MEET THE STUDENTENERGY FELLOWS 2022



Simón Ladino Cano

ENERGÍA CHILL PANAMA

The educative festival is an activity of the Panamanian NGO Jóvenes y Cambio Climático (Youth and Climate Change NGO), as part of one of the organization's commitments in their Energy Compact (voluntary commitments to help accelerate the energy transition).

With the aim of educating about the energy transition, the idea of the festival arises in response to the need to use public spaces to raise awareness through activities such as forums, education, art and culture, and demonstration of devices that will allow users to understand the potential of renewables.

HUMANIZING THE TRANSITION: ENERGY JUSTICE CHALLENGES IN THE PACIFIC ALLIANCE COUNTRIES COLOMBIA

Simón holds an M.A. in Latin American Studies with a focus on International Cooperation and Development from Université Sorbonne Nouvelle, Stockholm University and Universidad de Salamanca. From an energy justice perspective, his project concentrates on comparative analysis of renewable energy policies in the Pacific Alliance countries (Mexico, Colombia, Chile and Peru).

His goal is to identify the main blind spots of current energy policies and thus understand the obstacles to a just energy transition in Latin America. To this end, he hopes to gain insight into the challenges of accelerating the transition away from fossil fuels without creating new patterns of injustice across the energy system, especially among the most disadvantaged stakeholders.

Ultimately, this project aims to explore solutions to enhance energy policies with justice criteria in order to build sustainable development pathways through multi-stakeholder partnerships.



Aoife Hynes Criomhthann Morrison



Cherop Soy

FÍS D'ÉIRINN - A VISION FOR IRELAND IRELAND

We're producing a media project to showcase what sustainability-in-action looks like in Ireland. We see a big gap between day-to-day living and abstract notions of planet-level changes and system-level responses. Through interviews and case studies, we aim to paint a picture of what a renewed Ireland can look like; an Ireland which prioritises justice and equity for all and serves as an example for the rest of the world.

Aoife ("ee-fa"!) is an activist for sustainability causes and has worked almost 2 years as an International Project Assistant with communities and in emerging markets. She is particularly interested in intersectionality, decolonisation, sustainable agriculture and nature-based solutions, and systemic change through community organisation. She is excited to use her creative skills in debating, theatre, poetry, film-making and much more for this project. Criomhthann ("kree-vin"!) juggles many hats, from researcher to musician, from facilitator to lifelong learner. He developed insights and skills for exploring society-level changes and solutions during his studies in public policy, environmental policy, social policy and politics, and is excited to combine his skill sets in Global Citizenship Education and Creative Arts for this project.

SYNERGY NAIROBI, KENYA

Cherop comes from a lineage that has relied on the climate for its farming livelihood for generations. Over the years, the advancement of energy systems that provide reliable, accessible, and affordable energy has left significant positive impacts in different sectors across the world, agriculture included. Unfortunately, a majority of her family still remains part of the 78% of Africans without access to electricity and their livelihood continues to be threatened by climate change.

It is not by chance that she has chosen to build her career in the energy sector with experience from her country's Ministry of Energy and is currently an analyst at a climate and impact fund manager supporting a just energy transition in emerging economies. Her project is grounded on the influences from her life's experiences and she hopes to spread awareness on the importance of policies centered on energy systems for building sustainable livelihoods, mitigating climate change effects, and those which can be implemented in communities similar to hers. This project aims to bring awareness towards the importance of an enabling environment for private sector investments towards improved energy systems for sustainable agricultural value chains.

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Jyoti Dow 21, Law Stude





Sylvester Student (UWI)

rika Rumiche

Cavell Sylvester Tracey Seales Jyoti Dowlath Alexandra Ghany



Erika Rumiche Musye Lucen



Aadithya Sugumaran Leslie Noye

IBIS ENERGY TRINIDAD AND TOBAGO

Ibis Energy is a group of four 3rd year law students from Trinidad & Tobago: Alexandra, Jyoti, Cavell, and Tracey. Alexandra wishes to be the change she wants to see in the world, which means becoming an advocate for climate justice in order to preserve life on Earth. Jyoti's motivation for sustainable energy transition is fuelled by her desire to preserve the environment for future generations. The bright future Cavell envisions for his country and the Caribbean depends on what is done today as it relates to sustainable energy and as the rest of the world moves in that direction the Caribbean region cannot be left behind. Tracey's interest in the student energy fellowship sparked from her drive to aid in diversifying Trinidad's energy industry to ensure sustainable development, job security and environmental protection.

The Caribbean region will be one of the most adversely impacted regions from climate change economically, ecologically and sociologically. Sensitive marine ecosystems cannot withstand increased global temperatures, ocean acidification and rising sea levels, causing a loss of economic activity through tourism which the region is heavily reliant on. The region has already experienced an increase in severe weather events and coastal erosion. Seeing an opportunity to alleviate this, and be influential in encouraging positive changes through education and action through the Student Energy program, this team is motivated to work towards a better Trinidad and Tobago.

INTI ENERGY PERU

Inti Energy is a project that seeks to evaluate the feasibility of implementing a photovoltaic system on the campus of the Universidad Científica del Sur in Lima, Peru. This project will evaluate the indicators of Greenhouse Gas reduction and energy savings and will perform a cost-benefit analysis of the installation of solar panels on the university campus. The information generated will seek to validate through the indicators that the implementation of the photovoltaic system is profitable and sustainable over time, and by this way promote its expansion in the university as well as in other institutions.

ADLE ENERTECH PRINCE EDWARD ISLAND, CANADA

Prince Edward Island is well known for its world-class beaches, seafood, potatoes, and tourism, which is a lot of awesomeness to pack into the smallest province in Canada. It's important to prevent climate change from damaging what's most precious to this province, its natural beauty. We believe this can be achieved through implementing small-scale sustainable energy projects at a community level. Adle EnerTech is researching the feasibility of implementing sustainable energy technology to facilitate Prince Edward Island's Energy Strategy. The goal is to perform a feasibility study and provide a Front End Engineering Design (FEED).



Abdulhafeez Adebayo Nurudeen Issa Mustapha Muhammad Ibrahim Kabiru Zakariyau Fortune Riagbayire



Fred Birori Josue Faith Ishimwe Bartheremy Kundukundwe Uwacu Natasha Mutangana

SIRIUS-X NIGERIA

Sirius-X is a startup located in the northwest region of Nigeria. Sirius-X focuses on a solar wind hybrid system. They are developing a product called Proxima-B. Proxima-B is a solar wind hybrid system made up of Savonius-Wind turbine and solar panel. They are developing the product to leverage the existing generators in Nigeria and Sub-Saharan Africa market. The chief architect of Sirius-X is Nurudeen Issa, he is a dynamic leader with vast experience in climate-related activities and is a clean energy advocate. Final Year student at Bayero University, Kano. President; Energy Club Bayero University, Kano. The business developer of Sirius-X is Abdulhafeez Adebayo, he is a young leader with dynamic experience in business management in different impact-related non-for-profit and for-profit associations and organizations. They have three more members working alongside the team to ensure proper project execution.

DRAFTLENS RWANDA

Repurposing electric vehicle energy storage system: collecting and reusing the forms of energy lost during car braking, wheel rotation and bouncing of the electric vehicles

DRAFTLENS is a team of Rwandans who have a background in mechanical engineering, energy, and economics from the University of Rwanda who began to give their contribution in the journey of making energy affordable, after finding that Africans are not adopting the use of electric vehicles and the use of electrified machines mostly in agricultural practices, manufacturing and industrial processing not because they are not clean and healthier, but because their operating costs are high due to high consumption of electric energy.

Due to that same reason of electric energy cost being high in most places in Africa, the products that are locally made in Africa are also affected by this raised energy cost issue and as a result, those products are found to be more expensive than those that come out of the continent. It is in that spirit of making energy affordable, clean and sustainable by building up systems that collect and put in use all wasted forms of energy during any kind of production process that will serve as part of the solution to the energy cost issues in Africa, the DRAFTLENS was born.





JIN TANAKA JAPAN

Our organization is a non-profit organization based in Japan that advocates for the widespread use of renewable energy sources such as hydrogen energy and solar power to corporations and local governments. Many of our members are undergraduate and graduate students studying political science, environmental studies, and engineering. Through participation in COP25, COP26, and the Acacia Pacific Water Summit Youth Forum, he felt the gap between youth activities and business, and came to sympathize with the concept of "green jobs," which are sustainable jobs advocated by the ILO, and began to think about combating climate change through energy transformation.

Inspired by the highly efficient and low-impact gas turbine power generation and power generation methods built by Japanese companies and power generation companies, we are working to support a sustainable society from the aspect of energy. Our project hopes to learn from this project about the activities needed to achieve a decarbonized society today through visits to companies and participation in international conferences. We believe that the most important milestone for this is to promote empathy and understanding from decision-makers at international conferences and companies, and acceleration of these activities through investment, and to promote activities based on concrete scientific evidence based on regional and national characteristics regarding the urgency to combat climate change. We would like to put our business on track by promoting activities based on specific scientific evidence based on regional and national characteristics about the urgency to combat climate change, and by realizing funding for the transition to a joint-stock company by pitching to Japanese companies and international conferences.

