DECOLONIZING POLICIES: UNLEARNING AND RELEARNING AT THE WAKE OF CLEAN ENERGY TRANSITIONS

With this project, Aarisha hopes to learn what it means to decolonize the current systems in place through policy writing. Through reflection, she believes reconciliation is the most important key in creating a sustainable transition and combating the impacts of climate change. With that, this project aims to bridge knowledge gaps in energy transition, and mobilize communities about the urgency of climate action while highlighting the intersections of environmental, social and economic issues.

Zero Point Carbon

Zero Point Carbon wants to gain technical and project management experience to help aid their fellow Student Energy Chapter members in creating a carbon capture prototype. This prototype may lead to an implementable solution at Simon Fraser University in their biomass energy plant. As part of SFU’s 2025 Sustainability Plan, they are looking to drastically cut operational emissions. Helping research, design, and building a carbon capture module for their biomass energy plant will greatly aid them in doing so.

UNIVERSITY OF MANITOBA STUDENT LEADERS

The UofM Student Leaders aim to help remote communities in Canada with access to local fresh food (tomatoes) with a sustainable energy source while allowing them to be self-sufficient within their own community. Their project is a solar hot water system that will warm soil inside of a shipping container, which can be implemented for gardening in cold, remote communities.
Emergen believes that knowledge is a source of transformation and sharing it encourages and drives others. We want to empower women in the sector, because we believe in their role as a driving force for the transformation that the energy sector needs. In addition, according to the UN, women's leadership promotes gender equality, equal opportunities, guaranteeing health, security and freedom in situations of violence and full control of life. In this way, Emergen aims to encourage women in the energy sector and contribute to gender equality and class inclusion in a predominantly male sector.

GeoZewá is working on providing Boyacá Department with a map of geothermal uses. Their map will help the community to understand the possible uses that can be given to geothermal according to their economic activities and resource potential. GeoZewá hopes to make an impact through economical development. They are aware of the geothermal potential in Boyacá. However, Colombia doesn’t have productive geothermal projects which help communities to understand the benefits. We want to provide them with tools and confidence to appropriate their resources and take advantage not only in their current activities but also, make innovative projects.

Cygnus X-1 is researching the transport sector in El Salvador. They consider this an important and urgent issue, considering that 44% of the Greenhouse effect gases comes from this sector in El Salvador, and actions to remediate this situation are insufficient. In addition, we want to set the Universidad Centroamericana José Simeón Cañas (UCA) rol related to this issue, and evaluate what actions are necessary from the institution, to the students and society. We have identified El Salvador needs more young people to interest and engage actively on energy transition, and for that to happen, we need them to include themselves from different disciplines.

K’iin Sak’s (clean sun in Maya) main inspiration is to make a positive change in people’s way of commuting. Improving their cycling experience by providing sustainable rewards that can encourage, empower and engage people.
Joules main goal is to empower and address energy poverty in Mexican rural communities. Through the production of briquettes made from agricultural biomass residues that become a fuelwood-substitute that could meet their basic energy needs. Joules want the community to own the briquetting process to produce self-consumption energy for domestic use in safer and more sustainable sound ways and to be able to earn an extra income from this activity in the future. The use of briquettes from agricultural residues considerably reduces pressure on fragile ecosystems and reduces the effort and time invested by the community (mostly women and girls) in collecting firewood.

Solar Energy League (Sol-EL) is a multicultural group of solar energy enthusiasts, students, and professionals, aspiring to push solar energy to the forefront, and lead a sustainable future. Their goal is to make solar knowledge accessible and digestible for everyone while cultivating an information network for solar enthusiasts, professionals and experts. Sol-EL aims to be an all inclusive solar energy platform to educate, interconnect, and support all stakeholders.

Filling the Gap is focusing on collecting more accurate data on the deployment of renewables in Mexico to use as an input to run different scenarios inside the I-JEDI tool. Their objective is to have an updated set of data that can provide information for the decision-making process of deployment of renewable energy projects in small or large scale. With this project, they hope to create a bridge between science-based data and Mexico’s energy policy.

