SCIENCE, TECHNOLOGY & INNOVATION

SOLUTIONS BOOK

11TH STI FORUM

Science, Technology & Innovation for the Sustainable Development Goals

6 - 7 May 2026 | UNHQ, New York

United Nations | Department of Economic and Social Affairs

Acknowledgments

This Solutions Book was prepared by the Division for Sustainable Development Goals of the United Nations Department of Economic and Social Affairs (UN DESA) in connection with the 11th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals (STI Forum) and the 2026 Call for Innovations for the SDGs.

The Call for Innovations was co-convened by **UN DESA** and the **Youth Science-Policy Interface (SPI) Platform** of the **Major Group for Children and Youth (MGCY)**, in partnership with **Engineering for Change** and the **ASME Innovation Showcase (ISHOW)**.

UN DESA expresses its sincere appreciation to all innovators and partners who contributed to this initiative, especially those who responded to the Call. Their submissions and engagement made this publication possible and helped highlight innovative solutions supporting progress on the Sustainable Development Goals.

Prepared by the Division for Sustainable Development Goals, UN DESA (publication development, principal editing and design by Ola Göransson; drafting support by Wei Liu; editorial and process support by Meng Li, Xinyi Zhang, Nyu Wang and Yirui Ding; and guidance and revisions by Astra Bonini; with analytical inputs provided by Engineering for Change, ASME ISHOW, and the Youth Science-Policy Interface Platform / Major Group for Children and Youth).

The cover image and images on pages 12 and 23 were generated using artificial intelligence.

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Disclaimer

Foreword

Science, technology and innovation are essential to accelerating progress on the Sustainable Development Goals. At a time when the world faces interconnected challenges across water, energy, infrastructure, cities and partnerships — the Goals under review at the 2026 High-level Political Forum — the need for practical, inclusive and scalable solutions has never been more urgent.

The 11th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals (STI Forum), convening on 6 and 7 May 2026 at United Nations Headquarters in New York, provides a vital platform to strengthen dialogue, share knowledge and foster collaboration among governments, the United Nations system, scientists, innovators, civil society and the private sector.

This STI Solutions Book embodies that shared commitment. The innovations featured here, selected from over 900 submissions received through a global call for innovations co-convened by the UN Department of Economic and Social Affairs (UN DESA), the Major Group for Children and Youth, Engineering for Change, and ASME ISHOW, demonstrate how diverse actors are applying creativity, technical knowledge and partnership to address real-world challenges. From e-waste recycling in Zambia and bio-inspired water robots in China to solar energy solutions in Argentina and community-based renewable energy hubs in Nigeria, these innovations showcase high-impact, locally grounded technologies that can be scaled for global impact. The innovations presented in this publication also point to broader lessons. They remind us that innovation is most effective when paired with collaboration, local ownership and clear pathways to scale.

As the Co-Chairs of this year's STI Forum have emphasized, the private sector is not an add-on, it is essential. We need the ingenuity, investment and implementation capacity of business to help take solutions like these to scale.

I wish to extend my sincere gratitude to the 10-Member Group of High-level Representatives and the UN Interagency Task Team on STI for the SDGs (IATT) for their support.

I commend all innovators, partners and contributors who made this Solutions Book possible and hope this publication will inspire further dialogue, collaboration and action to advance the Sustainable Development Goals and support a more sustainable, equitable and resilient future for all.

Li Junhua
Under-Secretary-General for Economic and Social Affairs
United Nations

United Nations | Department of Economic and Social Affairs

Content

10 FEATURED INNOVATIONS + **50** ADDITIONAL INNOVATIONS

Background

As part of preparations for the **11th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals (STI Forum)**, the United Nations launched a **Call for Innovations for the SDGs** to identify breakthrough and scalable solutions that can help accelerate progress toward the 2030 Agenda, particularly in low-resource settings. The 2026 Call was aligned with the STI Forum theme, "*Transformative, equitable and coordinated science, technology and innovation for the 2030 Agenda and a sustainable future for all*" and focused on innovations contributing to SDG 6, SDG 7, SDG 9, SDG 11 and SDG 17, the Goals under review at the 2026 High-level Political Forum on Sustainable Development.

The Call was announced on the 2026 STI Forum website and widely circulated through outreach to partners and stakeholder networks. Young innovators, early-stage solution developers, and underrepresented groups, including women and Indigenous innovators, were especially encouraged to participate.

The Call was co-convened by the United Nations Department of Economic and Social Affairs (UN DESA) and the Youth Science-Policy Interface (SPI) Platform of the Major Group for Children and Youth (MGCY), in partnership with Engineering for Change, ASME Innovation Showcase (ISHOW) and other collaborators.

By the deadline, the Call had received over **900 applications** from around the world, including a strong representation from developing countries and a significant number from Africa. The submissions reflected a wide range of technologies, business models and service innovations addressing urgent sustainable development challenges in areas such as water, energy, infrastructure, urban resilience and partnerships.

Following an initial screening and review process, a shortlist of 30 innovations was identified. From this shortlist, the United Nations Group of **10 High-level Representatives of Civil Society, Private Sector and Scientific Community to Promote Science, Technology and Innovation for the SDGs (10-Member Group)** made the final selection of 10 featured innovations. 30 additional innovations were identified by the partners in recognition of their relevance, quality and potential contribution to SDG progress.