ACTGREEN SYRIA/GERMANY

Tasnim Hemmadeh is Electrical Engineering Graduate and has been working in the field of Climate Change Advocacy for the past 3 years. Tasnim's interest in environmentalism, climate action and sustainability stems from two factors. First is the profound relationship that she developed with nature given that I've grown up in an agriculture-reliant rural community. Second is an appreciation of the minimalist lifestyle that Syrians had to adopt during the war in Syria. Stemming from her commitment to social responsibility, and her belief that post-conflict societies need data, research and informed policymaking, she started the ActGreen initiative for capacity building about Climate Change, sustainability and Energy Policy in Syria, she was Syria's preCop26 (Youth4Climate) delegate.

Rachida EL-BOUAYADY



Temiladeola Oladugba Iteoluwakishi Babatunde



Tatsiana Mikhovich

SUSTAINERGY MOROCCO

Rachida El-Bouayady is an engineer who majored in energy. Currently, she is a Ph.D. student working on urban systems sustainability development. Her work focuses mainly on leveraging resilience and sustainability using combined approaches of urban planning and engineering methods. Along with her studies, energy was always at the core of her projects. She aims throughout this program to contribute to the sustainable energy transition. Her project consists of a research paper that highlights pathways to achieve energy efficiency goals, especially in her region and put forward the role of coordination in this sense.

This scientific paper would be the first step towards a more ambitious one that is an open Observatory Lab for urban energy planning bringing together municipality, planning department and universities and the private sector, to create knowledge and establish resources regarding urban energy systems. These resources will serve as guidelines to establish urban strategies and help decision-making processes in regards to energy with the major objective of climate change mitigation.

IMOLE NIGERIA

Team Imole is focused on giving people a reason to transition to renewable energy sources for their domestic use. Iteoluwakiishi and Temiladeola are both final year Electrical and Electronics Engineering students at the University of Lagos with experience working in the renewable energy industry in West Africa. Our collective experiences exposed us to the potentials and limitations of transitioning to solar energy within Nigeria. We recognise the fact that energy reliability is rather poor in Nigeria so most residential consumers of power rely solely on petrol or diesel generators which is rather carbon-intensive and more expensive in the long run than solar energy. The limitation of this is the capital-intensive nature of solar energy. We aim to represent in actual figures and timelines how an average Nigerian can save costs by transitioning their alternative energy sources to solar power. We hope that our publicly accessible tool will aid people in making the all-important decision to transition to renewable energy.

TATMIK BELARUS

Tatsiana is an engineering student from Belarus who also works as a software engineer. Her project idea is to create a podcast to discuss global energy-related trends, technology, and innovative concepts.



Emmanuel Selasi Tomude



ENERGYPOLICTICS UNITED KINGDOM

Emmanuel has a background in Environmental Change and Management, University of Oxford, UK. He believes that the hundreds of questions posed to the sustainable energy transition, especially in the fossil fuel-based economies of Sub-Saharan Africa lack contextual understanding. His prior studies have shown him that fossil fuel-based economies are on the verge of collapse whilst the so-called clean energy takes its place. With this understanding, he is not surprised that most of these fossil base economies are found in the global south.

In light of his experience and participation in the recent COP 26 at Glasgow 2021, Emmanuel felt that despite the goal of UNFCCC to reduce global warming, Nationally Determined Contributions remain locked into the country's internal politics. In this regard, he advocates that it is important to sufficiently unpack the socio-political lock-ins within the landscape of Ghana to enable the implementation of context-specific policies and understand factors that hinder sustainable energy transition policies. Emmanuel seeks to answer the overarching question: can the fossil fuel-based economies of Sub-Saharan Africa transition to sustainable energy pathways within certain power dynamics?

TRISINA SIMANJUNTAK JAKARTA, INDONESIA

Trisina, an electrical engineering graduate who minored in power engineering, has a particular interest in renewable energy technology. She was raised in West Borneo, Indonesia, and during her college year, she did an internship at a renewable energy company. There, she sensed that the electricity grid in her hometown was not as advanced as in Indonesia's central islands when it had the potential for solar energy resources.

Furthermore, the electricity system uses mainly fossil fuels and still imports electricity from the neighbouring country on account of the mismatch between supply and demand or any other deliberation. She is willing to sink her teeth into this field to critically observe the main causes of this matter, how to optimally implement the solar energy resources, and use any platform as possible to educate the youth about the urge to start spreading awareness of energy transition into clean energy in Indonesia.







Inés del Carmen Pastor

SUSTAINABLE FUTURE SASKATCHEWAN, CANADA

I aim to develop a program that will allow citizens in rural communities around Canada the convenience of fresh vegetation year-round with the help of renewable energy. This project has the capability to incorporate a sustainable lifestyle and a learning experience for remote communities. This project will utilize clean energy to sustain a year-round greenhouse and proper compost program.

TRUESG: ADVOCATING COMPANIES TO STAY TRUE TO ESG DENMARK

Bhargav has a technical background in mechanical engineering and interdisciplinary knowledge through a master's in sustainable energy. His growing understanding and interest in the synergy between technical and business avenues introduced him to the world of impact investing - which has been one of the latest buzzwords in the climate change space and has created a sense of curiosity & skepticism. His project aims at studying ESG principles, investigating how truly the companies and rating agencies align with their said values & finally advocating for better implementation to reflect the actual impact on the world.

The project hopes to bring along fellow like-minded students & working professionals interested in acting as watchdogs to look deep into the greenwashing happening in developed countries & beyond and initiate a dialogue with the companies to implement better value systems and strategies. It deals with analyzing ESG data, understanding perspectives behind the ratings, mobilizing ESG-enthusiasts, and advocating for a true change. Bhargav believes that this project highlights the high impact the world of sustainable investing offers to combat climate change and serves as a vital tool in this sustainable transition.

RED - INÉS PERÚ

The aim of "ReD" is the creation of a community that is responsible for training and promotion of electromobility, as well as the implementation of projects (at micro-level).



Nicholas Bridgemohan Chelsea Bailey Abigail Clarke Shania Yip Ying



Andika Akbar Hermawan Irene Antón Samuel Sulemanu

RENEW CARIBBEAN TRINIDAD AND TOBAGO

We're a team of three engineers and one scientist, with an interest in clean energy and sustainable practices. One member majored in process engineering, two in energy systems engineering, and one in biology and biochemistry. We're all personally or professionally invested in clean energy and sustainable practices, through our careers or adoption of environmentally friendly practices in our personal lives. This has allowed us to find a common goal which we're now seeking to use as a medium for effecting change through the transfer of knowledge on topics such as renewable energy, sustainable foods and agriculture, genetic modification for improved crop production, and waste reduction practices as a preventative action. We have a particular interest in the implementation of renewable energy technologies in our home country, Trinidad and Tobago, as the country's economy has been predominantly supported by revenue generated from oil exports for over 100 years. This has encouraged rapid development of the country over the century but now with natural gas reserves uncertain and rising climate concern, the country must look towards a more sustainable future that takes advantage of the Caribbean sun.

ANSARI FRANCE AND SWEDEN

'Ansari' is an international team of future energy leaders, comprised of Irene Sierra (Spain), Andika Hermawan (Indonesia), and Samuel Sulemanu (Nigeria) as members. Ansari aims to leverage community engagement, networking, and low-cost tools to contribute to bridging the Science, Technology, Engineering, and Mathematics (STEM) education gap in developing countries around the world, starting with Nigeria. The team intends to develop and support innovative approaches geared toward improving the quality of teaching and learning in public schools. According to research, adopting a more practical approach towards learning STEM subjects has resulted in increased interest, performance, and motivation, especially, among students who do not cope well with the traditional, more theoretical-based approach. This is very vital, especially during the formative years of children to expand and help to develop their minds into becoming solution-providers, inventors, creators, innovators, and path-finders.

STEM education has been identified as a key driver that can support and accelerate economic and technological growth in developing countries. It is important to increase the capacity of future talent as early as possible to prepare them for the challenges of the future.





Aadithya Sugumaran Leslie Noye

MONTSERRAT BARBA CARDOZO BOLIVIA

I studied at The University of Aquino Bolivia and I graduated with honours in August 2021. Throughout these years, I have had experiences in the area of operations management of the Ammonia and Urea Plant, specifically at Yacimientos Petroliferos Fiscales Bolivianos CORP. and I was also in the Pre-professional internships in Technical Services Management and HSE at REPSOL E&P BOLIVIA. These experiences have led me to grow my skills. I was interested in the energy transition and care for the environment when I attended a forum where the main topic was biofuels and climate change. There I understood the importance and awareness that engineers must have when carrying out their work. This is the reason why the topic of my thesis was: "Study of the production of dimethyl ether to starting with the reform of natural gas to reduce the import of diesel for vehicles of low cylinder capacity in Bolivia", because at the same time that it was helping to reduce the use of fossil fuels, it was also helping the environment and my country because Bolivia has a problem with the import of diesel because this generates too many expenses for the country. I would love to help train young professionals and make them understand that green energies can go hand in hand with their academic education, as well as being able to develop project ideas together with them to present in our country and turn Bolivia into a research country for the benefit of the energy transition.

ENVIRODYNAMICS NAMIBIA

Eunice and Eva are a dynamic team of aspiring professional Town Planners in Namibia. Both with an urban planning background, we are passionate about urban planning matters such as sustainable development, creating resilient cities, providing informal settlement interventions, and working with communities to create and provide inclusive and resilient built environments that take the environment into consideration.

