# CLIMATE CHALLENGE

**SPONSORSHIP INITIATIVE** 



جامعــة نيويورك أبـوظـبي



NYU ABU DHABI

# OUR COMMITMENT TO A LIVABLE PLANET

IN OUR WORK TO HELP mitigate the causes and consequences of climate change, NYU Abu Dhabi is redoubling its efforts and investments towards a greener tomorrow. Through strategies that span every area of university life, we are committed to reducing our greenhouse gas emissions, offering the most innovative teaching and research on climate change, and providing resources to establish a culture of climate responsibility that will help drive sustainable growth in Abu Dhabi, the UAE, and the MENA region.

As part of its commitment, NYUAD recently signed a Memorandum of Understanding (MoU) with the incoming Presidency of the 28th Conference of the Parties (COP28) to the United Nations Framework Convention on Climate Change. The MoU is aimed at generating impactful research pertaining to climate change; programming focused on climate action through the University's three public facing institutions; and supporting the organization of a Universities Task Force comprising UAE-based universities and higher education institutions to collaborate on research, dialogues, workshops, policy briefs, public events, and youth participation in the lead up to COP28.

Furthermore, NYUAD signed another MoU with The Abu Dhabi Department of Energy (DoE), which calls for scientific, technical, technological, legislative, and administrative cooperation in energy and water efficiency, sustainability, and conservation. Both institutions will jointly identify opportunities in Demand Side Management (DSM), energy and water efficiency, behavioral change, end-use consumption measurement, renewable energy, carbon footprint assessment, retrofits, energy and water resource issues, and clean energy certification.

With the support of our Abu Dhabi government partner, NYUAD is launching a sponsorship initiative to reinforce the University's commitment to advancing national priorities of the COP28 agenda to slow climate change and limit its ill effects.

*Climate Challenge* is NYUAD's first sponsorship initiative, guided by our mission to improve the world now and for future generations. We are making bold investments for the greatest impact, ensuring that our faculty and students have the support they need as they tackle the most critical challenges facing humankind.

Over the next two years, the *Climate Challenge* sponsorship initiative will give forward looking individuals and institutions the opportunity to join forces with NYUAD and its Abu Dhabi government partner in an impactful public-private partnership. The initiative builds on our unique strengths and expands our potential to make a difference locally and around the globe in four priority areas: people, programs, projects and community engagement at NYUAD.

Your financial contributions to the *Climate Challenge* sponsorship initiative will help us to engage and educate the local and international community on issues pertinent to Abu Dhabi, the UAE and the wider MENA region. It will support and attract the most talented and dedicated faculty and students in climate studies and research to NYUAD. In light of the strong regional focus of our climate research, this initiative is an opportunity to maximize the potential of some of the world's brightest minds from the UAE and around the world for the country's climate agenda.

## PRIORITY AREAS TOWARDS A LIVABLE PLANET

Support of the Climate Challenge sponsorship initiative will strengthen NYUAD's four priority contributions to the country's sustainability trajectory before, during, and after COP28.

#### ATTRACT AND RECOGNIZE **LEADING SCIENTISTS AND SCHOLARS**

Attracting top talent is central to the success of our mission. Our faculty lead cutting-edge research addressing complex challenges of local and global significance.

The initiative aims to endow or provide multi-year support for professors who are responding to the most urgent and inspiring UAE priorities for environmental sustainability and climate change, and who are advancing the UAE's agenda for COP28.

#### RESEARCH FOR IMPACT

Research at NYUAD seeks to expand human knowledge at the vanguard of many fields. Collaboration at NYUAD drives discoveries that are advancing the UAE's goals of being a knowledge-driven economy and society. Our scientists and scholars are making the world a better place through innovation, curiosity, exploration, and collaboration across the different disciplines required to tackle the causes and consequences of climate change.

The initiative aims to provide endowed and long-term spendable support for our research, with a focus on environmental sustainability and climate change. A wide range of opportunities is available to sponsor our labs, centers, research center directorships, and research fellowships.

#### ATTRACT TALENTED STUDENTS AND PROMOTE EQUAL OPPORTUNITIES

NYUAD has built a remarkable, diverse community of students and graduates from the UAE and 120 other countries. They are prepared to meet the needs and opportunities of our time. NYUAD is attracting some of the most talented students from around the world. If they need financial support to be able to attend, we provide them with full or partial scholarships.

The initiative aims to provide endowed and longterm spendable scholarship support to be awarded to undergraduate students who demonstrate a profound commitment to environmental sustainability and the talent to make change in the climate arena.

#### RAISE CLIMATE CHANGE AWARENESS IN THE COMMUNITY, ABU DHABI, THE UAE, AND BEYOND

NYUAD is committed to communicating to and engaging with the public through our programs, events, and initiatives. We develop and collaborate on artistic, cultural, and intellectual programming that is regionally relevant and globally recognized.

The *Climate Challenge* Initiative aims to raise sponsorship to support community-wide activities, from NYUAD Art Gallery exhibitions and public talks, to conferences such as the Student Energy Summit hosted at NYUAD in November 2023 and the International Conference on Desalination, Environment and Sustainability (IDEAS) organized by the Water Research Center of NYUAD in January 2024.

### **HOW TO CONTRIBUTE**

When you contribute to the *Climate Challenge* sponsorship initiative, you are doing more than supporting a university. Your contribution is an investment in people who are uncovering new knowledge, innovating, and putting their expertise to use for the good of all humanity. There are many ways to structure your support of this work.

#### **ENDOWED OR SPENDABLE FUND**

Your contribution can be either targeted towards an endowment fund to generate income in perpetuity and therefore contribute to the long term financial sustainability of the university's climate work, or provide long-term spendable support for a minimum number of years (depending on the destination of your contribution).