Together, the **60 innovations** presented in this **STI Solutions Book** offer a snapshot of emerging science, technology and innovation approaches that are helping to address complex and interconnected development challenges. They demonstrate the breadth of creativity, practical problem-solving and partnership needed to accelerate implementation of the Sustainable Development Goals in the years leading to 2030 and beyond.

STI FORUM

Science, Technology & Innovation for the Sustainable Development Goals

Insights from the Call

The 2026 Call received 924 submissions from 98 countries - with the **top 60 innovations** included in this publication.

The Call especially encourages young innovators from the Global South, women and Indigenous innovators, whose perspectives and leadership are essential for inclusive and sustainable development.

924 Total submissions

98 countries represented

51% Youth-led ventures

33% Women-led ventures

The Call was linked to the **SDGs under review at the 2026 High-level Political Forum.**

Benefits of participation

GLOBAL EXPOSURE

Visibility with UN Member States, researchers, funders, and development organizations.

NETWORKING & COLLABORATION

Direct relationships with potential collaborators, plus access to capacity-building on communication and intellectual property

KNOWLEDGE EXCHANGE

Opportunities to showcase solutions through STI Forum sessions and connect with participants at UN Headquarters.

The coalition behind the Call

UN DESA

The STI Forum is organized by the UN interagency task team on STI for the SDGs (IATT), convened by UN-DESA and UNCTAD, and the 10-Member Group of high-level representatives appointed by the Secretary General.

United Nations | Department of Economic and Social Affairs

ENGINEERING FOR CHANGE

E4C prepares and connects engineers, technologists and global development practitioners, and supports the process through the open call platform and expert review.

engineering FOR CHANGE

ASME ISHOW

The American Society of Mechanical Engineers' Innovation Showcase brings design and engineering review, prototyping support and a global network ofexperts familiar with the manufacturing industry to hardware-led ventures.

ASME | ISHOW

YOUTH SPI / MGCY

The Youth Science-Policy Interface Platform and the UN Major Group for Children and Youth ensure youth voice is central to the Call and bring young innovators into Member State decision-making spaces.

YOUTH SPI PLATFORM
Science Policy Interface

Inside the submissions

Who is building the next wave of SDG solutions?

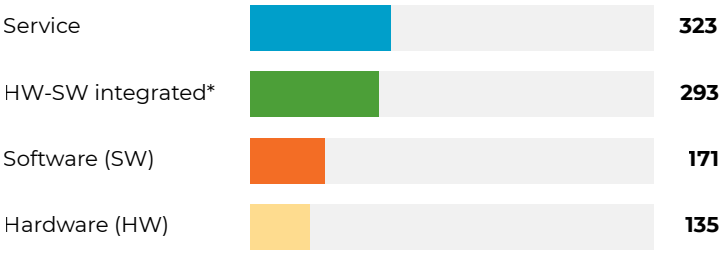
The 2026 Call received 924 eligible submissions from 98 countries, a 173% increase from the previous year. The snapshot below highlights where innovators are based, what they are building, and how mature their solutions are.

WHAT THE GEOGRAPHY TELLS US
Solutions are increasingly being built where they are needed most

Africa accounts for 58% of submissions and **Asia for 22%**, reflecting both the scale of SDG challenges and the strong role of local innovators in designing context-fit solutions. While submissions came from **98 countries,** the distribution also highlights the need for stronger outreach in underrepresented regions, particularly **Small Island Developing States**.

Type & maturity of solutions

Solution type



Stage of development

36%	32%	32%
329 Concept (TRL 1-3)	**297** Prototype (TRL 4-6)	**296** Pilot / deployed (TRL 7-9)

**HW-SW integrated refers to solutions that combine hardware and software components.*

Geographic distribution

Region	Submissions	% of total
Africa		535 | 58%
Asia		202 | 22%
North America		54 | 6%
Europe		44 | 5%
Latin America & Caribbean		34 | 4%
Oceania		8 | 1%
Not specified		47 | 5%

Top countries	
Nigeria	92
Kenya	90
Tanzania	75
China	69
United States	51
Uganda	40
India	40
Ghana	34
Pakistan	21
South Africa	17

Themes across the submissions

Five themes recur across the 924 submissions. They reflect a way of working: building close to users, integrating disciplines, and sharing risk with communities. Many solutions sit in more than one theme.

Why this matters - These themes describe how, not just what

Across all five themes, the same pattern emerges: build close to users, integrate disciplines, and design for continuity rather than one-off deployment. This is what scalable solutions in low-resource settings look like in practice.

