# Swarovski grant fuels Bio-Clad revolution in sustainable urban architecture



In an era marked by rapid urbanisation, the urgency for sustainable solutions in city planning and architecture is increasingly paramount. The Swarovski Foundation’s Creatives for Our Future programme, in partnership with the United Nations Office for Partnerships, aims to empower emerging talents in this sphere. Among the recipients of its 2025 grant is Mangesh, who is pioneering an innovative project known as Bio-Clad. This self-irrigating, bio-receptive cladding system has been designed to foster the growth of moss and algae, contributing to air purification, reducing urban heat, and enhancing biodiversity.

Mangesh conveyed to TheCSRUniverse that being awarded the €20,000 grant represents a significant milestone in his journey. He noted that this opportunity not only provides essential financial support but also serves as a platform to bring his vision of sustainable architecture to life. "Receiving the Swarovski Foundation Creatives for Our Future Grant is a transformative opportunity for me," he stated, highlighting the affirmation it gives to his years of exploration at the intersection of architecture, biology, and material science. His project responds to pressing urban challenges such as air pollution, rising temperatures, and diminishing biodiversity.

Bio-Clad features a series of lightweight tiles that integrate bio-mimetic geometries and micro-irrigation technologies, utilising sustainable materials like terracotta. This innovative cladding system aims to convert building facades into active elements in the urban ecosystem. "My mission is to transform building facades into self-sustaining ecosystems, enhancing urban greening," Mangesh explained. He envisions the tiles not only cultivating algae and moss for air purification and cooling but also acting as carbon-negative surfaces.

The ambitious project is aligned with several Sustainable Development Goals (SDGs), specifically SDG 9 (Industry, Innovation, and Infrastructure), SDG 11 (Sustainable Cities and Communities), and SDG 13 (Climate Action). Mangesh's objective is to develop and test functional prototypes by April 2026, ultimately collaborating with experts to facilitate wider adoption in urban environments.

The inspiration for Bio-Clad comes from Mangesh's dual heritage; he is the son of a farmer and an architect. This unique background has instilled in him a deep appreciation for the interconnectedness of ecosystems. He articulated a personal philosophy that encapsulates his vision: "Today the building nests the plant, tomorrow the plant nests the building." This illustrates his aim for architecture to not just coexist with nature but to actively enrich it.

As part of the programme, Mangesh aims to develop a commercially viable product and to spark broader discussions on sustainable architectural practices. He expressed his aspirations to catalyse a shift in how architects, developers, and city planners incorporate ecological considerations into their work. With plans to eventually launch a startup to market his innovations, he emphasised the need for solutions that are both simple and affordable, yet beneficial to the environment.

Mangesh also highlighted the value of mentorship in conjunction with the project funding, aiming to gain insights from experienced professionals that will enhance the project's design and implementation. He hopes to refine the communication of the ecological and economic benefits of his work to various stakeholders, which he believes is crucial for ensuring long-term success.

In regard to sustainability itself, Mangesh defined it as a balancing act involving economic growth, environmental care, and social equity. He remarked, "Sustainable development... is about designing solutions that address the needs of today without compromising future generations." The transformative potential of projects like Bio-Clad could significantly improve overall urban sustainability by enhancing air quality and mitigating heat effects in city environments.

Mangesh anticipates that the wider implementation of his project will yield multiple benefits, not only for urban dwellers who will enjoy healthier living conditions but also for architects and city planners seeking practical, scalable solutions in urban design. Furthermore, his initiative is expected to create job opportunities across various sectors while promoting awareness of sustainable practices, thereby contributing to the broader goals of sustainable development.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://creatives.swarovskifoundation.org/> - This is the official website of the Swarovski Foundation's Creatives for Our Future programme, which aims to empower emerging talents in sustainable development through education and grants.
2. <https://creatives.swarovskifoundation.org/news/swarovski-foundation-launch-2025-creatives-for-our-future-programme> - This announcement details the launch of the 2025 Creatives for Our Future programme, including the €20,000 grant awarded to successful applicants like Mangesh.
3. <https://creatives.swarovskifoundation.org/faqs> - The FAQ section provides information on the programme's objectives, selection criteria, and the €20,000 grant awarded to successful applicants.
4. <https://creatives.swarovskifoundation.org/application> - This page outlines the application process for the Creatives for Our Future programme, including eligibility criteria and required materials.
5. <https://www.swarovskifoundation.org/news/swarovski-foundation-launch-2025-creatives-for-our-future-programme> - This news release from the Swarovski Foundation provides details about the 2025 Creatives for Our Future programme, including the €20,000 grant and mentorship opportunities.
6. <https://creatives.swarovskifoundation.org/news/swarovski-foundation-launch-2025-creatives-for-our-future-programme> - This article discusses the 2025 Creatives for Our Future programme, highlighting the €20,000 grant and the programme's focus on sustainable development.
7. <https://news.google.com/rss/articles/CBMi5gFBVV95cUxPUm9KcDJJUVVqWDdQeFRTTkN0cS1NaWluRUM0Vkg2NF9SN0xWbWRMSDRnVnlIdkNuZjRqVE54ZDVFbndOaW1NZG80N2U1Q2RHcDdDNzlsbzl4QXFUMElXQ005Tjg5cmRlbWg4Ykp5ckpYWmkzV0JuTmRVaEdHdi1iRWg0Y2prQl95WWZ3RlFJX0JPYk5oTjdyNXUxMkJVZjlrOTkxOW9kbS1xSk1SODhPb0dMajBQTHdvZTlJMUYybHA1eHlUdndNSHl0d21NaGRWMWNsMktFS0RSaFFjTi1VLTJNQWt5Zw?oc=5&hl=en-US&gl=US&ceid=US:en> - Please view link - unable to able to access data