Lorena is creating a guide for young people to enter into the sustainable energy industry in Peru. She hopes this guide will be used by young people to understand how the energy sector works, not in the technical aspects, but how to start working in the sector, what skills are needed, etc.
Meet the Fellows

2021 Munergy AFCET Hub

Cameroon, Gambia, Algeria, and Oman

Munergy is looking at both social (increasing acceptance of wind turbines) and economic objectives (investment in wind energy) with their project, which aims at mediating between wind energy businesses/investors and citizens/communities. Their goal is to see an increase in the expansion of wind energy in Germany as this type of renewable energy has been stagnating for a while now. They hope to offer an opportunity to citizens to participate in the energy transition by including them directly in the expansion of wind energy. While also supporting wind energy businesses by persuading citizens to become shareholders and by including them in the project development phase and decision-making processes.

In a bid to foster national and regional collaboration for the sustainable energy transition in Africa, AFCET is devoted to bringing all energy stakeholders into one platform. The platform will ensure dialogues on African energy resources and scenarios, barriers and opportunities and discussions deepening the understanding of the role each stakeholder has to play in the quest to achieving the continent’s energy transition and revitalization goals. NGOs, Policymakers, youths, companies and all other stakeholders in the energy industry will be brought together in a single platform to deliberate on the issues each sector faces and the way forward. The outcome of this program will ensure voices from all sectors being heard, policies reviewed, commitments built and strategic plans established for the progressive transformation of the energy transition approach of the continent.

Know Your Energy

Vancouver, Canada

Know Your Energy is launching an intelligent application that is aimed to put together the daily energy usage pattern of a household and will be able to understand their energy usage (residential energy) through simple modelling. This application will provide data-driven suggestions to alternative energy usage pathways to reduce carbon emissions to individuals and help users understand the need of switching towards a cleaner and sustainable pathway.

MRINMOY, VARSHINI, RUHIDI

MERLENE AND PATRICIA

ZITA, ALPHA, REDHA, AND AISHA
Meet the Fellows

2021 SHE in Energy Africa

SHE in Energy Africa's is an organization serving young women in the energy sector. Their goal is to lessen the pressure that the schools have, lessen the financial burden when it comes to the electricity costs, and to further educate and create awareness on the importance of renewable energy not only as a source of energy/electricity but how it also contributes towards mitigating climate change.

Made in Portharcourt

Russia

Illustrious hopes to conduct a comprehensive study on global sustainable energy policy and a research project on global transition to sustainable energy. While most countries in the Global North are setting carbon-neutral goals, nothing as such has even been mentioned in my country, Nigeria up to the federal level. By conducting a research on the global transition to sustainable energy and following the blueprints of countries which has set ambitious carbon goals, he hopes to write an energy policy recommendation addressed to Honorable Ogundu Kingsley Chinda, the senator representing his constituency in the Nigerian Federal House of Representatives outlining the steps the country has to take to enter to a sustainable energy era.

Student Energy - University of Saskatchewan Chapter

Saskatoon, Canada

Student Energy - University of Saskatchewan Chapter is working on designing a feasibility study for implementing a demonstrative biomass energy generator to power the SENS (School of Environment and Sustainability) building on the University of Saskatchewan campus. This project will show the offset cost effectiveness and the fuel stock logistics behind implementing a biomass energy generator to power a medium to large sized building in the province of Saskatchewan. Their hope is that this will encourage further exploration into biomass as a viable energy source in Saskatchewan.

Energeegee

Canada

Energeegee is launching a literacy campaign to empower Canadians with the integral energy-related knowledge needed to make the often abstract concept of electricity concrete. They hope that this knowledge will help Canadians understand the importance of transitioning to renewable energy resources and to increase the demand for renewable energy in Canada.
Nyala Indonesia

Nyala Indonesia is working towards creating awareness and understanding of students and education officers related to the Indonesian energy transition and the importance/benefits of green energy. This project brings hope to all the youth participants, and a generation that is going to play an important role in the future to tackle energy issues and accelerate the energy transition in Indonesia. Equipped with knowledge and skills, they will have a package/resource to contribute and fulfil the market talent demand in the future. And moreover, they will do the same and channel these experiences to the next young generation after them.