FIRST PEOPLES, LAST VOICES. INDIA

Malavika is an undergraduate Physics major living in India. She was born and brought up in the Kingdom of Bahrain and it was through her deep encounters with the very specific natural ecosystems in her ancestral home in South India that she developed an appreciation of the natural world, the systems that govern it and later formed a sense of what is at stake with the consequences of climate change looming. Through her project, she aims to look at how we can create spaces for indigenous people through policy changes and active awareness. It was through the work of photographers such as Christina Mittermeier and other activists in her own country that she fully understood the unique place that Indigenous people occupy not only with respect to their relationship with nature but also in crafting solutions to the climate crisis. Their voices are not yet a mainstream part of the dialogue, but they must be. It's high time that privileged people with easy access to global climate change dialogues made seats at the table to the ones who deserve to be heard the most urgently. To quote Archana Soreng, one of the seven members of the UN Secretary General's Youth Advisory Group on Climate Change (also the only member who is a part of an Indigenous community in India), "Indigenous peoples must be leaders of climate actions and not victims of climate policy".



Biguel Nguefack Kenfack Yvon François Tsolefack Stephane Landry Nde Sikadie Samantha Chinyoka

ENERGY, OWNERSHIP AND COLLABORATION: ELECTRIFYING REMOTE COMMUNITIES IN CANADA CANADA

Our team came together through a group project for a Master's program in Sustainable Development. With backgrounds of environmental science and international relations unified under the pursuit of sustainability, we became passionate about the potential for community-owned clean energy projects to empower and electrify remote communities in Canada. Through our studies and professional experiences, we recognized that meaningful engagement prior to implementation facilitates sustainable projects. Such engagement allows for local and/or vulnerable communities to fully participate in the projects and receive the most benefits from project outcomes. As one of our team members works in northern Saskatchewan, they have established connections to members of northern Saskatchewan communities which allows us to pursue a project that fully adopts the idea of meaningful engagement. Our project centres around engaging with these communities to facilitate the development of community-owned clean energy projects in the remote area, to support the communities themselves as well as pursue Sustainable Development Goals: (10) Reduced Inequality, (11) Sustainable Cities and Communities and (17) Partnership to achieve the goals).

E4RC (ENERGY FOR RURAL COMMUNITIES) CAMEROON AND ZIMBABWE

E4RC is a project designed to solve energy access and energy efficiency challenges in the rural and peri-urban areas of developing countries in Sub-Saharan Africa. The project adopts an inclusive energy-agriculture nexus approach to promote a circular economy within the target communities. The project will implement a closed-loop cold storage system coupled with a drying room for the preservation of post-harvest crops and a biomass boiler unit for the recovery of agricultural waste. The aim is to have a self-sufficient electricity and heat production unit that couples photovoltaic solar energy, solar thermal energy, and biomass energy. The team's shared vision is to innovate solutions that offer efficient, economic, and sustainable energy systems for climate adaptation. Yvon is an Electrical and Energy Engineer from Cameroon, Samantha is a Renewable Energy Engineer from Zimbabwe, Stephane is an Electrical and Energy Engineer from Cameroon, and Biguel is an Energy Efficiency Engineer from Cameroon.



Rounok Jahan Khan Shougat Nazbin Khan



SEE (SUSTAINABILITY, ENERGY AND ENVIRONMENT) BANGLADESH

Over the next decade, youth will not only directly experience the outcome of Sustainable Development Goals (SDGs) and plans, but will also be the key driver for their successful implementation. They can only be at the forefront of realizing SDGs if they are sufficiently equipped with the necessary skill set in the knowledge economy and corresponding fields, and have the right mindset and motivation. Young people are the future leaders so if they are concerned and have a good understanding of pressing issues of the world from now, they can be better leaders and be passionate about protecting our planet and can make a real positive change in the world. Therefore, it's crucial that young people are informed and engaged with the global vision for the future.

Youth from marginalized and disadvantaged communities must be included and prioritized as they do not have the access to quality education and equal opportunities. Team SEE will facilitate capacity-building programs on Sustainability, Energy and Environmental issues for children from marginalized communities. It will arrange workshops and lecture series for the children consisting of several lessons about Climate Change, Environmental Protection, Renewable Energy and Sustainable Development Goals. It will develop a toolkit and learning modules to make it easily understandable and fun for children. Also, there will be exhibitions of eco-friendly, upcycled and recycled products so that children can learn more about such products and think of new ideas and innovations. SEE wants to provide the learning opportunity to unprivileged young people to ensure no one is left behind in the race to a net-zero future.

TUNINYOUTH TUNISIA

TUNINYOUTH is a team of hopeful leaders from Tunisia who seek to address issues related to sustainable energy in relation to gender and human rights. Our project SYNERGY is in the form of a public outreach campaign that focuses on sustainable energies, specifically in the area of oil and gas due to the fact that gender inequality and human rights violations are noted in this field. Our goal is to raise awareness and to find effective solutions and ways to use our natural resources in a manner that respects the dignity of every single person. Therefore, we want to target as many people as possible in our campaign in order to inform them about the sensitivity of the topic and to pave the way for them to understand the issues and to enhance their visions for the future.



Parvathy Sobha

Terrence Magadza



Terrence Magadza



Asmaa Masoud Eman Wahid Mohamed Sayed Ahmed Ali

CHANGING TIDES SWEDEN

Parvathy is a Ph.D. student working on climate change, energy system analysis, and policy strategies. She always had a flair for innovation and connecting diverse multiple solutions for optimization and actualization of requisite outcomes. She is looking up to a smarter tomorrow by improving the energy ecosystem that could change the lives of billions of people across the world through sustainable energy. But this transition will depend on the availability of resources, technology, finance, and policies. It greatly depends on the people's participation and their involvement in the energy transition. Educating the students, youth and public is the first step to this. The SE Fellowship project includes calling out for action to the government, conducting talks, discussions to make the voices heard. She aims to work towards creating awareness among people and inspire them to be part of the solution.

SOLARAWARE ALGERIA

SolarAware seeks to utilise established platforms i.e social media platforms including Sasai, Twitter, Facebook and WhatsApp to help provide Solar Energy Awareness, engage and strike a conversation on increasing the use of renewable energy in Zimbabwe. The focus is mainly on small-scale (Household and mini off-grid) installations, the benefits, barriers and cost-effectiveness in tackling Zimbabwe's electrical energy shortages and its goal in achieving sustainable energy growth.

AFRICA'S ENERGY TRANSITIONS: PATHWAYS TO CARBON-FREE ENVIRONMENT

NIGERIA

As an African who has experienced more blackouts than electricity availability, the enthusiasm for sustainable energy research has fueled my passion to delve into learning new perspectives and innovative approaches in a community with a common goal to accelerate the energy transition while confronting challenges around sustainable energy policy, climate change and other environmental injustice.

EGY-POWER EGYPT AND RUSSIA

Our team consists of three members, and we are all interested in renewable energy and climate change.

While the current literature indicates that the intensity of greenhouse gas emissions can be reduced by switching to the advanced technology of renewable energy such as (wind turbines, solar cells, hydroelectricity, nuclear reactors). And as we face the threat of global warming that threatens human life. EGY-Power tends to increase acceptance of renewable energy as an alternative source is a must for those concerned, by creating a fully working demonstration of an application that can be used by industries, environmental groups, and financial organizations, to show possible and cost-effective alternatives to converting from fossil fuel to renewable energy facilities. Cavell Sylvester Tracey Seales Jyoti Dowlath Alexandra Ghany

IANTA



BLUE MANTA ENERGY NIGERIA

Revolutionizing Nigeria's energy options through biogas solutions. Chimobi, Josephine and Gospel are students in their finals in the University of Nigeria, Nsukka, with Chimobi and Josephine studying Civil Engineering while Gospel is studying Mechanical Engineering. Chimobi is a critical thinker by talent, he has core knowledge in Engineering related software such as AutoCAD 2D and 3D, ArchiCAD and Excel, amongst others and has a flair for Science, Technology and sustainable development. Josephine seeks to revolutionize the world with technology in areas of Virtual Reality, Data Science, Machine Learning, Additive Manufacturing and sustainable energy systems. Gospel intends to change his world through his career in sustainable energy (Solar PV solutions, bio-digesters e.t.c) and sustainable development. As individuals, we grew up in our society with prevalent inefficient and unsustainable energy practices.

Added to this, is poor management of wastes, where organic wastes, septic wastes are channelled to water bodies or even miniature road paths and gutters. This inspired our idea to solve this problem by enabling waste to Energy practices. We strongly believe that we can solve Nigeria's problem of organic waste management and give her citizens clean, reliable and affordable biogas from organic wastes. With that, Blue Manta Energy is committed to increasing the impact of biodigesters on livelihood and productivity in rural and urban areas in Nigeria by transforming organic waste to environmentally sound biogas for cooking through the creation of biogas refill stations and solutions as well enlightening young people on sustainable energy, thereby contributing to SDG 7 & 13.

AWIS AZERBAIJAN

AWiS team aims to empower schoolgirls between the age group of 13-18 on the topic of Sustainable Development Goals (SDGs) in Azerbaijan, especially in the Southern regions of the country which are notorious for gender equality related challenges. By increasing awareness, AWiS is hoping to educate young people on all SDGs areas with a gender and equality approach.