1	AI-enabled local services (SDG 9) **~28% of submissions reference AI / ML**	Submissions deploy lightweight AI for low-bandwidth, multilingual and offline contexts: pest and pollinator detection for smallholder farmers, local-language tutoring and assistive learning, water- and air-quality sensing, and SME finance tools. The pattern is clear: models are designed to work close to the user and alongside existing services.
2	Distributed clean energy as social infrastructure (SDG 7) **~15% leverage solar / off-grid energy**	Solar mini-grids, modular kits and second-life batteries are deployed less as standalone products than as enablers of clinics, schools, irrigation and community water systems. Energy is increasingly bundled with services, reducing upfront barriers for low-income users.
3	Circular hardware, locally manufactured (SDG 11) **~14% are circular-economy or waste-to-value**	Many hardware solutions combine local fabrication and vocational training with waste-to-value models, turning plastic, biomass, used oil and e-waste into building materials, fuel, vehicles and sanitation infrastructure. Circularity appears as a practical manufacturing and job-creation strategy.
4	Water and sanitation, governed by communities (SDG 6) **14% target water, sanitation or hygiene**	Decentralized water solutions combine engineering with community-owned operations and maintenance: solar pumps, IoT-monitored filtration, low-cost shelters and other locally managed systems. Many submissions move beyond devices to invest in local governance, training and long-term service models.
5	Youth-led, women-co-led teams **51% youth-led / 33% women-led / 9% Indigenous-led**	Leadership patterns across the cohort are striking: 473 submissions identify as youth-led, 218 as women-led, and 81 as led by Indigenous innovators. These teams often cluster in agriculture, health, education and water, and frequently emphasize co-design, training and locally owned scale-up.

Lessons Learned

The **top 60 innovations** show how science, technology and innovation are being applied to address urgent sustainable development challenges through practical, inclusive and scalable solutions.

60 **INNOVATIONS** selected from over 900 submissions

Diverse mix of **HARDWARE** **SOFTWARE** **SERVICES**

Contributing to **12 SDGs** with strong focus on Goal 6,7,9,11 & 17

From **PROTOTYPES** to **DEPLOYED SOLUTIONS**

6 LESSONS FROM 60 INNOVATIONS

CIRCULAR & REGENERATIVE SOLUTIONS

Many innovations turn waste into value, including e-waste, plastics, agricultural residues and industrial by-products. These approaches reduce pollution, improve resource efficiency, and create new economic opportunities.

DIGITAL TECHNOLOGIES AS ENABLERS

Artificial intelligence, Internet of Things (IoT), data platforms and geospatial tools are helping deliver real-time insights, predictive analytics and more efficient services across sectors such as water, energy, mobility and governance.

INCLUSIVE & COMMUNITY-CENTERED

Many innovations respond to the needs of underserved communities, women entrepreneurs, informal workers and smallholder farmers. They expand access to essential services while also creating livelihoods and strengthening local ownership.

BRIDGING SYSTEMIC GAPS

Beyond technology, many solutions address broader barriers such as fragmented systems, weak coordination, financing constraints, limited data access and low institutional capacity.

FOCUS ON ESSENTIAL SYSTEMS

Water, energy, cities and core infrastructure feature prominently across the portfolio, reflecting urgent needs for access, resilience and environmental sustainability.

BUILT FOR PARTNERSHIP & SCALE

Many innovations are designed in collaboration with communities, public institutions, local operators and other partners, increasing their potential for adoption and scale. Across stages of development, innovators face common barriers, including financing, policy support and market access.

6

Clean water and sanitation

The innovations under SDG 6 demonstrate a strong shift toward decentralized, nature-based, and digitally enabled water solutions that improve both access and quality. From bio-based treatment methods that remove heavy metals and repurpose agricultural waste, to solar-powered purification systems and smart water kiosks, these solutions address the full water cycle - from treatment and distribution to reuse. AI and Internet of Things (IoT) are increasingly leveraged for real-time monitoring, early contamination detection, and climate-health forecasting, enabling proactive responses to waterborne risks.

Several innovations emphasize circularity, transforming waste streams into resources such as biochar or biocoagulants, while others strengthen governance through community-led management and sustainable financing models. Importantly, many solutions prioritize affordability, local manufacturability, and inclusive service delivery, particularly in underserved and climate-vulnerable contexts. Together, these approaches enhance resilience to climate impacts, reduce pollution, and ensure safer, more reliable water access for communities most at risk.

Based on **16 innovations** contributing to Goal 6

7

Affordable and Clean Energy

SDG 7 innovations highlight the rapid evolution of decentralized, circular, and inclusive energy systems designed to expand access while reducing environmental impact. Solutions range from solar technologies optimized for affordability and rapid deployment, to energy systems built from recycled materials such as e-waste batteries and plastic components. Several innovations integrate energy access with productive uses - linking solar power to agriculture, healthcare, and local enterprise development - thereby enhancing livelihoods and system sustainability.

Digital tools, including geospatial platforms and IoT-based energy management systems, support smarter planning and efficient consumption. Notably, many initiatives embed circular economy principles, repurposing waste into energy assets and reducing embodied carbon in infrastructure. Others prioritize inclusivity, such as programs strengthening women's participation in clean energy transitions. Collectively, these innovations demonstrate how clean energy solutions can simultaneously address energy poverty, reduce emissions, and unlock broader socio-economic benefits across sectors.

Based on **13 innovations** contributing to Goal 7

9

Industry, innovation and infrastructure

Innovations under SDG 9 reflect a growing emphasis on resilient, inclusive, and digitally enabled infrastructure systems. Many solutions leverage AI, IoT, and data platforms to modernize industries, improve efficiency, and enhance transparency - from digital financial tools for SMEs and cooperative systems to real-time monitoring platforms for infrastructure and healthcare quality. Circular economy approaches are also prominent, transforming waste streams into valuable industrial inputs such as bio-fertilizers, eco-cement, and biodegradable materials.

