Session Outcome Document

Intergenerational Dialogue on Technology for Innovation and Global Resilience: Strategies for Ethical AI, Digital Inclusion, and Climate Action

IEEE

July 7th, 2025, Monday, 15:00–15:45 (UTC+02:00)

https://www.itu.int/net4/wsis/forum/2025/Agenda/Session/273

Key Issues discussed: Looking Beyond 2025 (5–8 bullet points highlighting achievements, emerging trends, challenges in 20 years, figures, success stories and opportunities for WSIS beyond 2025)

- **Human-Centricity in Technological Advancement:** The session centred on how AI and robotics offer significant innovation potential but pose ethical risks and workforce disruption, demanding a balanced approach.
- **Redefining Success Metrics:** Emphasis on the need for verifiable metrics to assess AI's societal and environmental impact, aligning with the EU AI Act and IEEE's AIE+ Framework.
- **Strong Sustainability by Design:** Highlighted strategies to embed circularity at all stages, from design to disposal, supported by IEEE Planet Positive 2030 standards and initiatives.
- **Bridging Data Gaps:** Discussed gaps between domain experts and data scientists in AI-driven climate tech, stressing open, equitable access through IEEE DataPort and new climate resilience roadmaps.
- **Youth-Led Innovation:** The panel showcased how youth councils and young professionals contribute to co-creating trustworthy AI standards, fair data practices, and climate-focused tech solutions.
- **Emerging Trends:** Use of modular design, blockchain-based impact tracking, and grassroots community solutions to expand ethical AI and digital inclusion globally.
- **Workforce of the Future:** Addressed reskilling for AI-disrupted sectors, creating human-centred tech roles and aligning AI deployment with community needs.
- **Call for "Net-Positive Tech":** Envisioned a measurable shift where technology's societal benefits demonstrably outweigh its environmental costs.

Strategic Framework Pillars discussed:

1. **Strong Sustainability by Design:**
    - Embed circular design principles at every stage, from manufacturing to disposal.
    - Mandate full lifecycle analyses.
    - Scale through UNIDO/IRENA partnerships bridging local and global actions.
2. **Accountable Sustainability:**
    - Apply AI Trust Alliance standards covering safety, security, literacy, and ethics.
    - Develop robust industry certification protocols.
    - Implement transparent ethical impact audits.

3. **Grassroots Engagement:**
    - Promote community-led technological solutions with modular scalability.
    - Prioritize empathetic human-robot interfaces, particularly in sensitive sectors like healthcare.
    - Build ecosystems with incentives for shared value.

Tangible Outcomes of the session

Key Achievements:

- Clear roadmap for redefining AI success metrics aligned with the EU AI Act and IEEE's AIE+ Framework.
- Integration of sustainability by design through the IEEE Planet Positive 2030 Initiative and relevant standards such as IEEE P7100 and the IEEE 7000 series.
- Addressed practical gaps in data governance for climate resilience via IEEE DataPort, bridging experts and innovators.

Announcements & Launches:

- Launch of an IEEE Working Group dedicated to defining cross-sector AI sustainability KPIs by October 2025.
- Rollout of pilot tech hubs in Costa Rica, Turkey, and Dominica to support grassroots-led, circular innovation and inclusive climate solutions.

Agreements & Commitments:

- Multi-stakeholder commitment to adopt blockchain-based impact tracking for credible sustainability metrics.
- Ongoing engagement through local IEEE Planet Positive Communities Committees to pilot transdisciplinary projects in cities like Miami and Cali, Colombia.

Key Recommendations and Forward-Looking Action Plan for the WSIS+20 Review and Beyond (2–5 bullet points presenting concrete actions and guidance to inform the WSIS+20 Review by UNGA and build the multistakeholder vision of WSIS beyond 2025)

- **Transform Metrics & Accountability:** Establish globally harmonized, verifiable frameworks for ethical AI impact and sustainability performance.
- **Expand Grassroots Tech Networks:** Scale modular tech hubs and community-driven solutions by leveraging open data and shared standards.
- **Mobilize Industry Standards:** Embed "design for circularity", "design for manufacturing", "design for test" and "design for reliability" as minimum requirements for responsible AI innovation.
- **Strengthen Intergenerational Collaboration:** Institutionalize youth participation in AI governance, policy co-creation, and ethical audits.
- **Pursue Net-Positive Technology:** Drive toward measurable "net-positive tech" outcomes where benefits to society clearly outweigh risks, anchored in strong sustainability by design.