PROJECT DEEPTI INDIA

Sonali is currently pursuing her final year in chemical engineering with a focus in energy technology from Dayananda Sagar college of engineering, she is also doing a diploma in women empowerment and development. Coming from an economical background state in India she has first-hand experience of the huge gap with quality education and training provided by the governmental and non-governmental organizations catering for women and trans community needs towards technical empowerment and self-reliance. Through her project, Sonali is trying to empower the rural women and the transgender community of India by providing them technical training in the field of renewable energy, teaching them a cleaner method of home cooking and working with various stakeholders in providing more job opportunities for them.

Justin Warners



Ezekiel Nyanfor

JUSTIN WARNERS NETHERLANDS

Having a bachelor's in physics that focuses on energy and environment, a master's degree is taken to go even more in-depth on these topics. Combining what I have learnt with the knowledge in the Fellowship, I would like to contribute to the energy transition. Either via implementing new technologies or increasing the knowledge among citizens on what they can do to help and achieve climate neutrality.

ENERGY LITERACY LECTURE SERIES (ELLS) LIBERIA

Ezekiel Nyanfor is a 23-year-old Liberian youth climate activist, entrepreneur, Founder, and Executive Director of the Liberian Youth for Climate Actions-LY-CA a registered youth-based NGO residing in the Republic of Liberia. He is a Leader of climate change activities including World Environment Day, World Earth Day, and World Conservation Day.

He is a Senior Certified Climate Restoration Advocate with the Foundation for Climate Restoration(F4CR), Climate Reality Leader with the Climate Reality Project, Country Ambassador of Evolution360, Race for Ocean 2021, Champion, and the National Coordinator for ClimateScience a UK-based NGO focusing on climate education for all.

Additionally, he was selected to represent Liberian youth during the Mock COP26, a youth-led initiative aiming to mobilize around the postponement of the 2020 Conference of the Parties (COP) and to show world leaders what an ambitious yet realistic and inclusive COP looks like. He is a Campus Director and graduate of the Millennium Fellowship, a semester-long social impact program organized by the United Nations Academic Impact and the Millennium Campus Network.

Ezekiel's exemplary accomplishments have earned him numerous notable commendations from youths across Africa, the Government of Liberia, and local NGOs.

He was nominated as Young Green Ambassador for the Climate in Africa 2020 edition organized by Climate Change Africa Opportunities. Ezekiel won the Outstanding Leader Award in Liberia 2020. He won the Unleashed Hackathon 2021 and represented Liberia at Mock COP26. He also won the SDG13, Climate Action Champion Award 2021. Ezekiel was interviewed by the BBC World Service on COP26 just as President George M. Weah spoke at COP26.



Siddhant Goyal Ridham Chadha





Georgette Udo Aisha Abba Suleiman Mary Dora Kamara



Nareendar Kumar Aiman Mudassar Qureshi Laveet Kumar

AEROSNERGY WATERLOO, ONTARIO, CANADA

Samas, Siddhant and Ridham are undergraduate students at the University of Waterloo specialising in areas such as Environmental Science, Business Administration, Geomatics and Aviation, with a focus on Sustainability, Clean Energy and Economics/Finance. Samas grew up watching his aeronautical engineer parents talk about aerodynamics and the innovative disruption in the aviation space. He has been extremely passionate about changing the face of aviation sustainability in the climate change era.

Siddhant is a geomatics student who has been working as a research assistant in the ESG space. He is training to be a pilot and has been keen to learn about economic diplomacy and how it affects infrastructure projects in the aviation space. Ridham is studying the strategic and financial space in sustainability and has been working with various organisations to implement the United Nations SDGs in projects such as clean water, infrastructure and real estate equity and gender equality. She is strongly ardent about exploring the entrepreneurial space in sustainability and coming up with disruptive ideas to fight environmental justice issues.

SE UNIVERSITY OF MANITOBA CANADA

We are a group of students at the University of Manitoba, developing a method of heating a shipment container greenhouse to provide food (tomatoes) for remote northern communities in Canada. Our current scope looks at using a solar heater and creating a temperature sensor to monitor the ambient air within the shipment container and soil.

MAG GREEN NIGER, TOGO AND COTE D'IVOIRE

MAG - GREEN hopes to educate and inform the public on Renewable energy & Climate change mitigation and adaptation. We would also discuss 3 major areas: Photovoltaic, Geo-resources, and Bioenergy and highlight career opportunities in those areas, which will be done through webinars, blogs and also through social media platforms. The project aims to encourage viewers to believe that every act of adaptation and mitigation goes a long way to combat climate change.

TEAM MEHRAN PAKISTAN

Team Mehran is mainly focused on the use of advanced applications to study the impact of climate change on regions with the use of sustainable energy resources. We are looking at energy efficiency and conservation awareness campaigns in remote areas where people aren't well aware of energy resources and where there is no source of electricity. They hope that it educates students and workers about the importance of energy conservation and efficiency, with the aim of achieving long-term environmental and financial sustainability. Their project falls under the subset of engineering, technology and environment. Within the scope of the Leaders project, they intend to create a fully working demo of an application that could be used by industries, environmental groups and finance organizations to better understand and interpret the impact of climate change on different regions.





PROJEK ALAM UNITED KINGDOM

My name is Azrul Hamzi and I am originally from Malaysia and am currently doing a Chemical Engineering degree in Birmingham, United Kingdom. Since I have embarked on this course, I have been exposed to a lot of energy issues revolving around the whole world and how it is critical that we start taking things seriously now in order to combat the problem of climate change.

I have seen how developed nations are all working towards transitioning their energy sources to clean energy such as renewables and hydrogen and employing state-of-the-art technology to stop carbon emissions. Therefore I am naturally utterly worried about the state of my own country Malaysia which is still mainly dependent on fossil fuels as its main source of energy and is very far behind in terms of renewable energy despite being a tropical country.

Hence, I have planned to dedicate my project by focusing on the issues concerning Malaysia's readiness in helping combat climate change specifically from the point of view of renewable energy and carbon capture and storage (CCS). I will be looking at the main issues inherent in Malaysia's current energy systems and how do we tackle them effectively and efficiently thus helping our nation improve its energy systems.

HYDROGEN SOUTH AFRICA

My name is Nompilo Nkosi and I've decided to join the student energy fellowship program because I want to close the gap between academic activities and community engagement for a better change in South Africa.

My project HydroGen will focus on research exploring the possibility of green hydrogen as an energy source in South Africa by critically analysing the opportunities and DISADVANTAGES of green hydrogen. The project will also focus on educating children and community members about water conservation since South Africa is a water-scarce country.



Kamogelo Sehoole Caroline Matenchi



Qazi Osama Atif Muhammad Habib Ullah

RENEO WATT SOUTH AFRICA

The project is about bioenergy in rural areas in South Africa. Currently, Reneo Watt is working on installing a biodigester system in a rural preschool, as preschools spend a hefty amount of money procuring LPG to prepare meals for 70 children. By installing the biodigester, the school will cut down operational costs and will be able to direct its funds towards other amenities.

Kamogelo Sehoole is a BSC Chemistry graduate from the University of South Africa (UNISA). In 2018, she started an internship with a research unit within the university called the Institute for Development of Energy for African Sustainability (IDEAS). It was from this experience that she learned about various manners of energy generation and fell in love with the concept of waste to energy. At the end of the internship, she was offered the opportunity to head the community engagement projects, with a focus on waste to energy and the elimination of energy poverty in disadvantaged areas.

Caroline Matenchi is a final year biomedical science student at UNISA. In 2019, she worked as an I-SET (Inspiring science engineering technology) robotics facilitator, teaching learners at primary and high school levels, how to design and code lego robots. In 2020, she won the University's Innovation Challenge, for her agricultural project, where she designed a smart sensor that allows farmers to monitor the nutrients in the soil. As of 2021, Caroline has headed the UNISA chapter of Engineers Without Border (EWB), a student-led international organisation where students are given a platform to apply the knowledge they have acquired through their studies to help disadvantaged communities.

GREEN CITIZENS PAKISTAN

PROJECT: To Produce 100 Local Climate Change Agents who work on Life Cycle Assessment and Energy Auditing

PROBLEM: almost 60% of our country's energy production is fossil fuel-based because of a lack of climate awareness. Due to low climate literacy, the biggest problem is insufficient awareness and engagement of the people. Pakistan, which is frequently hit by climate disasters, consistently ranks among the top 6 worst-affected countries in both the long-term and annual indexes.

VISION: engage youth from diverse backgrounds with sustainable energy in a practical setting

GOAL AND OBJECTIVES (WHAT WE HOPE TO ACCOMPLISH):

- Produce 100 climate change ambassadors
- Provide hands-on experience regarding energy auditing
- Provide learning of Life Cycle Assessments
- Engage people from the rural areas as well as urban areas with sustainable energy projects

VALUE PROPOSITION: Local region is targeted which is most affected by climate change, partnered with 4 academic departments already, capable of producing the exponential positive effect by creating agents of change, most of the knowledge will be provided to locals in local language and practical setting so they better grasp it.





Nirmal Karthikeyan Vaidehi Sridhar Sanskriti Arvind Mahima Lolla



Anastasiia Elnikova Kira Zhmud

THE EVERGREENS INDIA

The main objective of this project is to significantly reduce energy consumption, especially in rural areas or those dependent on conventional sources of energy, by tracking and recording the number of different forms of energy used.

Mahima Lolla (she/her) is a third-year Computer Science student at AVVP, Coimbatore. Known for her optimistic, candid and social personality, she is an integral part of Student Energy Amrita, as the President. She's highly passionate about making a difference within the student community and strives towards that goal through various clubs in the university.

