AY 2023 - 2024



# Saint Louis University Climate Action Plan



## SLU GETS INVOLVED IN CLIMATE CHANGE ADVOCACY; LAUNCHES RESEARCHES, STUDIES, PROPOSAL

#### 27 November 2023

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### ACADEME GETS INVOLVED IN CLIMATE CHANGE ADVOCACY

The Saint Louis University (SLU) research consortium extends their expertise on mitigating global warming and climate change through small yet significant steps in the way of university programs, practices and research.

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SLU's research consortium is actively contributing to climate change mitigation through various initiatives. The university's programs, practices, and research align with the Catholic Church's call for environmental protection, as outlined in Pope Francis' encyclical "Laudato Si."

SLU has implemented several sustainable practices, including car-less days, meatless Mondays, and the promotion of green spaces. Additionally, the university has conducted research on renewable energy sources, such as solar power and rainwater harvesting, and has developed innovative waste management solutions. Moreover, SLU

has conducted research on small-scale mining in Benguet to assess its environmental impact. These efforts demonstrate SLU's commitment to sustainable development and its role in addressing the challenges of climate change.



## SLU conducts blessing ceremony for the SLU Navy Base Campus Sewage Treatment Plant (4th STP in SLU)

**20 May 2024** Published in the SLU Website

URL: <u>https://www.slu.edu.ph/2024/05/20/slu-conducts-blessing-ceremony-for-the-slu-navy-base-campus-sewage-treatment-plant/</u>



<image>

Saint Louis University (SLU) conducted the blessing ceremony for the SLU Navy Base Campus Sewage Treatment Plant (STP) on 20 May 2024 attended by the SLU and Basic Education School (BEdS) administration. This is the fourth STP project, among the series of SLU wastewater treatment systems include STP facilities in both the <u>Main Campus and Maryheights</u> <u>Campus</u>, as well as at the <u>SLU Sacred Heart Medical Center (SLU-SHMC)</u>, marking the continuous partnership between SLU and KBWorld Trading Corporation in the advocacy of sustainable development and environmental stewardship. Fr. Gilbert further stated the STP facility is a testament of SLU's commitment to the students and most importantly to Mother Earth, as a way to make Laudato Si<sup>'</sup> "tangible and executable in our school setting." Before water is released to the environment, it is already clean which helps preserve the integrity of God's creation. Also, the said end water will also be shared with the Immaculatis Cordis Mariae (ICM) Missionary Sisters of the Immaculate Heart of Mary as water for their gardens and for other needs.



### SLU-UL and American Corner Baguio conduct partnership meeting and ocular inspection at Camp 7

#### 08 October 2024

#### Published in the SLU Website

URL: <u>https://www.slu.edu.ph/2024/10/08/slu-ul-and-american-corner-baguio-</u> <u>conduct-partnership-meeting-and-ocular-inspection-in-camp-7/</u>

SLU, in coordination with the University Libraries and American Corner Baguio, held an initial meeting and ocular inspection with the Hon. Barangay Captain Angelina C. Ramos and Hon. Barangay Kagawad Michael V. Binay-an and Kagawad Oliver F. Binayan of Brgy. Camp 7 for a potential partnership in adopting a Creek on 03 October 2024 at Verdepino Drive, Camp 7. This creek is a tributary to Bued River that passes through Kennon Road going to La Union province.

This partnership with the Barangay of Camp 7 affirms SLU's dedication to implementing the Church and CICM advocacies on Ecological Integrity, and supporting the United Nations Sustainable Development Goals (SDGs), particularly SDG 13 (Climate Action) and SDG 17 (Partnership for the Goals).



### "Carbon Footprint Calculator: An Emissions Analysis for SLU"

#### Published in the SLU Website

URL: https://www.slu.edu.ph/2023/09/11/call-for-respondents-carbon-footprint-calculator-an-emissions-analysis-for-slu/



#### CARBON FOOTPRINT CALCULATOR: AN EMISSIONS ANALYSIS FOR SAINT LOUIS UNIVERSITY

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#### ABSTRACT

The impact of carbon emissions to the environment are immensely putting everyone in danger if not kept monitored and reduced. Carbon footprint makes up the total greenhouse gases emitted by an individual, organization, or a product. It is known that these gases cause climate change. By understanding carbon footprint, emission sources can be identified. Actions can be rendered to lessen carbon emissions generated. This research study aims to develop a carbon footprint calculator that can be used by the institution of Saint Louis University to reduce its carbon emissions and embody the Philippines' priority of reducing the greenhouse gas emissions. The study is conducted at Saint Louis University - Main Campus in Baguio City and will gather timeframe data of five years, including pre- and post-pandemic. It utilizes the quantitative research method to enable the students to analyze data systematically. Correlational research design is applied to instate relationship between the variables and the trends generated by the carbon footprint calculator. The research study employs on-site assessments, survey questionnaires, and application of Phyton software for the data-gathering tools. Treatment of data adapts to the framework of the 2017 Philippine GHG Inventory and Reporting Protocol. Data are analyzed through the use of ARIMA and SARIMA to account seasonality of the data. The results obtained with the use of the carbon footprint calculator will be used to predict the carbon footprint emissions of Saint Louis University until the year of 2030. This will aid Saint Louis University to make action plans on how to reduce their carbon emissions and be in line with the sustainable development goals.