Indonesia and Germany

S-Team

S-Team hopes to engage the scientific curiosity and creativity of young Filipino students, especially from marginalized communities, through an experiential learning product incorporating topics in STEAM (Science, Technology, Engineering, Arts, and Mathematics). Children develop their inquiry skills by exploring. Exposing kids at an early age to the experimental nature of STEAM allows them to understand and enjoy technical concepts outside the conventional classroom system as well as to supplement textbook lessons. We particularly want to reach children from marginalized communities since we believe that the joy of learning should not discriminate. We hope to encourage children to be acquainted with the different methods of innovation tackling problems so that one day, they may help develop ingenious solutions to uplift their own community.

Philippines and Canada

Conciencia Energética Mx

Conciencia Energética Mx is creating an online platform to promote energy literacy in Mexico. They hope this platform will educate and inspire young Mexicans to participate actively in Mexico's energy transition. They believe that energy education is the passport to a more sustainable energy future in the hopes that their project will help young Mexicans understand the urgency of accelerating Mexico’s energy transition; they hope they get inspired and motivated to take action.
EduEnergy

EduEnergy works to empower fifth and secondary school students on the topic of renewable energy as a measure of mitigation and adaptation to climate change. Through sensitization and awareness, EduEnergy is hoping to educate young people in renewable energies with a gender and equality approach.

Clean Energy for Edmonton

Clean Energy for Edmonton is working to implement solar panels on local charities in the community. This project will benefit users of the charities who depend on the services that they offer. The charity will have money which they can reallocate from utilities towards programs.

Gause Analytics

Gause Analytics is mainly focused on the use of high-end AI applications to study the impact of climate change on regions using aerial imagery. Their project falls under the subset of engineering, finance, 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 regions.

TEDxLeaders

TEDxLeaders is working towards increasing awareness of the energy industry in an accessible way to non-professionals. Using a different collective impact frameworks to make conversations, events, and resources related to energy and sustainability accessible for non-energy-professionals and continuously engage more and more young people in their endeavour.

Ailly Sheehama

Ailly is currently working on a project, by conducting a comprehensive study exploring the research theme, ‘Cultural Critique Framework as a Form of Just Energy Transition’. The research paper results will be used to assess drivers and their interplay across scales, to help identify plausible dynamics of climate governance which will be a necessary prerequisite for separating plausible from possible climate futures.
Antonia Macris - Environmental Education and Communication

EEC’s project is to develop a communications program that will highlight a diverse cross-section of environmental fields, industry sectors and systems, and their interconnected impact. The project aims to use communications practices and elements of educational technology to produce content that can be disseminated to mass publics to increase education and awareness of environmental issues and promote pro-environmental and sustainable behaviour change on a macro scale.

EmpEnergy

The objective of “EmpEnergy” is to reduce the figures of child labor in Bolivia, increasing quality education, health and well-being. EmpEnergy’s project will provide dynamic training to low-income children with an age range of 13 to 17 years. Likewise, it is aimed at parents in both urban areas and rural areas, but specifically in rural areas of Bolivia.

Kassa Energy Project

Kassa Energy Project is a project that consists of providing photovoltaic energy to the Kassa primary school and Secondary School in order to facilitate the increase in the literacy rate, the digitalization of lessons, the modernization of the educational system, the emancipation of students, the promotion of global citizenship, the monitoring of high school exams, on the other hand, the promotion of renewable energies and the achievement of the SDGs by 2030.

Since its creation in 1938, it has not had access to electrical energy, this precarious situation have participated in the degradation of the quality of education in the community.

Axolo-Team

Axolo-Team’s project is to draft policy recommendations with a bottom-up vision, involving local and national government entities with local communities.
The Electromobility technical summit is a project that seeks for the first time to bring together all Chilean academics researching in this area. The main objective is to disseminate knowledge and motivate university students so that human capital increases and the electromobility ecosystem continues to grow.