Several initiatives address structural gaps in low-resource settings by offering low-cost, modular, and open-source technologies that avoid vendor lock-in and enable local adaptation. Others focus on strengthening market access and value chains, particularly for underserved groups such as rural artisans and small enterprises. Across sectors, these innovations prioritize scalability, interoperability, and sustainability, demonstrating how technology and new business models can drive industrial transformation while reducing environmental impact and expanding economic opportunity.

Based on **25 innovations** contributing to Goal 9

11

Sustainable Cities and Communities

The SDG 11 solutions focus on making cities more inclusive, resilient, and environmentally sustainable through integrated, community-centered approaches. Waste management innovations feature prominently, combining digital platforms, incentive systems, and circular economy models to improve recycling rates, reduce pollution, and formalize informal workers. Smart mobility and clean transport solutions contribute to lowering urban emissions, while AI-powered risk management and disaster assessment tools enhance preparedness and response to climate-related hazards.

Several innovations emphasize accessibility and inclusivity, such as low-tech solutions that enable participation without smartphones or literacy barriers. Others address urban service delivery gaps through decentralized systems for water, sanitation, and air quality monitoring. A common thread is the use of technology not as an end in itself, but as an enabler of better governance, citizen engagement, and data-driven decision-making. Together, these approaches support cities in becoming more adaptive, equitable, and sustainable in the face of rapid urbanization and climate pressures.

Based on **12 innovations** contributing to Goal 11

17

Partnerships for the Goals

SDG 17 innovations underscore the critical role of data, transparency, and digital platforms in strengthening collaboration across sectors and geographies. Several solutions focus on democratizing access to information - such as open databases of sustainability reports and global knowledge ecosystems - reducing barriers for stakeholders in low-resource settings. Others enhance coordination and accountability by integrating donors, communities, and implementing organizations into unified digital systems that track funding, participation, and impact in real time.

Advanced analytical tools, including AI-driven policy mapping, help identify gaps, overlaps, and opportunities for more coherent and aligned action. Civic engagement platforms also amplify community voices, particularly in underserved or crisis-affected contexts, ensuring that local perspectives inform decision-making. Across these innovations, the emphasis is on building trust, improving visibility, and enabling more effective partnerships through shared data and interoperable systems - ultimately accelerating collective progress toward the SDGs.

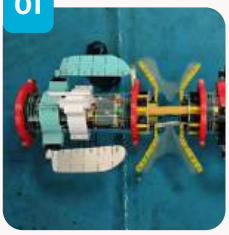
Based on **7 innovations** contributing to Goal 17

10 Featured Innovations

The following ten innovations were selected from over 900 global submissions. After an initial review and a shortlist of 30, the final selection was made by the United Nations Group of **10 High-level Representatives** of Civil Society, Private Sector and Scientific Community to Promote Science, Technology and Innovation for the SDGs (10-Member-Group).

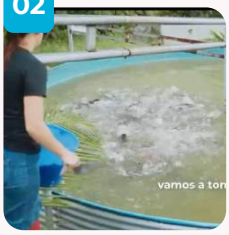
LISTED ALPHABETICALLY

01



AquaSentinel

02



BioDrop

03

Charcops Wetlands

04

Plstka

05

RE-HUB (Renewable Energy Hub) Model

06

SmartPod Water-Retaining Alginate Beads

07

SORA Health Intelligence Room

08

Sustainability Reports

09

The Solar Sheet

10

Yaaka E-Waste Recycling Plant

AquaSentinel

FEATURED

SUMMARY

- AquaSentinel is a bio-inspired robotic system designed to monitor water quality without disturbing sensitive environments. It addresses a critical challenge where traditional high-speed robots disrupt toxic sediments, compromising the ecosystems they are intended to protect.
- Using proprietary neural networks and bionic fin technology, AquaSentinel achieves “stealth stability,” enabling zero-disturbance operation. It allows for highly precise leak detection and pollution tracing in protected reservoirs, replacing hazardous manual inspections with a safer and more cost-effective digital solution.

KEY INFORMATION

China

Hardware

sealmaybe.github.io/AquaSentinel/

AT A GLANCE

- Zero-disturbance monitoring
- AI-powered navigation
- Micron-level detection
- Replaces manual diving

SDGs IN FOCUS

6 CLEAN WATER AND SANITATION

VIDEO

WATCH

Link to video
https://www.youtube.com/watch?v=XeyH5Epz1_0

INNOVATION IN ACTION

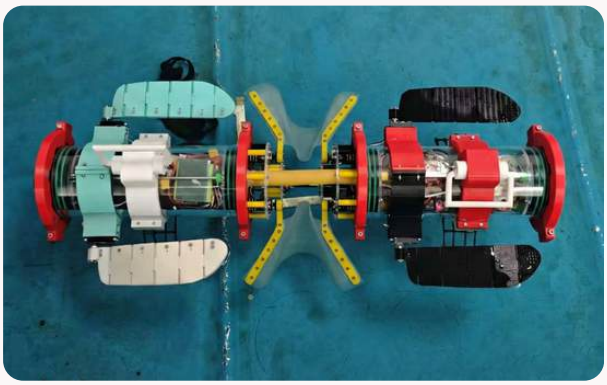


Photo credit: AquaSentinel

BioDrop

FEATURED

SUMMARY

- BioDrop is a circular biotechnology solution that transforms citrus waste into bio-based coagulants for treating industrial wastewater. It addresses the growing challenge of heavy metal contamination by achieving over 95% removal efficiency while reducing treatment costs compared to conventional chemical alternatives.
- By enabling compliant discharge and repurposing agricultural waste, BioDrop supports more sustainable industrial practices. Beyond remediation, treated water contributes to ecosystem restoration in mining-impacted watersheds, strengthening environmental resilience.

