

IRENA NewGen Renewable Energy Accelerator Programme for Youth – Cohort 2024

The IRENA NewGen Renewable Energy Accelerator entered its second year in 2024, promoting youth-led renewable energy start-ups. The initiative, which worked with Social Alpha and the Enel Foundation, provided training, mentorship, and resources to 34 young innovators from 17 start-ups. Participants concentrated on novel solutions for energy storage, grid integration, and climate technology. The initiative, which included webinars, seminars, and investment matchmaking, aimed to increase business impact and secure funding. With the top four solutions elected for the IRENA NewGen Award, providing opportunities to pitch investors in 2025.

The participating startups included a diverse range of innovative ventures:

Agrisiti – Nigeria

Agrisiti, an agritech startup based in Nigeria, is dedicated to transforming urban agriculture through sustainable and energy-efficient solutions. To increase efficiency, they integrate modern technologies into the design, construction, and implementation of commercial and urban food production systems. Additionally, Agrisiti supports sustainable farming methods through educational projects that teach students and promote an environmentally conscious culture within the future of the agricultural industry. By combining infrastructure development with educational outreach, Agrisiti aims to generate long-term prosperity and ensure a resilient food future.

>> Website - <https://agrisiti.com/>

>> Co-Founders - [Joseph Ante](#), [Eneyi Shalom .A.](#) & [Oyewale Akintonde](#).

Wasted Treasures – Lebanon

Wasted Treasures aims to transform waste management in Lebanon by converting organic waste from olive mills and forest pruning into high-calorie, low-emission biomass logs and pellets. The new approach not only provides a sustainable heating option during Lebanon's energy crisis, but it also encourages local agriculture and a circular economy. Wasted Treasures ensures high efficiency and environmental benefits through collaboration with regional farmers and rigorous product testing. Their activities help reduce deforestation, carbon emissions, and reliance on non-renewable energy sources. As a result, communities can protect resources while also improving their resilience and economic stability.

>>Linkedin - <https://www.linkedin.com/company/wasted-treasures/>

>> Founder - [Carlos Ayvazian](#)

Treeva – United Kingdom

Treeva generates renewable, reliable, and accessible energy for transport systems. By providing highly efficient 2-meter-tall turbines for installation alongside roads, railways, and airports, Treeva recycles the wasted airflow from passing vehicles to generate energy with a payback period of just one year. This allows road companies to reduce costs and emissions while independently powering infrastructure such as streetlights, traffic lights, displays, and electric vehicle charging stations without relying on the grid. This independence is further strengthened by their environmental data processed using their cloud-based algorithm. Treeva's disruptive technique guarantees a sustainable and efficient energy solution for transportation infrastructure.

>> Website - <https://www.treeva.co.uk/>

>> Co-Founders - [Anjali Devadasan](#) & [Yu Gu](#)

Greenova8 – Pakistan

Greenova8, based in Pakistan, is transformative climate-friendly investment decentralised platform, focusing on renewable energy projects. The company empowers individuals globally to invest in sustainable initiatives, bridging the gap between investors and project developers. With intuitive features and transparent processes, the platform facilitates efficient investment opportunities for investors while promoting environmental sustainability, particularly in regions such as Pakistan.

>> Founder - [Ibrahim Afridi](#)

RIOT - Colombia

RIOT is an early innovator in creating hydrogen-based fuel alternatives to replace traditional fossil fuels in high-intensity energy applications. Since 2017, RIOT has been developing a prototype hydrogen fuel generator at TQ - Yumbo, which is intended to replace natural gas in industrial boilers. This new fuel can lower greenhouse gas emissions by up to 90%, making a substantial contribution to environmental sustainability. RIOT's initiatives are aligned with eight of the 17 Sustainable Development Goals, demonstrating its commitment to a greener future.

>> LinkedIn- <https://www.linkedin.com/company/rioth2/>

>> Sustainable and Regulation Director - [Ana María \(A.M. Ramírez-Tovar\) Ramírez Tovar](#)

HuluSolar – Ethiopia

HuluSolar addresses energy poverty in Ethiopia by providing solar home systems to rural communities by using a pay-as-you-go model to ensure financial inclusion and accessibility. To date, HuluSolar has provided over 100 solar home systems, impacted 1,000 community members and allowed for renewable growth in the community while also committing itself to developing a renewable energy learning platform and foster a sustainable future for Ethiopia's rural areas.

>>Website - <https://hulusolarenergy.com/>

>> Founder and Managing Director - [Yohannes Bimrew](#)

E-Moti - Kenya

E-Moti is an electric vehicle (EV) bus fleet operator dedicated to providing mass transit solutions for urban public transport. By using electric vehicles, E-Moti aims to reduce CO2 emissions per passenger and per distance travelled. Leveraging the lower operational expenses and high-passenger capacity buses to operate longer routes and serve more people affordably, thereby contributing to emission reduction efforts.

>> Website - <https://e-moti.co.ke/>

>> Co-Founders - [Denis Kirera Muchoki](#) & [Billy Mwangi](#)

Artana Solutions - Germany

Artana Solutions' Maritime Counselor is an autonomous system that improves maritime operations by integrating stakeholders and automating processes. This reduces transit times and port congestion. Using AI and machine learning, it predicts bottlenecks to ensure efficient operations. The Ship-Fit-to-Port feature aligns ship operations with port activities, boosting efficiency. Artana Solutions provides end-to-end maritime optimisation solutions, to enhance industry competitiveness and sustainability.