Sanskriti Arvind (she/her) is currently pursuing Aerospace engineering in AVVP, Coimbatore and is in her second year. Her ambitious and driven mindset assists her in achieving the best possible results. She is enthusiastic when it comes to participating in hands-on projects and is eager to use her strengths for the advancement of our society.

Vaidehi Sridhar (she/her) is a sophomore, BTech CSE student at Amrita Vishwa Vidyapeetham, Coimbatore, India. An enthusiastic and passionate student with a flair for leadership and a deep desire to make a big change in the global energy system, she joined the Student Energy Amrita chapter and serves the position of Deputy Chair of Event Management, and helps in planning engaging and enthralling events to inspire the community around her. As a member of Fellows, her main objective is to bring about a massive change in sustainable energy.

Nirmal Karthikeyan (he/him), is a third-year BTech CSE student. His latest passion is UI/UX with a focus on designing for simplicity and a satisfactory user experience.

HYCA RUSSIA AND DENMARK

Hyca aims to create a better future through energy transmission, renewable energy and hydrogen as a new energy source. The team met at ITMO University in St.Petersburg, Russia and started to work together on a project to develop an educational Solar Energy Lab, where they won 3rd Place at the Schneider Electric Go Green competition on CIS stage and started a new project on launching a startup to make and sell electrolyses using competences of the HyTech Students of Aalborg University, Denmark, where Anastasiia is studying now.





Vijjasena Sugiono Ishita Yadav

Our Green Goals

Renew Watts echnologies

nergy is the future's sustainability ! n a world where energy is sustainable even at its peak!



n energy educationc grams Build bio-digesters for clean c Shalom Iboh grid

BETTERFUTURE USA AND INDIA

Ishita Yadav is a passionate youth advocate for climate equity and a social-justice activist. She serves as South Asia's Regional Focal Point at the SDG7 Youth Constituency and is co-facilitator of YOUNGO's Cities Working Group. Ishita has been involved in the climate advocacy sphere for several years and specializes in education, renewable energy, and sustainable policymaking.

Vijjasena Sugiono is an energy enthusiast with a demonstrated history of working on energy issues at higher education entities and a passion for financing energy access projects. He is currently a first-year student at Yale University and takes on the role of the Yale Energy Liaison, while also working as the Chair of the US Collegiate Energy Consortium. In the multilateral energy space, Sena serves as the North America Regional Focal Point for the SDG7 Youth Constituency.

Ishita and Sena met through the SDG7 Youth Constituency and share a passion for creating opportunities for young people. Together, they came up with the idea of BetterFuture, an opportunity desk platform designed to bring together the various stakeholders around the world (private companies, public entities, international agencies, youth organizations, fund managers, venture capitalists, etc) to create a centralized clearinghouse for opportunities in the field of energy. The aim of the project is to help connect young people with even more opportunities and help increase the transparency and accessibility of opportunity-sharing processes in the multilateral energy space.

RENEW WATTS TECHNOLOGIES NIGERIA

Renew Watts Technologies (RWT) is a green enterprise that envisions a world where energy is sustainable even at its peak. Founded in Nigeria, the main goal is to increase energy access, reduce carbon footprint, and foster sustainable energy production. One of its mission themed Renew Watts Campaign is an energy literacy educational program designed for youth, students in local schools, communities and underserved rural areas in Nigeria.

The campaigns are aimed at creating awareness about the potentials of renewable energy; imbibing young minds with the fundamentals of renewable energy technologies, climate change and the importance of using low carbon resources to transition to a net-zero emission economy. In the long run, we plan to collaborate with private industries, renewable energy leaders, school authorities, community heads, and governmental bodies to install solar systems and anaerobic bio-digesters to improve energy access, clean cooking and an offset to fossil-derived fuels.



Arwa Ibrahim





Akshayan Muthusamypillai

ARWA IBRAHIM USA

My name is Arwa Ibrahim. I'm from Sudan. I go to Eastern Illinois University, Charleston, IL, where I am a Master's candidate in Sustainable Energy. I am a sustainability enthusiast, it is my field of speciality, passion, and motivation.

I am interested in the fields of; United Nations Sustainable Development Goals, corporate social responsibility, green communities, sustainable development concepts (environment, social and economy), poverty eradication, environmental protection, renewable energy, and energy conservation. My life goal is to live a life of use to others. Upon my return to Sudan, I would be honoured to apply the leadership skills and knowledge gained from this prestigious program and my sustainability education to be an effective woman leading positive change, contributing and promoting green sustainable development concepts.

HER ENERGY TURKEY

Pinar and İlayda are bachelor students at Bilkent University Faculty of Business Administration, specializing in Management. Their passion for creating a positive impact in the world built the foundation of their strong interest in sustainability. As students, they believe that campuses are one of the best places to start creating awareness and observing the influence of each step taken to accelerate the energy transition.

Therefore, their initiative, HerEnergy, aims to introduce and promote energy transition to the students and develop solutions to implement a sustainable energy transformation. With the guidance of Student Energy, they aim to analyse how a campus can be transformed into a sustainable one in terms of water usage, energy efficiency, recycling, and the types of physical solutions that can be implemented and the findings will be presented in a guidebook within the scope of their project.

AKSHAYAN MUTHUSAMYPILLAI INDIA

Akshayan has a background in Electrical Engineering with experience working in management consulting projects on Electric Vehicles (EVs). He believes that there is a need for a comprehensive study on the state or country level to assess the impact of EV adoption in different scenarios. This analysis would include a projection based model, a social, economic and environmental impact created by switching to EV from ICE.

This analysis will also explore the possibility to increase renewable integration to further reduce the carbon footprint of the state or country. This analysis can be used by the policymakers and stakeholders to make a better-informed decision on whether to incentivise and invest in the EV ecosystem.



Aashna Aggarwal





Haruna Inuwa Kabiru Usman Tukur Salisu Dahiru Idris

ENERGY INVESTMENTS - BUILDING A COMMUNITY USA

Aashna has worked on climate change and cleantech projects in India, Peru, the United States, Switzerland, and Zambia. Her research focuses on economic impact analysis and willingness to pay for various energy services. Some of her work has been featured in podcasts, case studies and publications like the Financial Express and Sun-connect Off-grid Industry Handbook. Aashna is a WRISE (Women in Renewable Industries and Sustainable Energy) – GRID Alternatives' Rising Women in Solar Fellow. As a TEDx speaker, she gave a talk titled, 'Identifying Opportunities for Value Creation' where she talks about rethinking environmental costs by focusing on hidden opportunities and sustainable impact.

She is a former accredited LEED Green Associate, was a delegate at the 23rd Youth Assembly, a Duke Global Policy fellow and a three-time winner of the Commitment to Action award at Clinton Global Initiative University. Aashna holds a Bachelor of Science in Economics and a certificate in Sustainability Engagement from Duke University and is currently pursuing a Masters degree in Sustainability Management at Columbia University.

DIAMOND ENERGY SOLUTIONS NIGERIA

Diamond energy solutions is an innovation-driven startup that seeks to address the energy crisis in Africa using clean energy from renewable energy resources like solar, wind, biogas, etc.

The team is saddled with the responsibility of empowering the next generation of African young professionals with the needed practical skills to become financially independent, entrepreneurs and earn entry-level positions in the renewable energy industry.

Who we are?

We are result-oriented renewable energy professionals that pride themselves in the diffusion of ideas to drive out innovations that will address the energy poverty in Africa and contribute safely to the clean energy transition in the world.

What do we do?

We provide capacity building training in solar installation and maintenance, design and sizing analysis of renewable energy integrated systems, wind-solar integrated power systems, provide hands-on practical training in software like HOMER PRO, HYBRID, and sizing analysis using MS EXCEL SOLVER.

How do we do it?

We use our wealthy and vast pieces of experience to champion innovations and to deliver the best teaching experiences for our clients.





Raheem Smith Christianne Zakour



Jean Melice Merzier

TIWALADE NIGERIA

My name is Tiwalade Aderemi, I am passionate about leading a frontline career in the energy industry. I wish to lend my voice to activism against all sorts of oil violations, oil spills, gas flaring in the energy industry, particularly in African countries. Having a sole focus for the energy transition in the world.

SARGASSUM ENERGY: TRINIDAD AND TOBAGO POWERED BY THE CARIBBEAN SEA & GRENADA

Sargassum seaweed proliferation in the Caribbean became an unavoidable problem in the early 2010s and continues to haunt coastlines regularly. Sargassum buildup on a coastline can trap fish, prevent turtles from reaching ashore, clog boat propellers, and when it rots on the beach, it smells rancid and can cause skin irritation after contact. Yet, sargassum seaweed represents a valuable untapped resource in many ways, particularly as a biofuel. The Sargassum Energy project aims to produce and support a policy brief for our respective governments to finally recognise and implement sargassum as a biofuel as a way to reduce its presence on our coastlines, as well as educational materials. Thus, the sargassum buildup can be addressed in a sustainable way while also presenting an alternative source of energy.

GREEN RANGERS BANGLADESH

Green Rangers was formed with the aim to make a change in the Energy from Waste (EfW) or municipal waste-to-energy(WtE) technology. It aims to change the conventional plants' layout by decentralizing them at the local stage.

