1. Sustainable Energy & Smart Grids (SDG 7: Affordable and Clean Energy)
IEEE 1547: Standard for Interconnecting Distributed Energy Resources with Electric Power Systems –
Supports the integration of renewable energy sources like solar and wind into the grid.
IEEE 2030: Guide for Smart Grid Interoperability – Helps design smart grids for sustainable energy
distribution.
IEEE 2413: Standard for an Architectural Framework for the Internet of Things (IoT) – Supports smart
energy management and efficient resource utilization.

2. Climate Action & Environmental Sustainability (SDG 13: Climate Action)
IEEE 1680.1: Standard for Environmental and Social Responsibility Assessment of Computers and
Displays – Promotes sustainable electronic product design.
IEEE 1621: Standard for Energy Efficiency of Electronic Devices – Focuses on reducing energy
consumption in consumer electronics.
IEEE P7010: Well-being Metrics Standard for Ethical Artificial Intelligence and Autonomous Systems
– Ensures AI applications support sustainable development.

3. Smart Cities & Sustainable Infrastructure (SDG 11: Sustainable Cities and Communities)
IEEE 802.11ah: Low Power Wi-Fi for Smart Cities – Supports energy-efficient communication
networks for smart cities.
IEEE 1901: Broadband over Power Line Networks – Enhances energy efficiency and smart grid
communication.
IEEE 2784: Guide for Smart City Operational Models – Helps cities integrate technology for
sustainability.

4. Ethical AI and Technology for Good (SDG 9: Industry, Innovation, and Infrastructure)
IEEE 7000 Series (AI Ethics Standards):
IEEE 7001: Transparency of Autonomous Systems – Ensures ethical deployment of AI and automation.
IEEE 7002: Data Privacy Process – Supports responsible handling of data for sustainable development.
IEEE 7006: Personal AI Agent Standard – Helps AI applications align with human values and
sustainability.

**5. Circular Economy & Sustainable Manufacturing (SDG 12: Responsible Consumption and
Production)**
IEEE 1680.2: Standard for Environmental Leadership Assessment of Imaging Equipment – Encourages
sustainable design of printers and scanners.
IEEE 1149.1: Standard for Testing and Diagnosing Electronics – Helps reduce electronic waste by
enabling repairability and extended product life.

6. Health and Well-being through Technology (SDG 3: Good Health and Well-being)
IEEE 11073: Standards for Medical Device Communication – Supports interoperability of medical
devices to improve global healthcare access.
IEEE 802.15.6: Wireless Body Area Networks (WBAN) – Enhances healthcare monitoring and
telemedicine applications.