Sustainable Development Goals

—

BY JESUNIFEMI OJO

Introduction

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.

SDG 7: AFFORDABLE AND CLEAN ENERGY

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all.

Target 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services

Target 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.

SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

- Target 9.1 Develop quality, reliable, sustainable and resilient infrastructure
- Target 9.2 Promote inclusive and sustainable industrialization.

SDG 11: SUSTAINABLE CITIES AND COMMUNITIES

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable.

Target 11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

Target 11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage.

What do the three SDGs have in common?

PROBLEMS

Access to Clean and Reliable Energy:

- **Energy access** is a challenge for many regions, particularly in rural and underdeveloped areas. SDG 7 aims to provide affordable and clean energy for all, but without adequate infrastructure (linked to SDG 9), this goal remains out of reach for many. For sustainable cities (SDG 11), clean and reliable energy is a core need for both residential and industrial sectors to function efficiently.

Technological Innovation and Green Industries:

- SDG 9 promotes innovation, but achieving cleaner energy solutions and sustainable industries is a major challenge. Technologies that both enable renewable energy and improve urban infrastructure need continuous investment and development to be scalable and affordable. There's also the issue of transitioning existing industries (many of which are still reliant on fossil fuels) to more sustainable practices.

SRI

SUSTAINABLE RECYCLING INDUSTRIES

Climate Change and Environmental Impact:

- All three SDGs are impacted by climate change. Clean energy (SDG 7) can help mitigate it, but urbanization (SDG 11) and industrial development (SDG 9) often exacerbate it, especially when development doesn't incorporate sustainability. Rising temperatures, natural disasters, and resource shortages all affect the ability to meet these goals.

SOLUTIONS

USE OF BIOGENERATOR

Bio generators, which convert organic waste materials (biomass) into usable energy, offer a multi-faceted solution to several global challenges associated with SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 11 (Sustainable Cities and Communities). Here's a detailed look at how bio generators can help address these challenges:

Solving Energy Access Issues (SDG 7)

- **Decentralized Power for Remote Areas**: Bio generators can be set up in rural, off-grid, or underserved areas, which are often left behind in terms of energy access. In regions where extending the national grid is expensive or impractical, bio generators offer a reliable and cost-effective alternative. For instance, rural communities can use agricultural waste (like crop residues, animal dung, or food scraps) to generate electricity locally. This reduces the reliance on fossil fuels and provides a clean energy alternative.

- **Affordable and Clean Energy**: The energy generated from bio waste is not only renewable but can be much cheaper than fossil-fuel-based energy. For households and small industries in rural or poor urban settings, bio generators can offer a significant reduction in energy costs, enabling greater economic stability and more sustainable development. The fuel required is often waste that would otherwise go unused, making it a low-cost energy source.

Reducing Waste and Promoting Circular Economy (SDG 11)

- **Waste-to-Energy Technology**: Bio generators contribute to solving urban waste management problems, especially in rapidly urbanizing areas where waste generation is high. Organic waste like food scraps, yard waste, and agricultural residues can be converted into energy, effectively reducing the need for landfills and incinerators. By transforming waste into a valuable resource, cities can mitigate the environmental burden associated with waste disposal.

- **Reducing Landfill Emissions**: Traditional waste disposal often leads to the release of harmful greenhouse gases, particularly methane, as organic waste decomposes in landfills. Bio generators capture methane emissions from organic waste and use it for energy production, preventing the release of this potent greenhouse gas. This helps reduce the overall carbon footprint of urban areas, contributing to climate change mitigation.

Supporting Sustainable Industrial Growth (SDG 9)

- **Local Energy Generation for Small Businesses**: Small-scale industries can benefit from bio generators by using locally available organic materials to generate electricity for their operations. This reduces their reliance on external power grids and ensures a more stable and affordable energy supply. For example, food processing units, dairy farms, or textile businesses in rural areas could use their own waste products (such as leftover food, animal by-products, or agricultural waste) to generate power.

- **Fuel for Innovation and Technology**: Bio generators themselves represent an area of innovation. By improving efficiency, scaling up production, and lowering the cost of bio generators, companies can pioneer new business models around bioenergy, waste-to-energy plants, or bio-based products. Encouraging innovation in bioenergy technologies contributes to the overall development of clean energy solutions and enhances energy security in industrial sectors.

- **Supporting the Circular Economy**: Industries can integrate bio generators as part of their sustainability strategies by using bioenergy not only for their operations but also by converting by-products into value-added products. For example, using bio waste to produce biofuels,biochar, or biogas. This helps close the loop on resource use, reduces waste, and lowers industrial emissions, all contributing to SDG 9's goals of sustainable industry.

THANK YOU