

CLIMATE 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 Climate Action Plan 2050 provides a structured, long-term roadmap to systematically reduce greenhouse gas (GHG) emissions and align the university with global climate goals.

This plan is based on comprehensive Carbon Footprint Assessments conducted for academic years 2023–24 and 2024–25 and is aligned with internationally accepted frameworks such as the GHG Protocol, Paris Agreement (1.5°C pathway), and emerging 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 tCO₂e

2.2 Emission Profile (Baseline)

- **Scope 1 (Direct Emissions):** 921 tCO₂e
- **Scope 2 (Purchased Electricity):** 9 tCO₂e
- **Scope 3 (Indirect Emissions):** 2,382 tCO₂e

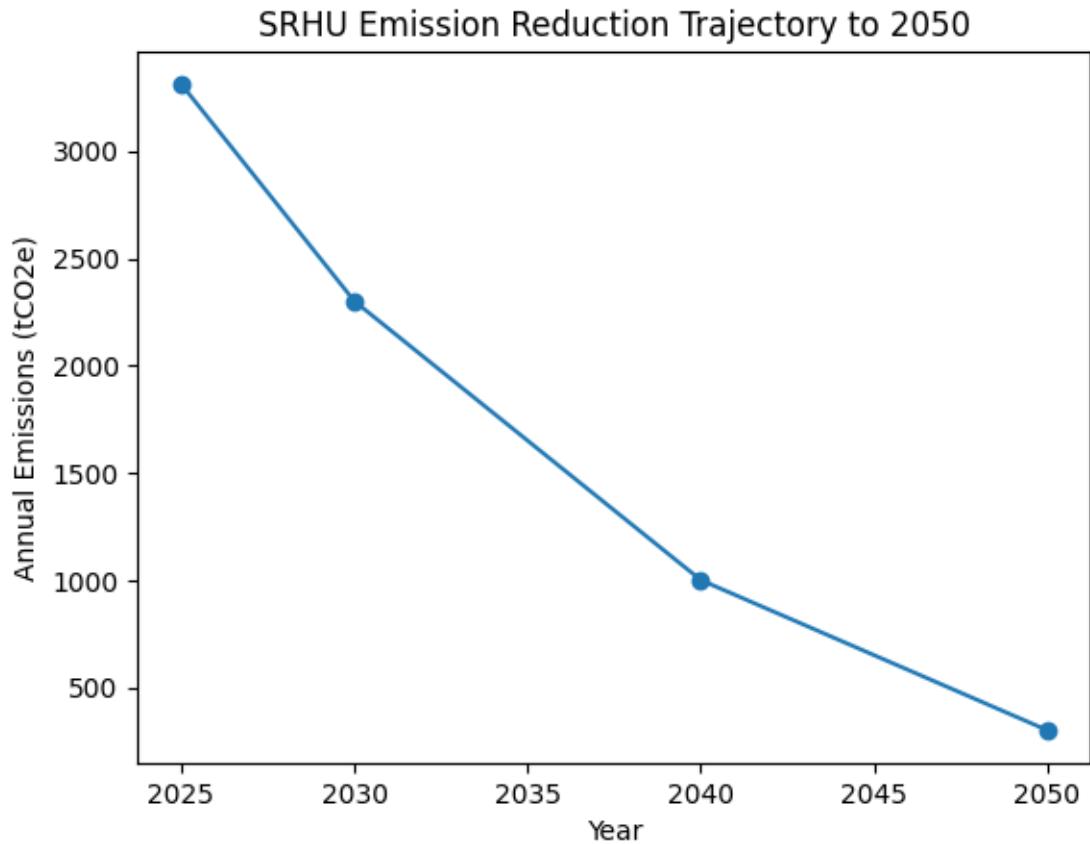
Scope 3 emissions constitute the largest share of SRHU's carbon footprint and therefore represent the primary focus area for long-term reductions.

3. Vision and Long-Term Commitment

SRHU commits to achieving:

Net-Zero Greenhouse Gas Emissions by 2050, with at least **90% absolute emission reduction** from the 2024–25 baseline and **no more than 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 (tCO ₂ e)	Reduction from Baseline
2025 (Baseline)	3,312	—
2030	≤ 2,300	~30%
2040	≤ 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: - Phased elimination of diesel generators through solar, battery storage, and grid hybrid systems - Full electrification of university-owned vehicle fleet - Transition to low-GWP refrigerants in cooling systems

Expected Outcome: Complete elimination of fossil fuel use under institutional control.

5.2 Scope 2: Purchased Electricity

Target: Zero Scope 2 emissions by 2030

Key Actions: - Maintain and expand on-campus solar power generation - Deploy energy storage systems to minimize grid dependency during peak hours - Implement smart energy management and efficiency measures

Expected Outcome: Sustained 100% renewable electricity supply.

5.3 Scope 3: Indirect Emissions

Target: $\leq 300 \text{ tCO}_2\text{e}$ by 2050

Key Focus Areas: - Sustainable mobility policies for students and staff (EVs, public transport, carpooling) - Green procurement standards for goods and services - Zero-waste campus initiatives, including biomethanation and recycling - Reduced carbon intensity of food services and material consumption

Expected Outcome: 85–90% reduction in Scope 3 emissions through systemic interventions.

6. Carbon Offsets and Sequestration

Offsets shall be used strictly 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 or short-term offset mechanisms

7. Monitoring, Reporting, and Governance

To ensure accountability and transparency, SRHU will:

- Conduct annual carbon footprint assessments
- Track Scope 3 emissions by detailed sub-categories
- Monitor emission intensity indicators, including:
 - tCO₂e per student
 - tCO₂e per hospital bed
 - tCO₂e per built-up area
- Establish a dedicated **Climate Action and Net-Zero Committee** for oversight and continuous improvement

8. Review and Continuous Improvement

This Climate Action Plan shall be reviewed every five years to incorporate technological advancements, regulatory changes, and updated scientific guidance. Interim targets may be strengthened where feasible to accelerate climate action.

9. Conclusion

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