MERZENERGY HAITI

Jean has knowledge about electricity and mechanics. He is interested in climate change and especially the impact of climate change on his community. He is motivated to contribute to a better future for his community and sustainability in designing a project for his community. He wants to use this fellowship to gain knowledge that will benefit his community in particular helping his country to accomplish sustainable development goals. His project plan is to synchronize a microhydraulic dam to a photovoltaic system to provide access to electricity to a small community in the south of Haiti in an effort to contribute to improving their life.



Elizabeth Obode



Elgenied Elqurashi Faisal Elfaki Mosab Elhassan

MICROGRID-LASSINA BURKINA FASO

Lassina has a background in Renewable Energy from the University of International Institute of Water and Environmental Engineering (2iE) in Ouagadougou-Burkina Faso.

He discovered in 2020 in Bokin (a rural place in the North of Burkina Faso) that small clinics don't have access to electricity and was shocked knowing that women are giving birth most of the time in darkness. His following in rural electrification with the solar system was the starting point of him showing his leadership in bringing electricity to the local area. One of his current projects was to design and manage the installation of a 50kWp mini-grid to electrify households, SMEs, water taps and horticulture. This project has the potential to increase the income of the rural local community. Lassina believes that installing those types of mini-grid in rural areas for productive uses has the potential of developing these small communities economically, socially and bringing them to independence.

GREEN GRADIENT QATAR

Gradient Green is a project that seeks to provide a deep understanding of the material requirements for a world powered by renewable energy. To allow for a truly sustainable system, all parts of the supply chain must be sustainable. The upstream parts of the process – including mining for minerals required to make the solar panels or wind turbines – is often overlooked. This oversight allows for environmentally unsustainable practices to thrive while consistently entrenching the inequalities in the lives of people 'upstream' of the renewable energy process.

Gradient Green is a project to draw awareness to and shine a light on the materials that hold the world.

ENLITE SUDAN SUDAN

Enlite Sudan is developing model-based energy policy recommendations to define particular strategies and pathways to increase electricity access across Sudan, through the use of geospatial information on the location of the existing grid, number of households, and expected population growth, the least-cost electrification is identified for each particular region.

BIOCAMPUS CUBA

Camila is a third-year student of Industrial Engineering focused on environmental issues associated with the use of renewable energy, in particular bioenergy. BioCampus is a project that aims to apply a set of instruments in order to demonstrate that the construction of a biogas plant at the University of Cienfuegos, using the waste from the kitchen-dining room of the campus is feasible and can satisfy the energy needs of this facility and other demands of the campus.



Matsepiso Majoro

Demystifying and relearning impact of the energy sector on community relations

Connect





MAHLASELI ENERGY LESOTHO

Mahlaseli Energy started as a small solar installer and has integrated and grown into Mahlaseli Energy.

Lesotho has a serious electricity challenge that affects mostly those living in rural areas, which is a barrier to education and healthcare due to energy poverty and the use of dirty fuel energy sources.

Mahlaseli Energy aims to focus its project on teaching women with technical skills in the area of solar power in rural areas and potentially employing them.

CONNECT PERU

Connect was born as an idea to improve the interaction between the energy sector (as well as oil & gas or mining) with the community. Our base idea consists of developing awareness of the benefits that the energy companies represent; and, how they work to provide such information to communities so that the latter are more empowered to welcome this sector but also to formulate any criticism objectively. For this purpose, Connect wants to design a programme whereby the energy companies learn an easy language to communicate with communities, strengthening their relationship.

RENEWABLE DOABLE'S: EDUCATING CANADIAN YOUTH THROUGH EXPERIENTIAL LEARNING ABOUT RENEWABLE AND CLEAN ENERGY C

CANADA

Alissa Gallizzi is a Canadian university student with a background in sustainability in environmental education. She is eager to change the education system to focus on environmental education. She believes youth are the future. Throughout her years as a student in the Canadian elementary and high school curriculum, she wished there was a focus on the importance of a green future!

Through the Student Energy Fellowship, her goal is to use her newfound knowledge, coaching, and mentoring to develop an accessible renewable energy curriculum for Canadian youth and students. With her experience in volunteering for various outdoor education programs, she hopes future education will be focused on place-based learning and nature-integrated courses.



Valeria Belén Cerpa Salas





Sandra Carolina Lock Benavides Arturo Cusihuaman Quispe Christopher Espinoza Wendy Ancieta Cinthya Helen Arhuata Suca Fiorella Cristina Vasquez Diaz

ECODESIGN

Valeria holds **PER** in Architecture from Universidad Catolica de Santa Maria, in Arequipa, Peru. As a result of her thesis and research project, she became involved in sustainable architecture and supported the development of composite building materials. She is working on the design of healthy rural housing, which contributes to saving natural resources and the use of clean energy. Her projects are inspired by the SDGs, supporting the most vulnerable communities and social architecture. She hopes to replicate these experiences in the design of healthy housing with clean, renewable energy for the three regions of her country (coast, highlands and the Amazon). Through reflection, Valeria is sure that responsible design could mitigate the effects of climate change. This project aims to contribute to her community of Arequipa while working with technologies, sustainable processes, and participatory design with actors and stakeholders in the field.

EMPRENDE VERDE PERU

The six members belong to the association Peru Young Energy Professionals (PYEP). The association's main purpose is to contribute to the energy transition in Peru; empowering and promoting the participation of new generations in the development and improvement of the environmental and energy sectors.

Emprende Verde seeks to provide a service focused on the optimization of energy consumption, green economic growth, contribution to the reduction of Greenhouse Gas (GHG) emissions, and the closing of knowledge gaps in renewable energy and climate change for Small Medium-sized companies.

According to the Ministry of Production of Peru (2020), the Small Medium-sized company represents 99.5% of the total number of formal companies in the Peruvian economy - 95.2% are micro-enterprises, 4.1% are small, and 0.2% are medium-sized. Of these, 85.2% are engaged in commerce and services, and the rest (14.8%) in productive activities (manufacturing, construction, agriculture and livestock, mining and fishing). Small Medium-sized companies generate more than 90% of the Economically Active Population (EAP) employed in the private sector and are considered the source of employment. Likewise, 8 out of every 100 persons of the employed EAP are drivers of a formal Small Medium-sized company.

This team strongly believes that the project Emprende Verde will have a huge impact on improving the energy consumption of Small Medium-sized companies in Peru.



Etumuka Amamize Oritsejolomisan Stephen Emmanuel Ibanga



Blessing Ekarume Canice Anyika Habibu Omoniyi Michal Ezeh

Kornelija Ukolovaite

RENALYTICS NIGERIA

Etumuka is an energy professional and climate change activist. She and her team (Emmanuel, Jolomi and Ayodeji) founded REnalytics. Their vision is for a world where clean energy is available to everyone through smart technology. Approximately 2.6 billion people worldwide do not have access to modern, clean, and affordable energy. This forces them to rely on open-fire cookstoves, which produce a lot of smoke and expose users to household air pollution (HAP).

Access to clean cooking fuels is essential because household air pollution (HAP) caused by continued cooking with traditional fuels and stoves has been linked to nearly 4 million premature deaths in women and children each year. Additionally, residential fuel burning accounts for 21% of global black carbon emissions, mostly in developing countries, resulting in unsustainable harvesting of wood, causing massive deforestation, particularly in Africa.

REnalytics was inspired by the environmental and health hazards of cooking fuels, so we combined hardware with smart digital infrastructure to provide rural communities with access to clean energy. This project aims to promote the acceleration of clean energy while stimulating impact with measurable outcomes for environmental preservation, gender equality, and good health.

CHEM LAGOS, NIGERIA

"CHEM" came to light after seeing the darkness and a loophole in the educational sector in Nigeria. About 80% of Nigerians don't have access to research internships and mentorship programs to boost their research skills. This has led to a decline in the rate of research published and available for interested researchers to access. In the coming years, CHEM hopes to tackle this problem by providing mentorship and research internship opportunities in the Energy sector to help student energy enthusiasts follow their passions and play a role in the world's green sustainable energy transition process.

KORNELIJA UKOLOVAITE UNITED KINGDOM

Kornelija has graduated from Minerva University with a degree in political science and history. For her bachelor's thesis, she analyzed the EU energy and climate policies, particularly the European Green Deal. While working on this project, Kornelija became interested in how governments and businesses interact to propel energy transition. Following the economist Mariana Mazzucato's idea of public value creation, Kornelija wants to connect with renewable energy companies and government institutions in Lithuania to analyze risks and opportunities for more efficient decarbonization in the country.

 Naya Tallacagua



CARLITO LANIE TEEPU

Teepu Cedi Camba Arben Vallente Carlito Jr Baco Melissa Libres Lanie Calabio

Renewly Solar Pooja Goswami

NAYA TALLACAGUA BOLIVIA

Naya has a background in Electromechanical Engineering from Universidad Privada Boliviana. For her bachelor thesis, she analyzed household electrical consumption and found a disconnection between electrical standards and people's participation. After researching her country's legislation and statistics, she found that indigenous communities are most affected by this disconnection. Her Fellowship project seeks to expand knowledge of the energy context in rural communities in her home city to understand how energy affects their development, problems, and climate change impact. She hopes to open the doors to future energy-related projects and give rural communities the economic empowerment that electricity access provides.

