Synergy Solutions for a World in Crisis: Tackling Climate and SDG Action Together

**MAPPING THE EVIDENCE**

**In rural parts of Southern Belize**, three Mayan women, trained by Barefoot College India, are installing solar systems, in four indigenous communities impacting over 1,000 residents, and helping avoid 6.5 t of carbon emissions. In the Graham Creek village, they powered 25 homes benefiting over 150 residents, as well as a primary school with 30 children.

**In Rosario, Argentina**, the Urban Agriculture Program has supported hundreds of urban farmers to produce organic food in vacant lots, rooftops, and public spaces, while also providing training, technical assistance, and marketing support.

**In Bogotá, Colombia**, the TransMilenio Bus Rapid Transit system has reduced travel times, costs, accidents, and emissions by providing high-capacity buses that run on dedicated lanes along with cycling and pedestrian infrastructure.

**In New York City, USA**, the Climate Change Education Project has integrated climate change into the curriculum of over 600 public schools, reaching over 1.1 million students with learning activities such as school gardens, green roofs, and energy audits.

**In India**, the Slum Networking Project has provided basic services such as water supply, sanitation, drainage, solid waste management, street lighting, and paved roads to over 100,000 slum dwellers, while also promoting low-carbon solutions such as biogas plants, solar panels, and rooftop gardens.

**In Quito, Ecuador**, the Gender Inclusive Cities Program has supported women’s groups to conduct safety audits, raise awareness, and advocate for gender-responsive urban planning and climate action.

**The United Kingdom’s Department for International Development**, through its WASH program, granted 62.9 million people access to clean water and sanitation. They also partnered with UNICEF, investing £57.3 million to provide sustainable WASH services for 3.8 million people in 10 countries through the Sanitation, Water and Hygiene for the Rural Poor program (2017–22).

More than 5.8 million of the 9.8 million workers employed in the renewable energy sector are now concentrated in the Asia-Pacific region (with 40% in China and about 9% in India). Employment in the sector will increase, resulting in a net gain in job possibilities that will exceed losses in traditional energy industries like coal. According to ILO projections, this region might create 14.2 million jobs by 2030.
The Olkaria power station in Kenya is a geothermal investment venture created to lessen the nation’s dependency on hydropower. According to the World Bank, Olkaria has boosted the share of geothermal energy in Kenya’s national energy mix to 51%. Geothermal energy is essential to Kenya’s plan for reducing poverty by boosting access to dependable and clean electricity.

In Rosario, Argentina, the urban agriculture program empowers low-income citizens to plant food on public property. Over 75ha of transformed land in seven regional farmers markets now provide a new income source, reduces urban heat impact and enhances the city’s flood resistance.

The City of London, UK, in 2019 introduced the first Ultra Low Emission Zone where all drivers are required to adhere to rigorous vehicle emissions requirements or else pay a fee. The fee proceeds are subsequently reinvested into the city’s public transportation infrastructure. In the first 10 months, the strategy resulted in a 44% decrease in roadside NO2 with 44,000 fewer polluting automobiles per day in the city.

Under the women-led project Amazonas Originaria, a group of displaced indigenous families are being taught how to utilize and take care of the tropical woods close to Puerto Ayacucho. They are learning how to cultivate the native Amazonian plants cacao, cupuaçu, manaca, and tpiro and how to turn their fruits into pulp, chocolates, baskets, and other goods. This project seeks to rehabilitate portions of the degraded tropical forest by replanting native trees and other species. It also trains community people to create Amazon-derived items and ecological packaging, assisting them in diversifying their incomes.

The Barbados Sea Turtle Project, housed at the University of West Indies Campus, is helping inform the conservation strategies for the Hawksbill turtle, classified as endangered by the IUCN due to its vulnerabilities to heatwaves, and other anthropogenic factors. Under this project, turtles may be tracked using tags, which also allow researchers and conservationists to estimate growth rates, survival rates, and reproductive output. The project managers also assist local communities in promoting ecotourism using best practices, which gives them a source of income.

The GEF Small Grants Program and two partner organizations, under the alliance “Guardianas de los Páramos” (Paramos Women Guardians), are supporting local projects in Paramos Pisba and TotaBijagual-Mamapacha. Out of 37 chosen projects, 2,400 people engaged in native plant restoration since 2020 benefit, preserving protected areas and fortifying biological corridors. The initiatives involve aqueduct enhancements and the promotion of homegrown agro-ecological gardens, aiming to reduce reliance on environmentally harmful traditional production methods.

The United Kingdom is supporting a new initiative on ‘Near-Zero Emissions Coal’ with Carbon Capture and Storage (CCS) to address the challenge of tackling rising greenhouse gas emissions from the use of coal in China as a key component of the EU-China Partnership, signed in Beijing on September 5, 2005. This is done in consideration of the fact that by 2030, CO2 emissions from China’s growing coal consumption will have doubled to more than 5,000 Mt. With the use of carbon capture and storage, emissions per unit of power might be cut by 85–90%. By 2030, anticipated emissions in China might be cut in half thanks to the widespread use of ‘Near-Zero Emissions Coal’ and CCS.

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The EU economy expanded by 6.3% between 2016 and 2021, whilst domestic material consumption (DMC) expanded at a slower rate, 4.5%. As a result, the resource productivity of the EU rose by 1.4%, from €2.06/kg of DMC in 2016 to €2.09/kg in 2021. Simultaneously, due to greater reductions in energy consumption than in material usage, energy productivity of EU between 2016 and 2021 increased by 9.1%, from €7.8/kg of oil equivalent (kgoe) to €8.5 /kgoe. EU’s 6.3% economic growth during that same period was matched by a 2.6% drop in gross available energy (GAE).

In the United Kingdom, the Department for Business, Energy & Industrial Strategy joined forces with the University of Edinburgh to launch the Strategic Energy Research Centre (SERC) in 2017. Their mission was to develop new ways of reducing energy consumption and increasing energy efficiency across the UK. They aimed to generate innovative solutions that could be implemented on a large scale, leading to a more sustainable future for both society and the environment.