KEY INFORMATION

Peru

Hardware

AT A GLANCE

- 95%+ metal removal
- 40% lower treatment costs
- Uses citrus waste
- Enables ecosystem restoration

SDGs IN FOCUS

6 CLEAN WATER AND SANITATION

INNOVATION IN ACTION

Photo credit: BioDrop

Charcops Wetlands

FEATURED

SUMMARY

- Charcops Wetlands is a nature-based solution that repurposes agricultural waste into biochar and integrates it into solar-powered wetland systems for treating household wastewater. The system enables safe water reuse for irrigation, reducing pressure on limited freshwater resources.
- By enhancing soil health and improving farm yields through optimized biochar, the solution supports sustainable agriculture while strengthening sanitation and water management. Its low-cost, decentralized design makes it well-suited for local communities, contributing to climate resilience and resource efficiency.

KEY INFORMATION

Ghana

Service

gteg.net

AT A GLANCE

- Uses agricultural waste (biochar)
- Solar-powered treatment system
- Enables water reuse for irrigation
- Improves soil health and yields

SDGs IN FOCUS

6 CLEAN WATER AND SANITATION

VIDEO

WATCH

Link to video
https://www.youtube.com/watch?v=hw68AV1fzo0

INNOVATION IN ACTION

Photo credit: Charcops Wetlands

Plstka

FEATURED

SUMMARY

- Plstka is a digital waste management platform that combines a gamified mobile application with an AI-powered enterprise system to improve recycling and waste collection. By rewarding users for sorting and recycling waste, it encourages behavioral change while increasing material recovery at the community level.
- The platform also integrates a comprehensive system for managing the waste value chain, enabling more efficient collection, tracking, and processing. By connecting users, collectors, and operators, Plstka strengthens urban waste management systems and supports more sustainable and inclusive cities.

KEY INFORMATION

Egypt

Software

plstka.com/en

AT A GLANCE

- Gamified recycling incentives
- AI-powered system
- Optimizes waste supply chains
- Increases recycling participation

SDGs IN FOCUS

11 SUSTAINABLE CITIES AND COMMUNITIES

INNOVATION IN ACTION

Photo credit: Plstka

RE-HUB (Renewable Energy Hub) Model

FEATURED

SUMMARY

- The RE-HUB Model is a community-based solution that converts electronic waste into affordable solar energy systems for underserved and off-grid communities. By integrating e-waste collection, safe battery refurbishment, and decentralized solar deployment, it expands access to clean and reliable energy.
- Through locally managed hubs, the model reduces environmental pollution while creating circular value from discarded materials. It strengthens energy access, supports community resilience, and promotes sustainable, low-cost electrification in resource-constrained settings.

KEY INFORMATION

Nigeria

Hardware

revnics.com.ng

AT A GLANCE

- Converts e-waste
- Supports off-grid communities
- Enables local hub-based deployment
- Reduces pollution and costs

SDGs IN FOCUS

VIDEO

WATCH

Link to video
https://www.youtube.com/watch?v=JP8fl2JrLtA

INNOVATION IN ACTION

Photo credit: RE-HUB

SmartPod Water-Retaining Alginate Beads

FEATURED

SUMMARY

- SmartPod Water-Retaining Alginate Beads are biodegradable hydrogels designed to improve water efficiency in agriculture. Capable of absorbing up to 100 times their weight in water, they release moisture gradually to plant roots during dry periods, helping to reduce water loss and maintain soil hydration.
- The solution supports smallholder farmers in drought-prone areas by stabilizing crop yields and improving soil conditions. Enhanced with mineral ions and beneficial microbes, the beads promote soil health while offering a low-cost, locally manufacturable approach to strengthening agricultural resilience.

KEY INFORMATION

South Africa

Service

AT A GLANCE

- Absorbs up to 100× its weight in water
- Releases moisture gradually to crops
- Improves soil moisture and yields
- Supports drought resilience

SDGs IN FOCUS

6 CLEAN WATER AND SANITATION

VIDEO

WATCH

Link to video
https://www.youtube.com/watch?v=AfdC1CLvPM8

INNOVATION IN ACTION

Photo credit: Plstka

SORA Health Intelligence Room

FEATURED

SUMMARY

- SORA Health Intelligence Room is an AI-driven platform that anticipates climate-related health risks, particularly diarrheal disease outbreaks linked to flooding and water contamination. By combining weather forecasts, flood modeling, and hydrological analysis, it provides early warnings to support preventive action and targeted WASH (water, sanitation and hygiene) planning.
- The platform also supports long-term resilience by enabling cities to assess urban development plans under future climate scenarios. By integrating health risk intelligence into planning processes, it helps strengthen climate-adaptive and health-responsive urban systems.

