SDG 7 Affordable & Clean Energy

ITS SDG Report 2025



ITS contributes to SDG 7 through renewable-energy research, energy-efficient technology, sustainable mobility, and the development of future energy professionals. The university applies engineering and technological expertise to explore solutions that support Indonesia's transition towards cleaner and more efficient energy systems. Student innovation, research activities, and engagement with energy-sector partners create opportunities to test ideas and develop practical capabilities. In 2025, EVOLVE provided a platform for students to engage with energy sustainability and developments in the future energy sector. ITS's work on energy-efficient vehicles and alternative-energy technologies also connects learning with national energy challenges. These initiatives demonstrate the role of higher education in supporting technological development and human-resource preparation. Measuring energy generation, consumption, efficiency improvements, and technology readiness would help establish the scale of ITS's contribution.

1,043
publications

7,532 GJ
total renewable energy made

SDG 7 Affordable & Clean Energy

ITS SDG Report 2025

Research

ITS conducts engineering research relevant to renewable energy, energy efficiency, and alternative propulsion technologies. Research and student innovation can support the development of systems that reduce energy consumption and explore alternatives to conventional fossil-fuel technologies. Energy-efficient vehicle development provides an applied setting for evaluating engineering design and energy performance. Reporting measured outputs, such as energy savings, efficiency results, and technology readiness, would strengthen the evidence of research impact under SDG 7.

Teaching

ITS connects energy education with practical projects, engineering design, competitions, and engagement with energy-sector professionals. Student activities allow participants to investigate energy systems and apply technical knowledge to real-world challenges. EVOLVE 2025 provided a setting for students to engage with discussions about energy sustainability and future energy developments. These experiences help prepare students for careers in renewable energy, power systems, energy management, and related industries.

Stewardship

ITS can demonstrate its institutional contribution to clean energy by documenting energy consumption, energy-efficiency measures, and the use of renewable energy across campus facilities. Energy management is relevant to laboratories, academic buildings, operational infrastructure, and student facilities. Regular monitoring can identify opportunities to reduce consumption and improve operational efficiency. Publishing comparable annual data on energy use, renewable-energy capacity, and emissions associated with campus operations would strengthen institutional accountability.

Outreach

ITS engages with external stakeholders to support awareness and development in the energy sector. Activities such as EVOLVE create opportunities for students, academic staff, and industry representatives to exchange knowledge about emerging energy technologies. Collaboration with energy companies can help connect research and education with practical sector needs. Reporting the partners involved, audiences reached, and follow-up projects would help demonstrate how these activities contribute to wider energy-transition efforts.