gas (GHG) emissions and align institutional operations with global climate goals.

The plan is based on comprehensive Carbon Footprint Assessments conducted for academic years 2023–24 and 2024–25 and is aligned with internationally accepted frameworks, including:

- GHG Protocol
- Paris Agreement (1.5°C pathway)
- Global best practices for net-zero campuses

2. Baseline Emissions and Scope

2.1 Baseline Year

- **Baseline Year:** Academic Year 2024–25
- **Total Gross Emissions:** 3,312 tCO_{2e}

2.2 Emission Profile (Baseline)

- **Scope 1 (Direct):** 921 tCO_{2e}
- **Scope 2 (Electricity):** 9 tCO_{2e}
- **Scope 3 (Indirect):** 2,382 tCO_{2e}

Scope 3 emissions constitute the largest share of SRHU's carbon footprint and therefore represent the primary focus area for long-term reductions.

3. Vision and Long-Term Commitment

SRHU commits to achieving:

Net-Zero Greenhouse Gas Emissions by 2050, with

- $\geq 90\%$ absolute emission reduction from baseline
- $\leq 10\%$ neutralized through verified offsets

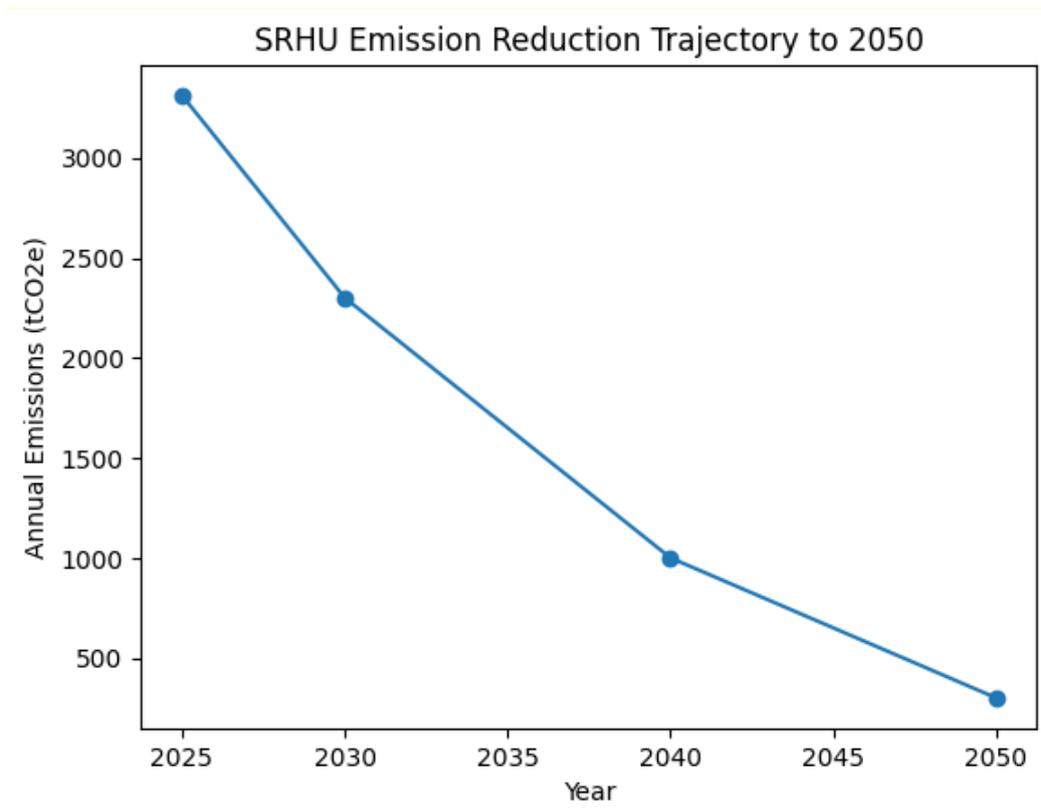
This commitment positions SRHU as a forward-looking institution aligned with global climate leadership expectations.

4. Emission Reduction Targets

4.1 Long-Term Reduction Trajectory

Year	Target Emissions	Reduction from Baseline
2025 (Baseline)	3,312	—
2030	$\leq 2,300$	~30%
2040	$\leq 1,000$	~70%
2050	≤ 300	~90%

Residual emissions in 2050 shall be neutralized only through high-quality, verifiable carbon removals.



5. Scope-Wise Mitigation Strategy

5.1 Scope 1 — Direct Emissions

Target: Zero Scope 1 emissions by 2040

Key Actions

- Phase out diesel generators through solar, battery storage, and hybrid systems
- Electrify university vehicle fleet
- Transition to low-GWP refrigerants

Expected Outcome: Complete elimination of fossil fuels under institutional control.

5.2 Scope 2 — Purchased Electricity

Target: Zero Scope 2 emissions by 2030

Key Actions

- Expand on-campus solar generation
- Deploy energy storage systems
- Implement smart energy management

Expected Outcome: Sustained 100% renewable electricity supply.

5.3 Scope 3 — Indirect Emissions

Target: ≤ 300 tCO_{2e} by 2050

Key Focus Areas

- Sustainable mobility policies
- Green procurement standards
- Zero-waste campus initiatives
- Reduced carbon intensity of food and materials

Expected Outcome: 85–90% reduction through systemic interventions.

6. Carbon Offsets and Sequestration

Offsets will be used only as a last resort and shall not exceed 10% of total emissions in 2050.

Offset Priority

1. On-campus afforestation and biodiversity enhancement
2. Verified nature-based carbon removal projects
3. Exclusion of low-integrity offset mechanisms

7. Monitoring, Reporting, and Governance

SRHU will ensure accountability through:

- Annual carbon footprint assessments
- Detailed Scope 3 tracking
- Monitoring intensity indicators:
 - tCO₂e per student
 - tCO₂e per hospital bed
 - tCO₂e per built-up area
- Establishment of a dedicated Climate Action and Net-Zero Committee for oversight and implementation.

8. Review and Continuous Improvement

This Net Zero Action Plan will be reviewed every five years to incorporate technological advances, regulatory changes, and updated scientific guidance. Interim targets may be strengthened where feasible.

9. Conclusion

The SRHU Net Zero Action Plan 2050 represents a realistic, science-aligned, and institutionally achievable pathway toward net-zero emissions. By prioritizing absolute reductions, limiting reliance on offsets, and embedding sustainability into governance and operations, SRHU commits to becoming a benchmark low-carbon university campus and a responsible contributor to global climate goals.