SDG 13 Climate Action

ITS SDG Report 2025



ITS contributes to SDG 13 through climate-related research, renewable-energy innovation, environmental management, and community engagement. The university applies engineering and scientific expertise to explore technological solutions while promoting environmental responsibility within campus life. In 2025, ITS supported activities involving energy sustainability, campus greening, sustainable mobility, and coastal conservation. These activities connect climate action with research, education, institutional operations, and community participation. ITS also recognises the importance of partnerships in addressing climate challenges that extend beyond institutional and geographical boundaries. Through these efforts, the university can contribute to both climate mitigation and adaptation. Reporting greenhouse-gas emissions, energy use, tree survival, and the outcomes of climate-related community programmes would help quantify its contribution.

287
publications

7,532 GJ
total energy generated from renewable resources

53,350 GJ
total energy used

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Research

ITS conducts research relevant to renewable energy, energy efficiency, environmental systems, and climate resilience. Engineering research can support the development of technologies that reduce energy consumption and help diversify energy sources. Research involving coastal ecosystems and conservation can also improve understanding of environmental vulnerability and adaptation. Documenting research outputs, technology performance, and the application of findings in climate-related decisions would strengthen evidence of research impact.

Teaching

ITS connects climate awareness with engineering education, student projects, and sustainability-related activities. Students can explore climate challenges through research, technology development, competitions, and environmental fieldwork. New-student activities in 2025 incorporated environmentally responsible practices, providing an opportunity to introduce sustainability from the beginning of university life. These experiences can help students understand the relationship between technology, human behaviour, and climate action.

Stewardship

ITS can strengthen its climate contribution by integrating energy efficiency, green-space management, sustainable mobility, and environmental monitoring into campus operations. Walking campaigns and campus greening initiatives provide practical opportunities to encourage lower-impact behaviour. Tree planting and vegetation management can support campus environmental quality, although their climate benefits depend on tree survival and long-term maintenance. Publishing campus emissions inventories, energy-consumption data, and progress against environmental targets would provide a more measurable account of institutional climate action.

Outreach

IITS extends climate-related knowledge through environmental education, conservation activities, and partnerships with external stakeholders. In 2025, ITS-related turtle conservation activities in Trenggalek connected research and community engagement with coastal ecosystem protection. Collaboration with local communities can support environmental awareness and the protection of vulnerable habitats. Documenting participating communities, conservation outcomes, and changes in environmental conditions would help establish the longer-term contribution of these activities to climate resilience.