ENERGY WISE NETWORK FOR YOUTH (EWIN4YOUTH) PHILIPPINES

EWiN4Youth members are all graduates of electrical engineering in the Philipines working in the key areas of SDG 7, such as energy access, energy efficiency, and renewable energy. This gives them opportunities to completely immerse themselves in community development projects, including off-grid island electrification. These community projects allow them to see the gaps and barriers such as poverty, unemployment, inequality, inadequate social protection, and other socio-economic problems that limit youth participation in the energy sector and the broader dialogue of climate action.

This could also be attributed to the minimal or lack of youth's shared understanding of the energy sector and its essential role in the economic development of their community and in mitigating the adverse effect of climate change. Some of these challenges are systemic and are embedded in the community's everyday life. The EWiN4Youth Project is conceived from the team's belief that energy literacy catalyzes meaningful and organic youth participation in the energy sector and climate action.

Energy literacy is also a requisite in addressing those systemic barriers and challenges in the community. It empowers the youth to lead and challenge the status quo. This project aims to create a network of empowered energy-literate young leaders and advocates through a series of literacy-based activities (workshops) and advocacy-based initiatives (campaigns and projects) contributing to the attainment of SDG 7 targets and the realization of a just and inclusive energy transition.

RENEWLY SOLAR CANADA

Renewly Solar is a team from Nova Scotia looking to make a change for Education in Solar. They aim to bridge the diversity gap in the Canadian Solar Industry.



Saad Khalid Syed Ather Abbas Naqvi



BREEZE CATCHERS PAKISTAN

The 'Breeze Catchers' team consists of two passionate young engineers and close friends, Saad Khalid and Syed Ather Abbas Naqvi. Saad has a Bachelor's degree in Metallurgical and Materials Science Engineering from Punjab University, Lahore. He has a keen interest in Renewable Energy and wants to provide solutions for Green Energy Transition and a Sustainable Future. Saad is also current Country Ambassador of Student Energy for Pakistan.

Ather Abbas has a Bachelor's degree and a Master's degree with Honors in Mechatronics Engineering from Air University, Islamabad. He is a researcher in the domains of Green Energy, especially Wind Energy, with strong ambitions to contribute towards a sustainable energy future. Besides, he is a Certified Genius from Lahore Institute of Psychological Services, multiple times Gold Medallist in Athletics, a Champion in Karate (Shotokan) and a fine Allrounder Cricketer.

Ather and Saad are residents of the famous and culturally rich city of Lahore, Pakistan. Together they also completed an internship at Pakistan Aeronautical Complex (PAC), Kamra, which grew their friendship. In recent years, they have gained valuable experience working on composites, mechatronics, artificial intelligence, and research, making 'Breeze Catchers' a formidable team. Their prime aim is the development of an engineering project to generate electricity using only green and sustainable energy. On this venture, they plan to develop a wind energy project to help reduce dependence on conventional fossil fuel-based power plants.

BENIAMIN UNITED ARAB EMIRATES

Beniamin is a New York University Abu Dhabi student and has been active as a climate and energy advocate in Poland, Israel, Germany, the UAE, and the US for the last five years. He serves as the Global Focal Point of the SDG7 Youth Constituency, where he liaises with UN agencies focused on energy issues to promote and support the role of youth in the energy transition. Additionally, Beniamin serves as a youth advisor to the Global Center on Adaptation. Professionally, Beniamin worked as a researcher on the economics of renewable energy at the Potsdam Institute for Climate Impact Research and the German Institute for Economic Research.



ENERGY COLAB SINGAPORE, BRUNEI, TAIWAN

The four of us came together out of a shared curiosity towards what a renewable energy transition in Singapore and the broader ASEAN region could look like. We found it challenging to find answers as individuals until we started to put our heads together and identified the problem. Youth want to be engaged, informed and contribute meaningfully to sustainable energy solutions. Institutions seek innovative energy ideas, but there are high barriers to current energy knowledge pools beyond formal academic spaces for youth.

We started asking questions like: How do we weigh the pros and cons of potential energy solutions? How can we protect oil and gas workers as fossil fuels are being phased out? How can we actively engage our youth and communities and translate calls for high-level policy into localized solutions led by our next generation of energy leaders? What skills do we need collectively? How will we get there?

With Energy CoLab, we hope to build a community of learning and practice with other young people in Singapore to dive deep into energy challenges and co-design and develop projects through a 12-week social impact lab. Through workshops, training, and mentorship, a cohort of participants from diverse backgrounds will tackle specific local energy challenges of interest and mobilize solutions to increase access for Youth to more domains in the renewable energy sector. Instagram: @energycolab | Facebook: Energy Colab

HYDROMAN OMAN

Mariam has a background in Chemical Engineering from Aston University, UK and Muscat University, Oman. During her placement in the Energy Industry, she worked directly on Oman's national hydrogen feasibility study, the outcomes of which have initiated a pipeline of hydrogen projects in Oman, which are continuously growing. There has been a rising interest in renewable energy and hydrogen in Oman in the past years. However, as it is a fossil-fuel-dependent country, due to lack of investment into renewable energy projects, engagement of the community and policy support for the development of these projects, the progress of clean energy projects is slow. With depleting natural gas reserves in Oman, switching to renewable energy sources is required to alleviate energy security concerns. Mariam's project idea involves conducting feasibility research relating to the production and use of hydrogen from renewable resources in Muscat and Sohar, Oman. This will be followed by an energy policy recommendation outlining the steps that the country could take to scale up the production of renewable hydrogen in these areas. The policy will recommend how local communities can be engaged in the sustainable energy transition, emphasizing young professionals/students. By pursuing this project idea, Mariam aims to encourage some entities to transition to profitable but clean energy sources and mobilize communities, including young professionals and students like herself, to participate in the urgency of climate action, activism, and energy transition.



Ahmed Ali Hamdy Abdelsabour Mohalel



SUSTAIN ASU EGYPT

Ahmed and Hamdy are senior undergraduate students in the Energy and Renewable Energy Engineering program at Ain Shams University in Egypt. Both students are awardees of the Center of Excellence for Energy scholarship. They are interested in Sustainability and Renewable Energy, and thus seek to broaden their knowledge and improve their skills in these fields through this Fellowship. Ahmed has completed sustainability internships at Mondelez International CTOR plant in Egypt and at AEE Lebanon Chapter. During these internships, he created and implemented sustainability projects related to Energy, Water, and Waste. Hamdy focuses on Renewable Energy Technologies and interned at Voltalia Egypt, an international player in the renewable energy sector. He also has a background in industrial Automation. Their project idea involves employing their passion and knowledge to make their university campus more sustainable. They plan to achieve this by proposing a sustainability Plan, which includes some proposed measures and activities to be implemented related to Energy, Water, and Waste.

VICTORIA ADEGBAJU GHANA

Victoria Adegbaju is a social entrepreneur passionate about building a longterm career in Waste to Energy technologies for development in Africa. Her drive to fulfil this goal drives her ambition to pursue, identify and develop waste-to-energy solutions to solve energy deficit and waste management problems in Africa.

She has experience in administration, coordination, research, data analysis, sales, project management and building partnerships. As an Executive Assistant in a Financial institution, she works closely with an Executive Manager and assists other senior managerial staff in the execution of their duties. She is capable of working in a team, which helps her manage people from diverse cultural backgrounds and achieve set targets.

ENERGY AND TECHNOLOGY: MEXICO'S ENERGY CHALLENGES MEXICO

The project aims to give policy recommendations to the Mexican energy authorities in order to contribute to the energy transition.

Nahomy Bermúdez

Martin Kwan



Syeda Mendia Naqvi Maheera Faheem Syed Naheel Raza Rizvi



ENERGY ADVOCATE 2030 CHINA

Martin is committed to addressing environmental challenges and climate change. With the world being a global community with a shared future, effective measures require collective effort and cooperation. He aims to engage and empower more people to become active participants in international energy governance, laws, policies, development, and security. Together, we seek to create a sustainable energy future.

SUSTAIENERGY PAKISTAN

Mehdia Naqvi, Mahira Faheem, & Syed Naheel Raza Rizvi are Founders of the organization Sustaienergy. By profession, Naheel is a researcher at Chunbek University South Korea in the field of information and communication engineering. Mehdia is the Energy team leader of the energy management system department, and Mahira is the Assistant Manager of the Utility department of the leading Textile Industry in Pakistan. They are breaking societal stereotypes, including gender inequality and Women Leadership, by working as a successful professional engineer in the industry and energy sector.

The team analyzed the critical situation of achieving sustainable development goals by the country they decided to become contributors to achieve SDGs. For this purpose, they initiated a volunteer organization, "Sustaienergy" with the mission to provide "access to energy education for all." This awareness campaign educates youth, especially women and students from rural regions, regarding the energy sector with effective learning outcomes. They build collaboration between academia, industry, and UNIDO Pakistan, defining their efforts to develop a culture of accountability from stakeholders to the society for energy and sustainability-related actions. With the support of Student Energy, they are now working on the project: Designing a course to build up skills, focusing on capacity building, to create a skilled labour force to service and operate renewable generation, storage, and distribution systems. The course will emphasize Solar generation, storage, and distribution. This program will help the community by skilling, re-skilling, early introduction, career development, Solution of challenges, job opportunities in the renewable energy sector.

BLIBW ALGERIA

Amira has a background in renewable energy and energy systems from Mohamed Khider University in Biskra, Algeria. She was inspired by energy issues and wanted to improve and develop the systems for the best energy consumption and address the infrastructure's problems.

The project aims to develop an algorithm for a desalination technology using renewable energy to face drought and rain scarcity in Algeria.