KEY INFORMATION

Kenya

Software

sora-technology.com/en

AT A GLANCE

- AI-based health risk forecasting
- Early warning for disease outbreaks
- Supports WASH planning
- Enables climate-resilient urban planning

SDGs IN FOCUS

6 CLEAN WATER AND SANITATION

VIDEO

WATCH

Link to video
https://www.youtube.com/watch?v=lDAYzLMrm98

INNOVATION IN ACTION

Photo credit: SORA Health Intelligence Room

SustainabilityReports

FEATURED

SUMMARY

- SustainabilityReports.com is a global, open-access database that provides free access to corporate sustainability reports. By centralizing information that is often fragmented, costly, or restricted by proprietary platforms, it enables broader access to data on companies' sustainability performance and contributions to the Sustainable Development Goals.
- The platform supports a wide range of users, including NGOs, researchers, and students, particularly in low-resource settings where access to such information is often limited. By improving transparency and accessibility, it strengthens data-driven decision-making and supports more inclusive collaboration toward sustainable development.

KEY INFORMATION

Global

Software

www.sustainabilityreports.com

AT A GLANCE

- Open-access sustainability database
- Centralizes corporate sustainability reports
- Free access to global data
- Supports research and collaboration

SDGs IN FOCUS

17 PARTNERSHIPS FOR THE GOALS

INNOVATION IN ACTION

Photo credit: www.sustainabilityreports.com/

VIDEO

WATCH

Link to video:
https://www.youtube.com/watch?v=CoTF2XIEZGQ

The Solar Sheet

FEATURED

SUMMARY

- The Solar Sheet accelerates renewable energy adoption by drastically reducing installation time and costs through its lightweight, 'plug-and-play' BIPV design.
- By replacing energy-intensive aluminum and glass with recycled polymers, our solution is 80% lighter than traditional systems and reduces embodied carbon. This enables rapid and low-cost solar integration for industrial sectors and rural communities that previously lacked the budget or structural capacity for conventional infrastructure.

KEY INFORMATION

Argentina

Hardware

www.hdfotovoltaica.com

AT A GLANCE

- Lightweight design (80% lighter)
- Plug-and-play installation
- Uses recycled materials
- Reduces embodied carbon

SDGs IN FOCUS

7 AFFORDABLE AND CLEAN ENERGY

VIDEO

WATCH

Link to video
https://www.youtube.com/watch?v=H6Re16dKG_s

INNOVATION IN ACTION

Photo credit: The Solar Sheet

Yaaka E-Waste Recycling Plant

FEATURED

SUMMARY

- Yaaka's innovation is Zambia's first formal e-waste recycling plant, designed to safely manage electronic waste and address its growing accumulation in communities and landfills. Through structured collection, material recovery, and responsible processing, it improves how e-waste is handled across urban environments.
- The initiative also promotes public awareness and encourages proper disposal practices. By reducing pollution, protecting public health, and advancing circular economy approaches, it contributes to more sustainable and resilient cities.

KEY INFORMATION

Zambia

Hardware

yaakainvestmentlimited.wuaze.com

AT A GLANCE

- E-waste recycling system
- Structured collection and processing
- Promotes safe disposal practices
- Reduces urban pollution

SDGs IN FOCUS

11 SUSTAINABLE CITIES AND COMMUNITIES

VIDEO

WATCH

Link to video
https://www.youtube.com/watch?v=6mjVrNBwPzk&feature=youtu.be

INNOVATION IN ACTION

Photo credit: Yaaka E-Waste Recycling Plant/

Additional Innovations

The 50 additional innovations featured in this publication were identified through the 2026 Call for Innovations for the SDGs in recognition of their relevance, quality and potential contribution to sustainable development, including across the SDGs under review at the 2026 High-level Political Forum.

A COLLECTION OF

50

ADDITIONAL INNOVATIONS

Showcasing bold ideas from around the world accelerating progress towards the SDGs.

More ideas. More progress. More impact.

We invite you to explore **50 additional innovations**.

Listed **alphabetically** on pages **27 - 43**

01

Advancing SDGs through Social Innovation Labs

A service platform using AI-enabled digital infrastructure to connect rural artisans with global markets, improve production efficiency, support ethical sourcing, and help artisans earn more stable incomes.

Service | India | www.barecraft.in

02

AfyaSolar

A hardware–software integrated system using modular solar energy to provide reliable power for off-grid healthcare facilities, supporting essential medical services while reducing costs and strengthening resilience.

Hardware–software integrated system | Tanzania | www.ubuntuafyalink.co.tz

03

AI-Enabled Typhoon Risk-to-Action System for Resilient Communities

A service platform using AI and multi-source data to forecast typhoon risks, deliver actionable alerts, and support timely response for communities, industries, and infrastructure in resource-constrained settings.

Service | China | N/a

04

ALBON

A hardware solution using modular algae–bacteria units to treat wastewater in agri-food facilities, reduce chemicals and energy use, and convert waste biomass into biochar.

Hardware | Australia | www.albon.com.au

05

Annita

A software platform designed for micro, small and medium enterprises to manage sales, payments, financial services and market access, even in low-connectivity environments.

Software | N/A | N/A

06

Aqualama by ASEI

A service model using solar-powered water purification stations and women-led delivery to provide affordable, safe drinking water in informal settlements while reducing plastic waste and emissions.

Service | Uganda | aqualamaug.com

07

Aquatorre: Decentralized Water Autonomy for Quilombola Communities

A hardware system using solar-powered water treatment and gravity-fed distribution to provide safe water in rural communities while supporting local operation and long-term water security.

Hardware | Brazil | www.sdwforall.com

08

Ari the Pad ATM

A hardware–software integrated system using a user-based payment model to sustain menstrual hygiene services in low-resource facilities and support continuous access beyond one-off installations.

