

SDG 9: Industry, Innovation and Infrastructure

Progress Report

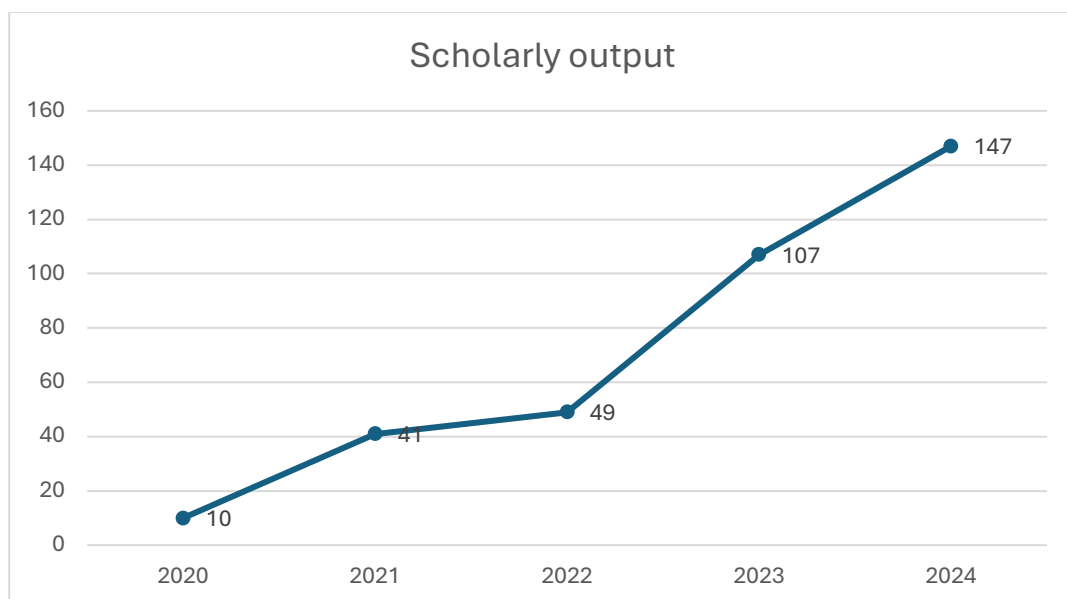
2024 - 25

Introduction

JGU supports SDG 9 by combining campus-level infrastructure investments, applied research, and convening power to promote resilient infrastructure, technology-driven learning, and circular-economy practices. The university's sustainable-infrastructure priorities — renewable energy rollouts, digital research centres, and organised e-waste handling — are presented as institutional commitments that translate into measurable outcomes for industry-academia collaboration and local innovation capacity.

1. Scholarly Output

The scholarly output linked to SDG 9 has risen sharply from 10 publications in 2020 to 147 in 2024. This strong upward trend shows how JGU is deepening its research focus on innovation, infrastructure, and technology-driven development, reinforcing its long-term commitment to SDG 9.



2. Campus infrastructure that advances resilient, low-carbon systems

JGU has invested substantially in on-site solar photovoltaic systems (total on-site capacity reported as 2 MW) and installed large rooftop systems at key campus entry points and the Naveen Jindal Sports Academy. These installations reduce fossil-fuel dependency and demonstrate an institutional move toward resilient, decarbonised infrastructure.

The university has adopted GHG Protocol accounting for Scope 1 and Scope 2 reporting and is progressing on Scope 3 quantification. The calculation of Scope 3 emissions is a governance step that ties infrastructure investment to measurable climate outcomes for JGU. The university has seen about 45% reduction in Scope 1 & 2 emissions year-on-year, signalling tangible returns from infrastructure and operational changes.

3. Digital and research infrastructure for innovation

JGU hosts research centres that explicitly target SDG-aligned innovation, including centres focussed on digital circular economy and environmental sustainability. These centres channel funding, student projects, and faculty collaborations that translate academic insight into pragmatic innovations for industry and public policy.

JGU dedicated research funding (reported figure \$629,961) for research based on SDGs which supports applied projects, fellowships, and interdisciplinary programmes that drive technological and process innovations relevant to infrastructure and industry transitions.

4. Circular economy and responsible materials management (link to industry & innovation)

JGU led campus e-waste drives, established permanent collection points, and signed partnerships/MOUs to ensure safe recycling and material recovery. This creates a campus-level closed-loop practice that can be scaled up through industry partners and teaches practical resource-management approaches to students.

Student groups (e.g., ReNew Earth under the Millennium Fellowship) are converting classroom learning into operational proposals. These groups take practical steps towards circular infrastructure and local industry by linking segregation, composting, and e-waste collection systems.

5. Convening power, partnerships and capacity building for industry links

JGU was the lead host university for APAIE 2025 which the university used to showcase research, facilitate multi-stakeholder dialogues on sustainable infrastructure, and build partnerships across academia, industry and policy circles. Hosting APAIE highlights JGU's role as a hub for cross-sectoral networks that can accelerate SDG-9 innovation pathways.

The institution seeks partner MOUs (e.g., e-waste partner, research collaboration frameworks) and to host cross-disciplinary events that link industry needs to academic research outputs. These relationships create routes for technology transfer and applied R&D.

6. Teaching and skills development that feed innovation ecosystems

JGU integrates SDG themes into electives and short programmes; the Jindal School of Environment & Sustainability recently launched online MSc programmes and professional courses that include technology, geoinformatics, AI, environmental compliance, and circular economy modules. The program directly links nuances of sustainability to build local innovation and skilled labour for resilient infrastructure projects.

Initiatives such as the Millennium Fellowship allow students to design projects with industry applications, this experiential learning is a pipeline for entrepreneurial and technical skills that industry needs.

Conclusion

JGU's work toward SDG 9 shows a clear, coordinated effort to strengthen innovation, infrastructure, and industry readiness across the institution. The steady rise in scholarly output, combined with major investments in renewable energy systems, digital research centres, and circular-economy practices, reflects a university that treats sustainable infrastructure as both an operational priority and an academic responsibility. By hosting global platforms like APAIE, building strategic partnerships, and integrating technology-focused learning across programmes, JGU positions itself as a catalyst for ideas, skills, and solutions that support resilient development. What emerges is a campus that not only models sustainable systems internally but also equips students, researchers, and partners with the tools to drive broader transformation.