Trade Cycle – United States of America

TradeCycle simplifies renewable energy procurement through AI-driven PPA matchmaking and streamlined negotiation processes. With a focus on commercial and industrial businesses, renewable energy providers, and sustainability-focused organisations, offering

cost savings and efficiency. The unique value lies in its AI algorithms processing real-time energy market data for unmatched negotiation insights. Through online marketing, industry partnerships, and direct outreach, positioned as a disruptive force in a traditional market, TradeCycle aims to reshape renewable energy procurement to its maximum potential.

IQ Energy Australia (IQA) - Australia

IQ Energy Australia (IQA) is an environmental technologies startup based in Melbourne that provides modular advanced thermal conversion (ATC) technologies. The turnkey and continuous units convert problematic waste streams into valuable resources. IQ Energy Australia provides robust, movable carbonisation, drying, and energy generation units with advanced emissions controls. These units efficiently convert waste into valuable resources, reducing environmental impact. With automation and remote monitoring, they enhance operational efficiency and integrate seamlessly into existing site layouts, offering scalable solutions for waste management, climate risk, and cost concerns.

>>Website - <https://iq-energy.com.au/>

>> Founder - [Nicholas Foster](#) & [Charles Foster](#)

Kooti Agrivoltaics - Greece

Kooti Agrivoltaics, based in Athens, Greece, focuses on integrating agriculture with solar energy production through agrivoltaics. With the vision to synchronise agriculture and photovoltaics, Kooti Agrivoltaics helps empowering farmers with innovative tools while offering industries a sustainable energy solution. Its mission is to revolutionise agriculture by integrating solar energy and farming, mitigating climate impacts, supporting farmers, and enabling growth even in challenging environments making it part of a growing movement towards sustainability.

>>Website - <https://www.kootiagrivoltaics.com/>

>> CEO - [Georgios Paliouras](#)

Dayma – United Arab Emirates

Dayma is pioneering climate adaptation technologies tailored specifically for agriculture, irrigation, and resource efficiency in greenhouse farming. Based in UAE they provide innovative solutions that encompass water security, efficient irrigation practices, and livestock management to mitigate the impacts of climate change on agricultural ecosystems. By integrating advanced sensor technology and data analytics, they provide

farmers with real-time insights to optimise resource utilisation and enhance crop resilience. With a focus on climate adaptation, Dayma is committed to empowering farmers to thrive in a changing climate while promoting environmental sustainability.

>> LinkedIn - <https://www.linkedin.com/company/daymaa/people/>

>> CEO - [Oussama Jamal](#)

SolarJiji - Kenya

Kenya based SolarJiji is dedicated to address the challenges of integrating solar power farms, caused by the instability due to the sun's intermittent nature. By offering web and mobile AI-based platform that provides accurate forecasts of solar energy per surface area. With projections available on an hourly, daily, and week-ahead basis, SolarJiji empowers energy optimisation decision. By facilitating sustainable energy planning, it enables smoother integration of renewable sources into grids, making the harnessing of solar power more predictable and paving the way for a greener future.

>>Website - <https://www.solarjiji.com/>

>> CEO & Founder - [Mwigereri Dorcas](#)

Earthsaaathi - India

Earthsaaathi, based in India, specialises in Bio-CNG cylinders. These cylinders are compressed at high pressure and are chemically identical to regular CNG, offering greater value and efficiency. With the target market of industrial kitchens and facilities that serve between 500 and 2000 people daily, Earthsaathi aims to address the environmental and economic difficulties that these facilities confront by offering a cleaner and more efficient energy option in the form of Bio-CNG.

>>LinkedIn - <https://www.linkedin.com/company/earthsaaathi/>

>>Co-Founders - [Dr. Shaurya Mohan](#) & [Dr. Namrata Upreti](#)

Store Now

Store Now, through its integrated optimisation software, selects the most appropriate storage technology and matches the user with the optimal companies offering the needed renewable technology and solutions. Allowing, for a time and cost-efficient process, simplifying and streamlining the whole value chain. By facilitating easier access to these

systems, Store Now helps users maximise their energy efficiency and savings, particularly when combined with renewable energy sources.

>> LinkedIn - <https://www.linkedin.com/company/storenow-energy-platform/>

>> Co-Founder - [Alex Berezhnoy](#)

Yna Kenya

YNA Kenya is a social enterprise dedicated to mitigating climate change through innovative technological solutions. These include e-mobility, clean and renewable energy, and decentralised carbon trading system that use DeFi, blockchain, and web3 technologies. With a focus on clean technology and community empowerment, YNA Kenya is paving the way for a greener future in Kenya.

>>LinkedIn - <https://www.linkedin.com/company/ynakenya/?originalSubdomain=ke>

>> Co-Founder - [David Kabue](#), [Mary Munyao](#) & [Sebastian Mwaura](#)

Choto Renewable Energy – Zimbabwe

Choto Renewable Energy is a Zimbabwe-based company specialising in sustainable energy solutions through solar, and energy storage systems. It provides affordable and efficient energy for agricultural and domestic use, supporting local economic development and addressing Zimbabwe's energy challenges and promote lower dependency on grids.

>>LinkedIn - <https://www.linkedin.com/company/choto-renewable-energy/people/>

>> Founder - [Tatenda Muzangwa](#)