Hardware–software integrated system | Kenya | Inteco.co.ke

09

Arosia Water

A hardware–software integrated system providing safe drinking water through smart kiosks with real-time quality monitoring, rapid contamination detection, and pay-per-use access for underserved communities.

Hardware–software integrated system | India | www.arosia.in

10


Arsenic-Removing Adsorbent Material for Drinking Water

A service innovation using adsorbent material to remove arsenic from drinking water through a cost-effective, scalable process compatible with existing infrastructure in low-resource communities.

Service | Peru | www.gob.pe/ins

11


Bio1 Solutions

A service innovation using low-energy microbial fermentation to convert fish waste into bio-organic fertilizer, reducing emissions and pollution while supporting circular agri-industrial systems.

Service | Tanzania | N/A

12

CULTURE AS INFRASTRUCTURE: An “AI + Heritage” Model for Rural Revitalization

A hardware-software integrated system using generative AI to connect local heritage, female artisans and modern markets, creating scalable cultural products for rural revitalization and women’s empowerment.

Hardware–software integrated system | China | www.arch.tsinghua.edu.cn

13

Digital Healthcare Accreditation Tool (DHAT)

A software platform for real-time health facility accreditation and quality management, replacing paper-based systems with data-driven tools that improve compliance, monitoring and resilience in low-resource settings.

Software | Rwanda | N/A

14

Disaster Impact Assessment Tool

A software tool using GIS-based disaster alerts to estimate damage, economic losses and relief needs, helping governments and communities plan responses based on hazard severity.

Software | N/A | N/A

15

Distant Voices by Ushahidi

A software platform that collects and analyzes first-hand community feedback at scale, helping make civic voices visible and actionable in crisis-affected and underserved contexts.

Software | Kenya | www.ushahidi.com

16

E-SACCOS: AI-Powered Cooperative Management System

A software platform using AI and mobile money integration to modernize cooperative operations through real-time tools for member management, loans, reporting and compliance.

Software | Tanzania | esaccos.sangelasystem.com

17

ECO CREDIT SCORE

A service model that rewards waste pickers and recyclers for safe sorting and consistent supply, improving plastic recovery, traceability and the efficiency of recycling systems.

Service | Tanzania | libegreeninnovation.co.tz

18

EcoTrace

A hardware–software integrated system using IoT-enabled refill stations to reduce single-use packaging, lower consumer costs, and support reusable, circular retail models.

Hardware–software integrated system | Kenya | www.ecotrace.ke

19

Energy Access Explorer

An open-source geospatial software platform that integrates energy supply and demand data to support cost-effective planning for households, businesses and critical institutions.

Software | Global (Africa) | wri.org/initiatives/energy-access-explorer

20

eSahara

A service platform that brings NGOs, communities, volunteers and donors into one system, improving coordination, transparency and trust in social initiatives.

Service | Nepal | esahara.vercel.app

21

EvMak Tanzania

A software platform combining AI-powered payments and business management tools to improve collections, records and real-time operations for SMEs and public transport systems.

Software | Tanzania | evmak.com

22


Fairaction Smart Water Solution (SWS)

A hardware-software integrated system using solar power, real-time monitoring and predictive maintenance to deliver reliable safe water in climate-vulnerable communities.

Hardware–software integrated system | Nigeria | fairaction.ngo/ng

23


From Dumping to Circularity: The Ambikapur Low-Cost Zero-Waste Governance Model

A service model for low-cost urban sanitation and zero-waste management that combines door-to-door collection, source segregation and decentralized processing to eliminate dumping and protect water bodies.

Service | India | N/A

24


Futuristic Energy Efficiency Rating System (FEERS)

A hardware–software integrated system using Internet of Things (IoT) technology and analytics to identify energy waste, reduce costs, and help users monitor and control consumption in real time.

Hardware–software integrated system | Botswana | www.feersenergy.com

25


Global Women in Clean Energy Fellowship

A service programme that builds women's technical and leadership capacity for an inclusive energy transition through training, mentorship and hands-on experience with distributed energy solutions.

Service | USA | www.energytransitionacademy.net/rmi-global-women-in-clean-energy-fellowship/

26

JoliTrash

A software solution using a toll-free, voice-based system and AI matching to connect users with waste collectors, making recycling accessible without apps, data or literacy barriers.

Software | Nigeria | cleanupmdc.com

27


Just Add Water Quantum Regenerative FuelCell

A hardware solution using regenerative fuel cell technology and AI-enabled membrane replacement to generate reliable power and medical-grade oxygen for healthcare facilities, businesses and industries.

Hardware | Nigeria | newdigit.tech

28

Kéola

A hardware innovation that transforms agricultural residues into biodegradable paper materials, providing a locally produced alternative to plastic packaging in low-resource urban contexts.

Hardware | Togo | keola.k-j.store/

29

Key Technologies and Platform R&D for Collaborative Services in the Full-Life-Cycle Value Chain of Waste Lead-Acid Battery Products

A hardware-software integrated system using a digital collaborative platform to improve traceability, contracting and compliance across the full recycling value chain for waste lead-acid batteries.

Hardware–software integrated system | China | www.tianneng global.com

30

MonoFoam

A hardware-software integrated system that captures and destroys harmful F-gases on-site while recovering valuable materials, enabling compliant and circular recycling of insulation foam.