#### **POOLED CONTRIBUTIONS**

Through your contribution you will have the option to cover partially, or entirely, the amount required to fund a position (endowed or spendable). In the first case, individual contributions to proposed funds will be pooled and commingled with other contributions to reach the required amount to fund a position, whether a chair, research center directorship, research fellowship, or scholarship. In this case, the name of the proposed position is determined by NYUAD and our Abu Dhabi government partner.

#### NAMING OPPORTUNITIES

Should your contribution be at a level that entirely sponsors a position (endowed or spendable), you will be offered the opportunity to choose the name to be added to the position, in agreement with NYUAD.

#### **CENTERS** AND **LABS**

You will have the option to provide spendable support to research projects of specific centers and labs that focus on environmental sustainability and climate change. For long term contributions, this includes naming opportunities. Select capital projects are also available for named sponsorships.

#### RECOGNITION AND STEWARDSHIP

As a valued member of the UAE and global community, you provide outstanding leadership in valuing the importance of advancing knowledge and understanding of how we can tackle climate change and promote sustainability. While anonymous sponsorship is always an option, NYUAD sees great value in the exemplary role of sponsors of major climate action programs.

We have therefore developed various options to recognize your participation in *Climate Challenge*. Should you be interested in joining this sponsorship initiative, we would be delighted to define a bespoke stewardship package, depending on your interests and requirements.

## **HOW YOU CAN SUPPORT**

We welcome additional contribution to the success of the initiative by inviting individuals to become members of the Outreach Committee, lending advice and support to the Vice Chancellor.

#### **CHAIR**

As a leading member of the business community locally and globally, the Chair will head the outreach effort acting as a champion within the local and international prospect pool by facilitating connections, broadening outreach, and serving as a key partner to the Vice Chancellor.

#### **CO-CHAIR**

As prominent community members with close ties to NYUAD, Co-Chairs will drive the identification of and approaches to potential sponsors for the initiative. They will be actively engaged in helping the Vice Chancellor to cultivate and approach high priority prospects for the success of the initiative.

#### **PATRON**

The locally and internationally prominent Patron will provide visibility at the highest level to elevate the recognition and importance of the initiative and to incentivize support and contributions. The Patron may preside over signature events and galas. The Patron may wish to be further involved by facilitating connections and approaching high priority prospects.





## **OUR LEADING RESEARCH**

NYUAD has the ambition to be among the world's great research universities, nurturing the next generation of thinkers and changemakers. To this end we have established more than 100 faculty labs and projects and 20 larger-scale research centers.

We make significant discoveries and contribute important knowledge to our rapidly changing natural environment. From studying rising sea levels to discovering new species, from protecting coral reefs and mangroves to designing sustainable building materials, our researchers are investigating the future of our planet and all living things. To meet the complexity of climate change issues, NYUAD harnesses the power of multidisciplinary research to solve some of humanity's greatest challenges.

#### **OUR LEADING RESEARCH**

## CASE STUDY | RETHINKING THE WAY WE BUILD

Professor Kemal Celik, Director of the AMBER Lab, has developed a method of using brine, a water desalination byproduct, to make cement in a process that requires significantly lower resources and energy than the conventional cement production process, while producing a similar quality product.

With more than 70 desalination facilities in the UAE alone, desalination provides water to millions, but this public good comes at an environmental cost. Along with all the fossil fuels needed to drive the process, the leftover waste of highly concentrated brine is discarded into one of the saltiest bodies of water on earth.

Using Celik's method, the amount of magnesium-based cement that could be produced by the waste brine corresponds to approximately 23 percent of the cement production in the UAE and KSA. In other words, generating a huge offset of the total cement production of GCC countries. This material based on Celik's method was demonstrated in the UAE's National Pavilion at the Venice Architecture Biennale, which won the Golden Lion for Best National Participation.





**OUR LEADING RESEARCH** 

## CASE STUDY | LOCAL MANGROVES RESEARCH AND WATER CONSERVATION EFFORTS

The Arabian Peninsula is one of the most environmentally extreme regions in the world, yet is home to large and widespread stands of the gray mangrove, a unique mangrove species that is able to withstand extreme conditions. The gray mangrove forms the only naturally occurring evergreen forest in Arabia and supports high biodiversity and productivity in coastal areas across the region.

Researchers at the **Center for Genomics and Systems Biology** (CGSB) at NYUAD are working on priority areas for future research after publishing an analysis of the evolution of mangrove research in the Arabian region over the past half-century to determine geographic and topic-area trends.

Most recently, CGSB researchers, Associate Professor of Biology **John Burt** and group member **Guillermo Friis-Montoya**, published a high-resolution genome for the gray mangrove, providing an important resource for researchers around the world studying this species.

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#### **OUR LEADING RESEARCH**

## **CASE STUDY | DESALINATION SUSTAINS** MODERN LIFE IN THE DESERT, BUT IT IS COSTLY

As Director of the Water Research Center (WRC), Nidal Hilal researches the challenge of solving water scarcity in the Arabian Gulf.

Hilal works with membrane technologies capable of reverse osmosis desalination, a process whereby seawater is pumped through a thin polymeric film that separates fresh water from salty feed. The technology requires less energy to desalinate seawater than the traditional use of thermal desalination, which boils water to separate H2O from salts.

However, membranes tend to get soiled, and with time, flux through the membrane is reduced and its efficiency drops. The WRC are working on a number of membranes and desalination technologies that will address these challenges. The goal is to make technological advances that would allow wastewater regulations. The lab will continue to to test the prototypes in industrial conditions to