BS Chemical Engineering 4th-year students of Saint Louis University invite the Louisian students of the School of Teacher Education and Liberal Arts (STELA), School of Engineering and Architecture (SEA), School of Medicine (SOM), and the School of Advanced Studies (SAS), to make a stand to reduce carbon emissions by participating in the study, "CARBON FOOTPRINT CALCULATOR: AN EMISSIONS **ANALYSIS FOR SAINT LOUIS** UNIVERSITY." The study aims to develop a Carbon Footprint calculator to monitor and reduce the carbon emissions of SLU.



## Empowering Communities: SEA-SLU and Local Partners illuminate path to progress with Solar-Powered Street Lamp Initiative

#### Published in the SLU Website

URL: <u>https://www.slu.edu.ph/2024/02/27/empowering-communities-sea-slu-and-</u> <u>local-partners-illuminate-path-to-progress-with-solar-powered-street-lamp-initiative/</u>



In a collaborative effort of Saint Louis University, the School of Engineering and Architecture (SEA), **Electrical Engineering** Department, under the Community Extension and **Outreach Programs Office** (CEOPO) with the Parish Pastoral Council of the SLU Saint Aloysius Gonzaga Parish, spearheaded a transformative project aimed at enhancing safety and sustainability within Barangay Happy Hollow, Baguio City on 9 and 10 February 2024.

Three solar-powered street lamps have already been installed in Purok 1, Brgy. Happy Hallow, Baguio City, and more will be installed on the undeveloped roads, mostly consisting of narrow footpaths leading to different Puroks in the barangay. Furthermore, a seminar and training session was also conducted by Engr. Marc Gabriel Labagnoy, the Adviser of Jr. IIEE, and Mr. Joel Campos, EE Laboratory Technician, together with EE Faculty Members and Jr. IIEE members.

This comprehensive approach underscores SLU's commitment to holistic community development and capacity building, aligning with the United Nations' SDGs and the CICM Advocacies on Justice and Indigenous Peoples Apostolate are affirmed. Through collaborative efforts and ongoing education, SLU empowers local communities with knowledge and skills in sustainable practices paving the way for brighter and more equitable future for all.



### Journeying through the 29th ASEACCU International Conference Theme: "Global Goals in the Care of our Common Home: A Catholic Response"

### 21-25 August 2023

Published in the SLU Website URL: <u>29th ASEACCU International Conference</u>



Over 200 faculty and students from the nine member-countries of the Association of the Southeast and East Asian Catholic Colleges and Universities (ASEACCU) – Australia, Cambodia, Indonesia, Japan, Macau, Korea, Philippines, Taiwan and Thailand – arrived in Baguio City, Philippines to participate in the 29th ASEACCU Annual Conference from 21-25 August 2023. Within the conference week, participants shared their knowledge, wisdom, and experiences anchored on the theme, "Global Goals in the Care of Our Common Home: A Catholic Response".

The 29th ASEACCU International Conference has indeed been a testament to the unity in purpose and diversity in approach, emphasizing that the care of our common home is not a solitary endeavor but a harmonious chorus of mindful actions.



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A technology known as a remote monitoring system makes it possible to measure and observe various parameters from a distance. These systems usually collect and send data to a central monitoring unit for analysis via the use of sensors, data collection tools, and communication technology. In response, this study focused on developing a remote monitoring system using microcontroller technology to assess soil moisture condition for soil erosion risk, specifically for the residents in Lower Atok Trail. This research can contribute to SDG 13 by providing early warning systems and data-driven insights for climate-resilient land management practices, mitigating the risks associated with landslides and protecting vulnerable communities.

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The study's significance to SDG 13 lies in its development of an innovative coastal protection solution that can mitigate the impacts of climate change, such as rising sea levels and stronger storms. The hexapod sea barrier offers a more effective and efficient means of protecting coastal communities from erosion, flooding, and storm surges, contributing to climate resilience and sustainable development.





#### AY 2023 - 2024

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The study on Enhancing Flood Resilience through Strategic Flood Gate Implementation in Catggaman Nuevo, Tuguegarao City contributes significantly to SDG 13. By developing and implementing effective flood mitigation measures, the study helped reduce the vulnerability of communities to climate-induced disasters. The flood gates provide a crucial defense against flooding, protecting lives, property, and infrastructure. Additionally, the study's findings can inform policy decisions and inform the development of sustainable flood management strategies in other vulnerable areas, promoting climate resilience and sustainable development.





### AY 2023 - 2024

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The study contributes to SDG 13 by exploring sustainable construction materials and methods that can mitigate the environmental impact of building fires. By using pyrolyzed coffee grounds as an additive in concrete, the research aims to reduce waste and promote circular economy principles. The study's findings can inform the design and construction of fire testing facilities, ensuring they are more resilient and sustainable. Additionally, the research can contribute to the development of fire-resistant building materials, reducing property damage and loss of life due to fires. By promoting sustainable construction practices, the study supports climate resilience and sustainable development.





#### AY 2023 - 2024

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The proposed recreational and stormwater reservoir in Emilio Aguinaldo Park in Salud Mitra, Baguio City contributes significantly to SDG 13 by addressing the challenges of climate change, particularly extreme weather events and water scarcity. The project aims to create a sustainable and resilient urban green space that can mitigate the impacts of flooding and provide a recreational area for the community. By harnessing rainwater and storing it in a reservoir, the project can help conserve water resources and reduce dependence on external sources. Additionally, the green space can improve air quality, reduce urban heat island effect, and enhance biodiversity. The project aligns with the goals of SDG 13 by promoting climate resilience, sustainable urban development, and the protection of natural resources.