Hardware–software integrated system | Netherlands | www.aetheria-nl.eu/

31


Moving Health's Community-Designed Emergency Transport System

A hardware–software integrated system using low-cost, community-designed ambulances to connect last-mile communities with emergency care and strengthen local transport infrastructure.

Hardware–software integrated system | Ghana | www.moving.health

32

Nappertoir Eco Cement

A hardware innovation producing low-carbon cement from mining and agricultural waste, turning underused materials into construction inputs while reducing emissions and industrial waste.

Hardware | South Africa | linkedin.com/company/nappertoir-pty-ltd/

33

OLAMOVE: Smart E-Mobility & Circular Manufacturing for Africa

A hardware–software integrated system using electric motorbikes, retrofit solutions and modular charging to make low-emission transport more accessible and affordable for logistics and mobility services.

Hardware–software integrated system | Rwanda | olamovegroup.com

34


Ona AI: Learning Assistive Tech

A hardware–software integrated system using real-time sign language avatars and accessibility datasets to make digital learning more inclusive for deaf learners.

Hardware–software integrated system | Ghana | projectona.framer.website

35


OnePlastic

A hardware–software integrated system using recycled plastic bottles and e-waste batteries to produce low-cost solar lanterns, supported by solar charging stations managed by rural women.

Hardware–software integrated system | Nigeria | N/a

36

Open Infrastructure Data Commons (OIDC)

An open-source software platform for real-time monitoring, data preservation and cross-sector analysis of energy, transport and water infrastructure in low-resource settings.

Software | N/A | iotdb.apache.org

37

OxValue AI-Powered Valuation System

A service platform using AI-powered valuation tools to make sustainable financing more accessible by providing fast, affordable assessments of intangible assets for innovators and startups.

Service | United Kingdom | oxvalue.ai

38

ParaBoda: Closing the Last-Mile Healthcare Gap

A software platform that coordinates emergency response, health guidance, transport and digital financing to help bridge last-mile healthcare gaps in underserved rural communities.

Software | Kenya | www.kidnexus.or.ke

39

QuePay

A hardware–software integrated system that enables secure cashless payments and real-time data tracking for community services such as water kiosks, improving accountability, efficiency and sustainability.

Hardware–software integrated system | Kenya | quepay.co.ke

40

Respyre

A service innovation that applies moss spores to concrete surfaces, creating low-maintenance green walls that absorb greenhouse gases, improve urban well-being and help prevent graffiti.

Service | Netherlands / Belgium | www.gorespyre.com/technology

41

Rural Energy Viability via Inclusive Circular Economy (REVIVE)

A service model linking solar irrigation, agro-processing and waste-to-value systems to support rural electrification, reduce waste, and create jobs through circular energy use.

Service | Uganda | www.linkedin.com/company/sustainable-energy-and-entrepreneurship-at-makerere

42

SDG Tagging of Nigerian Laws

A software framework using AI-driven classification to map Nigerian federal laws to the SDGs, helping identify policy gaps, overlaps and areas of legislative misalignment.

Software | Nigeria | uniuyo.edu.ng/faculty-of-engineering/computer-engineering

43

Second-Life Lithium Battery Packs for Clean Energy Access

A hardware solution in Nigeria that repurposes discarded lithium-ion cells into affordable battery packs for off-grid homes, electric vehicles and mini-grids, while reducing e-waste and building local skills.

Hardware | Nigeria | N/A

44

Solar-Powered Cold Storage

A hardware–software integrated system providing solar-powered clean cooling through repurposed freezers, chill tents and community cooling centers to reduce food waste, lower emissions and increase incomes.

Hardware–software integrated system | N/A | N/A

45

Smart-Float: A Global Intelligent Network for Multi-parameter Water Quality Sensing and AI-driven Prediction

A hardware–software integrated system using IoT buoys, real-time sensors and AI-driven prediction to monitor water quality and provide early warnings for algal blooms and salinity intrusion.

Hardware–software integrated system | China | https://www.sysu.edu.cn/sysuen/

46


SQUAIR - AI and IoT Transforming Industrial Refrigeration into Efficiency

A hardware–software integrated system that uses AI and Internet of Things (IoT) technology to optimize industrial refrigeration, reduce energy waste, lower costs and cut emissions.

Hardware–software integrated system | Brazil | squair.io/en

47


Textiloop – Digital Infrastructure for Circular Textile Manufacturing

A hardware–software integrated system using AI and data-driven coordination to reduce textile waste, improve fabric use, and enable reuse of surplus materials across manufacturers.

Hardware–software integrated system | Croatia | www.textiloop.com

48


Turing Certs

A software platform providing secure, verifiable digital credentials for professionals in clean energy, water management and sustainable construction, while supporting interoperable credential sharing across partners.

Software | N/A | turingcerts.com

49


VayuDrishti

A hardware-software integrated system using dense sensor networks and an AI-driven platform to provide real-time air quality insights, pollution forecasts, and actionable guidance for communities, industries and governments.

Hardware–software integrated system | Nepal | www.vayudrishti.com

50


World Impact Library

A software platform aggregating open-access social and environmental impact knowledge into a unified ecosystem to improve shared access, reduce duplication, and strengthen coordination for SDG action.

Software | N/A | resolve.global

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