GoParity Canada is developing a sustainable investing platform accessible from any laptop, mobile device, or tablet. With the mission to democratize access to sustainable investing by breaking down industry barriers, GoParity Canada will allow everyone a chance to invest in good. Using a unique model from Europe, GoParity allows users to browse investment opportunities that support their interests by providing social, environmental, and financial returns. For those less familiar with investing, the team is developing an online community with educational content. GoParity boasts low minimum investment amounts and allows its users to simulate the investment payback before they commit any money.

UTEC Fellows project will provide young adults with a bigger view of the number of people who do and who don’t have electricity access on a daily basis. Use the potential of solar energy to involve rural communities in the process of use, installation and maintenance of these systems for the benefit of children and young people, so they can have artificial lighting at any time of the day.

PVeegilant’s project is hoping to achieve a good system design, using solar energy for irrigation to meet the water needs in the northern part of Nigeria that is arid. This project will feed into the Great Green Wall project which intends to plant a great wall of trees across the Sahel, from the West to the East of Africa to stop the encroachment of the desert.
BioWorth’s Leaders project is to reach out to rural and underserved communities and educate them on biogas and help them realize how it can benefit the community by giving them access to clean cooking. The objective is to help communities transition from cooking over firewood open fires and/or nonrenewable kerosene (paraffin). We plan on designing and developing a small-scale biodigester and having produced by biomass readily available in their homes.

Pearl Entrepreneurs Academy (PEA) is hoping to provide families living on less than $2 a day in rural Uganda with access to high quality, affordable and durable clean energy products, helping them break the cycle of poverty. A family who owns 1 PEA solar lantern, 1 PEA cook stove and 1 PEA water filter is capable of saving 73% of their monthly cooking, lighting and medical expenses. PEA targets customers that are of low-income households living on less than $2 PPP a day. In Uganda, these people are generally smallholder farmers and small business owners living in under-served, off-grid markets.

“Socio-Economic and Environmental Analysis of Hydrogen Economy for Driving a Sustainable Energy Market of Pakistan - A Policy Recommendation” is a comprehensive socio-economic and environmental analysis, and will provide a roadmap of policy recommendation for driving a sustainable energy market for Pakistan. Hopefully, this policy recommendation will be recognized at the local level and funding will be granted by government and private agencies for starting small-scale pilot projects.

RenEd (Renewable Energy Education) will be a platform with educational videos about renewable energy by experts in the field. Their project aims to inform the audience about both the positive and the negative impacts of renewable energy sources.
Pakistan

Team #84's energy efficiency and conservation awareness drive are working to understand the awareness amongst urban community residents especially amongst students in Peshawar city and identification of opportunities, challenges, and barriers in the adoption of energy-efficient culture and also to develop guidelines for sustainable energy-efficient policy.

New Zealand

Club Zero Emissions project will be a research paper which will look into new energy related policies that can be introduced for residential housing and communities in the South Canterbury region of New Zealand. It will help in identifying gaps in existing energy based policies for residential housings and communities and what new incentives can be developed to make transition to low carbon energy consumption attractive for the public in the south Canterbury region.

Ontario, Canada

Team #48 aim's to create a resource video that university divestment campaigns can look to for information on how to find success. Their project will aim to answer the “Who, What, Why, and How” of divestment, and pair informative research with moving illustrations. To inform this project, Team #48 plan to use what they learned from their successful campaign at the University of Guelph, insights gathered from Divest Canada (National Divestment Coalition of Universities), paired with what they are learning from the Student Energy Fellowship.

Nigeria

Dynergy's project is to design and fabricate a closed cycle micro-hydropower plant using renewable energy sources (water) currently used in most parts of the world to supplement electricity needs.