Ashoke Mohanraj Aandrianna Jacob Christina Lin

Kenya Fernanda Piña Zaballa Berenice Hernandez Rubio

GREEN - ENERGY CAMEROON

Green Energy (GRN -NRG) is an initiative whose mission is to accompany remote and rural populations in Sub Saharan Africa in achieving a just energy transition. We empower the youth, women, and girls to advocate and promote sustainable energy technologies through capacity building, training, and workshop.

DESIGNING A JUST TRANSITION: BRINGING JUSTICE BACK TO THE PEOPLE

CANADA AND GERMANY

In order to achieve the climate goals the global community has set in the Paris Agreements, a transition from oil and gas to renewable energy sources is inevitable. But the way this is carried out has a tremendous impact on the industry's workers - either it happens without appropriate preparation, leading to a severe fallout in affected communities, or it will acknowledge their needs and design a just transition for them. With "Designing A Just Transition: Bringing Justice Back to the People", the team aims at providing policy recommendations for upcoming energy transitions in different countries and contexts that puts a focus on the worker's interests and livelihoods.

MUNENERGY: ENERGIZING YOUNG WOMEN MEXICO CITY, MEXICO

Berenice and Kenya are both graduates of environmental engineering in Mexico and have experience in the energy sector as well as climate change. In the last two years, they have been involved in various projects in the private sector, civil society organisations and international cooperation. It has been in these spaces where they have identified the limited participation of young women as decision-makers and agents of change.

In this sense, they have identified a wide area of opportunity to promote the involvement of women in the renewable and low-emission energy sector from high school and university education. To this end, with this project, they seek to encourage young women to get involved in the sector in public schools in Mexico and contribute to closing gender gaps.



Fiorela Valdiviezo Dominguez



Aina Kabdrakhimova Alas Alaskhanov Islambek Zholshibekov Aruzhan Yussubaliyeva

ENERGY FOR FUTURE PERU

Microbial Fuel Cells are an alternative with high potential

Fiorela Valdiviezo Dominguez is a graduate of Environmental Engineering from Cesar Vallejo University, during her academic career she has always researched in various areas, including biotechnology, an area that from the beginning called her attention and in which she got involved little by little until she participated as a thesis student in a research project in biotechnology. Here she discovered her passion for this fascinating area and specifically in what refers to microbial fuel cells, an emerging technology that could contribute to solving various problems facing the world today, including the energy crisis and the availability of clean water. Therefore, the project "ENER-GY FOR FUTURE: Microbial Fuel Cells an alternative with high potential" aims to further investigate the various applications of these bioelectrochemical systems, its progress since its inception and the various research and application cases that have been conducted over time and how this information can be valuable to provide a general and consistent perspective on this technology for further application on a larger scale in the future.

OLLAS SOSTENIBLES PERU

Ollas Sostenibles is a project that focuses on common pots, a type of small soup kitchens that emerged due to the pandemic in the most vulnerable and poorest areas in Lima. The aim is to enable the community of Cantagallo to generate self-sustaining resources such as energy and food, as there is food insecurity in the area. To do this, in the first instance, the population is trained in urban agriculture, while in the second instance, the idea is to guarantee clean cooking inside the common pots in this zone, as it is known that they use firewood and charcoal for cooking very frequently, which has caused respiratory diseases in many of the people in charge of each common pot. To this end, the project seeks to implement a biodigester that transforms the organic waste from the community into biogas for cooking and to produce natural fertiliser for the residents' urban vegetable garden.

SCE KAZAKHSTAN

The team is formed by four second-year students of the Kazakh-British Technical University located in Almaty, Kazakhstan. They were informed about the fellowship by a senior student and were pleasantly impressed and inspired to learn more about it. The project is at an early stage at the moment, due to the pandemic and the distance between the team members, but we believe that there is still time to implement it. The theme of our project is directly related to both the sphere of ecology and the energy industry - "Waste-to-energy processing". We are youth with initiative who care about the well-being of our world.



Peter Nfon



Titilayo Enigbokan David Gomo

AGRI-PV TEAM GERMANY

Peter Nfon is pursuing a master's in Environmental Engineering at the University of Applied Sciences (HTW) Dresden-Germany with research interests in Agrophotovoltaics (Agrivoltaics or Agri-PV) and waste-to-energy conversions. He has a background in Physics, Industrial Hygiene, Safety, and Security.

His project seeks to research the state of the art on the concept of cohabitation between Agriculture and Photovoltaics, its role, and functioning. How these two sectors can co-exist to improve land use, contribute to fighting food security, and a great push to the sustainable energy transition and/or access to sustainable energy. This environmentally friendly and innovative technology promises to boost food output and cut water consumption while simultaneously generating electricity and cash. Solar panels put on the same ground where crops are cultivated effectively allow producers to capture the sun's energy twice. The food-energy-water nexus has a pivotal role to play if we must attain sustainable development goals by 2030. The UN water emphasizes this point by stating; "Because of the inextricable links between these important sectors, guaranteeing global water and food security, as well as sustainable agriculture and energy production, need a well-integrated strategy". Agrivoltaics present an inclusive and integrated approach to contribute to solving some of the aforementioned problems which are gradually transforming into crises the world over.

ACROSS AFRICAN COUNTRIES CHINA

Titilayo holds a Master's degree in Power Engineering from Shanghai Jiao Tong University. Growing up in the urban cities of Lagos and Benin in Nigeria, she often encountered electricity outages due to power supply shortages and inefficient transmission. Her interest in energy is based on her experiences and subsequent realization that energy is a basic human resource and is essential to work and productivity. Therefore, after obtaining her first degree in Petroleum and Gas Engineering, she travelled to China to gain more knowledge on the development of sustainable energy resources for developing countries. She sees her participation at the Student Energy Fellowship as an opportunity to bring her skills into doing relevant work for the benefit of low-income class communities.

David's background is in Power Engineering from Shanghai Jiao Tong University. His interests lie in improving the standards of life for ordinary Africans through the provision of clean and easily accessible energy. He feels there's a need for more engagement from the different stakeholders in the energy sector, including young Africans and the government. Having grown up in the outskirts of Harare, the capital of Zimbabwe, he has first-hand experience of energy poverty and therefore believes that to properly address the issue of sustainability and climate change in most African communities, it is imperative to also address energy poverty and find sustainable ways of ensuring easy access to clean energy."

ILLARI LIMA, PERÚ

Dayana has a bachelor's degree in Civil Engineering from the Pontificia Universidad Católica del Perú. Due to the COVID 19 pandemic, Dayana noticed the great technological and social gap between the most remote areas of Peru and the cities, especially the capital Lima. This problem became closer as even her family, residing in rural areas, had similar difficulties. Living and learning in the village of Urcos (Cusco) with his grandparents during his vacations, that experience made him understand the importance of basic services in the development of communities. Her project is inspired in many ways by the use of renewable natural resources for community development, and he hopes to learn more about the positive impact that clean energy can have through a simple and inexpensive system. Through reflection, Dayana believes that the use of solar energy can improve the energy gap in rural areas without the need for complex investment in infrastructure, which would result in more complex management over time. With this, this project aims to improve the quality of life of the communities through solar energy, using simple maintenance tools for the villagers and at low cost, so that it can be replicated in different parts of the country.

E-GRIDACCESS PHILIPPINES

Shula is an engineer and is passionate about sustainable energy access. Growing up in one of the provinces in the Philippines, she remembered experiencing several power outages a week due to the lack of unstable energy supply, especially during typhoon season. She believes that studying the different energy solutions is the best way for her to maximize both her research and societal contribution. Thus, E-gridAccess aims to evaluate the feasibility of installing a microgrid in a remote coastal area in the Philippines. This project hopes to bring more reliable, cleaner, and safer energy to off-grid areas in the future.

THE RENEWABLE ENERGY SYMPOSIUM GHANA

The Renewable Energy Symposium is a series of conversations centred on Ghana's desire for increased use of renewable energy resources and the need to minimise the adverse effects of energy production on the environment. These different discussions will cover various aspects of Energy, such as the environment, healthcare, technology, law, social justice, among others. The Energy Forum will lay the groundwork for policies that will directly affect ordinary Ghanaian and improve their livelihood. All stakeholders including the Ghanaian citizen will have a seat at this agora and will work together to help achieve one of the Sustainable Development Goals of Clean energy.

Dayana Pauccar



Shulamite Cereno



Afia Amponsah-Mensah

Transition Ambassadors (ETA)



ENERGY TRANSITION AMBASSADORS (ETA) PAKISTAN

Energy Transition Ambassadors (ETA) members are one man and three women. The team is made up of students studying energy engineering, disaster management, and members interested in sustainable development by contributing to SDG 7,SDG 8 and SDG 13.

Miss Maryam Parvez holds a bachelor's degree in Disaster Management and a master's degree in Development Studies. Her research focuses on climate change and sustainable development. Saddam Hussain, Hamra Abrar, and Manahel Khattak all come from the same educational background. They are Electrical Engineers with a focus on Energy Transition. Mr Saddam Hussain is Vice President of the Association of Energy Engineers and CEO of a Social Enterprise. They want to bridge the energy-climate-change gap, educate and provide practical trainings to youth for starting their careers in Solar Energy Sector.

LEARN MORE ABOUT THE FELLOWSHIP PROGRAM: www.studentenergy.org/program/se-fellowship-2022/

STUDENT SE FELLOWSHIP