

# AKU



# COOLING OUR CITIES

CLIMATE SOLUTIONS FOR A BETTER TOMORROW



# SUMMARY REPORT

PRESIDENT'S CHALLENGE FOR CLIMATE SOLUTIONS 2023

*"The actions we take as individuals can seem small relative to the scale of the problem. But large-scale change typically becomes possible only when many individuals share common values that are rooted in common experiences."*

Prince Hussain Aga Khan  
Closing Ceremony  
Inaugural President's Challenge  
2 December 2022

# President's Challenge for Climate Solutions | Overview

The AKU President's Challenge for Climate Solutions was inaugurated in May 2022 to engage AKU students globally in critically thinking about and problem-solving the climate crisis. The endeavour promotes student involvement in learning about the climate crisis, taking collective action, and driving tangible solutions that contribute to a better environment for all.

## AIMS



Educate, inspire, and encourage AKU students to serve as change agents for climate action



Promote their inclusion and engagement in addressing climate issues



Solicit and reward innovative and viable ideas through a design thinking process

The Challenge is open to all AKU students in all AKU geographies, medical and nursing interns, residents, and fellows.



# 2023 Challenge

The second year of the Challenge, in 2023, was launched on 3 October 2023 and formally closed on 15 February 2024. As an AKU-wide initiative, the AKU President, Dr Sulaiman Shahabuddin, sponsored this Challenge, executed with the support and expertise of the various departments across the University.

Patron in Chief	Implementation Leads	Challenge's Steering Committee
President's Office	<ul style="list-style-type: none"><li>Office of the Student Experience - Pakistan</li><li>Office of Environment and Sustainability</li></ul>	<ul style="list-style-type: none"><li>Office of the Student Experience - Kenya, Uganda, and Tanzania</li><li>Office of Strategic Communications</li><li>Office of the Registrar</li></ul>



## Theme

'Cooling our Cities' was the theme for the 2023 iteration. It recognised the rising heat profile of cities due to climate change and the urgent need to drive urban solutions. As global temperatures rapidly increase because of the enhanced greenhouse effect, cities experience heightened temperatures due to concentrated heat-absorbing surfaces, reduced vegetation, and growing population and energy consumption. Furthermore, the cities in which AKU operates, especially in Pakistan and East Africa, are amongst the most extensive, fastest urbanising, and some of the most poverty-stricken in the world and are already facing extreme climate impacts.

# Phases

The 2023 Challenge process was implemented in different phases (see graphic below) to seek diverse and sustained student engagement. A [linked highlights video](#) also captures the journey.



# Results

The [closing ceremony](#) for the 2023 President's Challenge for Climate Solutions was held in a hybrid format across the four countries on 15 February 2024. It celebrated the dedication and diversity of ideas put forward by all students. Following are the winning ideas of 2023, with [winners featured in this post](#).

## Winner

Students of AKU Pakistan's School of Nursing suggested "Ecobreeze, Climate Craft Creators" to cool air by pushing it via a solar-powered fan through a clay box and layers of bamboo and wettened jute, as a meant to provide a low-cost option for urban residents.

## 1st Runner Up

The "River Albedo Enhancement Project" by students of AKU's Medical College seeks to install trash collection nets on rivers to capture, sort, and properly deal with waste while enabling river areas to become more vegetated, better filter water, and reduce urban flooding.

## 2nd Runner Up

"Eco Cool Bin to solve waste management issues" was proposed by AKU Kenya's Medical College students, where an attractive and compartmentalised bin supports waste collection while seeking to reduce methane production from mixed waste.

## Most Impactful Idea

Fast Fashion' is an idea for students of AKU Pakistan's School of Nursing to engage companies to reduce overproduction in the fashion industry by transitioning to a circular economy approach, thereby increasing profits and reducing emissions.

## Most Feasible Idea

'Involving Children in Cooling our Cities' was proposed by students of AKU Uganda's School of Nursing for young students to be educated and actively engaged in roof gardens and other activities to address interlinked challenges of heat, food insecurity, and quality education.

## Most Innovative Idea

'Breathing Homes' is suggested by students of AKU Tanzania's Medical College to support residents of slums building catching towers made of palm fronds as well as thermal insulation in roofs from tetra packs, while students of AKU Pakistan's Faculty of Arts and Sciences suggested a 'Suburban Approach' for middle to upper-class housing to re-invigorate the use of clay tiles, insulation, and courtyards with green spaces and cross-ventilation.



# Schools Competition

For the second year, in parallel to the Challenge for AKU students, high schools in Karachi, Pakistan, were invited to submit ideas on the 2023 theme to [a schools' competition](#). From over 60 applications, 25 school teams were selected to present their ideas at AKU, impressing the jurors and audience with their innovativeness and dedication. The winners were invited to the Challenge closing ceremony to recognise and celebrate their winning ideas.

## Winner

### *Aga Khan Higher Secondary School*

with the idea for a rechargeable stove with aluminium

## 1<sup>st</sup> Runner Up

### *Karachi Grammar School*

with an application for products and carbon accounting

## 2nd Runner Ups

### *Bai Virbaiji Soparivala Parsi (BVS)*

with the idea for reflective paint mixers

### *Meritorious High School*

with the idea of a biofuel-compost exchange



## Conclusion and Way Forward

The interest and engagement of participants from different AKU geographies increased significantly (more than 400%) from the previous year, demonstrating that the Challenge is striking a chord and creating an impact. The campaign posts' social media visibility also garnered public interest, reaching more than 350,000 people.

Given the high level of interest, we look forward to continuing it annually and scaling its reach and impact further. The President's Challenge for Climate Solutions reaffirms AKU's commitment to engage and enable our students and recognises that we are looked upon to lead as an institution of higher learning. It ultimately empowers the young generation to take climate action in their career, from health to education to journalism and beyond. This aligns with the AKDN Environment Commitment, stating that "enabling future generations to engage in an informed and meaningful way with environmental degradation and climate change challenges is key for the success of AKDN's initiative in this area".