Nigeria

M-Energy project aims to provide recommendations that could improve the level of energy access in Nigeria’s Health Care sector.
Meet the Fellows

Green Link

Tatiana
Edmonton, Alberta, Canada

With her project, Tatiana hopes to continue to educate herself on novel technologies that are helping accelerate the energy transition as well as learn new and effective ways to become a more sustainable inhabitant on this precious Earth. Ultimately, she hopes to also educate others and inspire them to get actively involved with the energy transition and become sustainably-conscious citizens themselves.

Greenlink

Vancouver, Burnaby, Canada

Greenlink hopes to promote sustainability, provide opportunities for leaders, and contribute to the progress of making Vancouver a smart city through an engaging webinar series and potential collaboration with the City of Vancouver. Greenlink will bring together students who are interested in the webinar topics, professionals who want to network and contribute, residents of Vancouver, and thought leaders in energy/sustainability/technology at their events.

Green Bloom Tech

Kenia Nicole, Ines, Boris

Reducing energy inequality in rural regions and creating awareness of alternative energies to benefit families, through our project, who want to be part of making a difference in Bolivia’s Antiplano.

Campus Mobility

Javi eria

Campus Mobility is investing in an effort to create one of the fastest, eco-friendly means of mobility within Nigeria University campuses, while revolutionizing and innovating transportation systems on campuses. Their goal is a sustainable transportation system for students using smart scooter sharing technology, and enabling students to commute, keep fit and enjoy leisure within eco-friendly communities.

Communal Energy Savings

Javier

The Venezuela Youth organization for United Nations is an organization in Venezuela that created the Communal Energy savings project. This project works to distribute energy kits to rural communities and provide workshops to young people about sustainable energy.
Eco-Campus Montreal

Eco-Campus hopes to gather a professional architectural proposal for an addition to a building part of McGill University. They hope their effort will help bridge academic gaps between innovative research and the reality of our built environment.

Akani Bokamoso Energy

Akani Bokamoso Energy is looking at energy efficiency and conservation awareness on their school campus. 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.

Green Environmental Engineering (GENENG)

Green Environmental Engineering (GENENG) goal is to reduce landfill waste, whilst promoting urban agriculture and off-grid rural energy matrices. They aim to reduce the amount of produce that is landfilled such that we use it to generate urban agricultural products and add to a solar energy mixture for powering communities with little to no energy access.

Student Energy Case Competition Copenhagen, Denmark

Student Energy Case Competition Copenhagen (SECCC) is a case competition with the focus on energy issues. SECCC wants to create awareness amongst Danish university students in non-technical fields in terms of making the clean energy transition a viable employment path. And to show that young people are able to come up with new, innovative solutions that can make an impact.

IGNITE Nigeria

IGNITE’s project will increase the knowledge people have about Energy and its impact on their society and know how their energy choices affect the global climate and themselves.

Adidaya Initiative

Adidaya Initiative is focusing on two main areas, which are energy access and activism through social media. First and foremost, they hope to build a simple micro-hydro installation to provide electricity for public facilities in rural areas. Secondly, they hope that they can develop a social media platform which provides daily news on renewable energy. Last but not least, they hope to make their project sustainable by developing the organisation in the years to come.
The Zealous Spectrum

Rwand

NSENGIYUMVA, MARIE MERC, DESANGE, KARIMBA, AND BELLA HONORINE RWANDA

The Zealous Spectrum’s project will treat water and improve the citizens’ life and well-being in Rwanda.

SELENA

(SELENA
(Sustainable Energy in Law, Entrepreneurship, and National Administration)

Philippines

JIM JIMENO AND FRANCIS

SELENA is developing publications on sustainable energy solutions in hopes it will inform energy policymaking in target countries.

CoolHealth

Ottawa, Canada

ANDRES

CoolHealth pilot project aims to provide access to sustainable cooling alternatives for health posts and mobile clinics by targeting temporary IDP sites in Burkina Faso. The focus is on using a cost-effective, solar-powered solution that ensures easy implementation and sustainable long-term management for local communities. Overall, the goal is to address the prevalent demand for health services in Burkina Faso using clean and affordable energy.
Learn more about the Fellowship program:

www.studentenergy.org/program/se-fellowship-2022/