VAAL UNIVERSITY OF TECHNOLOGY

Inspiring thought. Shaping talent.

Launch of the VUT Green Hydrogen Centre of Excellence
Prof Khehla Ndlovu, Vice-Chancellor and Principal, Vaal University of Technology
04 September 2025 | VUT Science Park, Sebokeng

Distinguished guests, colleagues, partners from Standard Bank, representatives from industry and government, members of the University Council, our academics and students, good morning. It is an honour to welcome you to the Vaal University of Technology (VUT) on this historic day, as we open the doors of the Green Hydrogen Centre of Excellence. Today, we do not simply inaugurate a building. We light a beacon for the future of our country, our continent, and our planet.

Around the world, the call for clean energy is no longer a whisper, it is a resounding chorus. Climate change, carbon emissions, and the urgent need for sustainable energy solutions demand bold action. South Africa has answered through the Hydrogen Society Roadmap, a national strategy positioning hydrogen as a pillar of our just energy transition. Here, in the heart of the Vaal, we know that industries are energy intensive and communities feel the weight of pollution and unemployment. We also know that our people carry the ambition to innovate, to engineer, to lead. That is why this Centre matters. It is not just about technology, it is about justice, jobs, and the joy of building a sustainable future.

For decades, VUT has been a university of action, a place where applied research meets community need. Through our Faculty of Engineering and Technology, we have built expertise in materials science, chemical engineering, and advanced manufacturing. The Green Centre for Hydrogen will draw on this foundation. From fuel cell design and 3D printed membranes to hydrogen production from waste and renewable powered systems, our academics and students will pioneer solutions that make green hydrogen not only possible but practical.

This Centre is strategically located at our Science Park in Sebokeng. Established in 2012, the Science Park occupies 10 hectares of VUT's land and was envisioned as a technology hub for Southern Gauteng. It houses our Advanced Manufacturing Precinct, Technology Transfer Office, and innovation labs that connect researchers with local and global networks. Its mission has always been to foster industrial renewal through science and technology. By situating the Green Hydrogen Centre here, we anchor it within a space designed for applied research, skills development, and enterprise incubation. This is not

just a facility, it is an engine for industrial and community transformation with the potential to create new industries, nurture entrepreneurs, and generate solutions that respond directly to the challenges of our region.

None of this would be possible without the vision and commitment of our partner, Standard Bank. Earlier this year, we held a soft launch to mark the beginning of this relationship, an event focused on announcing their involvement and securing the sponsorship that has made today possible. That early step enabled us to procure the necessary equipment and prepare the facilities you see today. Standard Bank has been bold in backing this venture, not just with funding but with faith. By supporting us for the next three years, they affirm their role as a catalyst for South Africa's green economy. Their leadership in the B20 and G20 dialogues, and their pledge towards net zero emissions by 2050, make this partnership more than corporate sponsorship, it is an alignment of values, a shared mission. On behalf of the University, I extend our deepest gratitude. Together, we demonstrate that when academia and industry unite, the result is not addition, it is multiplication.

This Centre will deliver on four fronts. It will advance research and innovation in hydrogen and alternative energy systems tailored for South African industry. It will equip the next generation of engineers, scientists, and entrepreneurs with critical knowledge for the green economy. It will engage with partners in mobility, steel, and energy sectors to drive green hydrogen adoption. And it will empower communities by creating jobs, nurturing skills, and ensuring that the benefits of innovation are felt beyond the laboratory, in homes and in local enterprises. The ripple effects are profound: reduced carbon emissions, strengthened energy security, new business opportunities, and, above all, hope.

The establishment of this Centre is a milestone, but it is also a beginning. Let us remember, the world will not wait. If South Africa is to lead in hydrogen, if the Vaal is to become a hub of green innovation, we must seize this moment. To our students, you are the inheritors of this vision. Your hands will build the prototypes, your minds will refine the science, your leadership will take these ideas into industry. To our staff and researchers, let this Centre be your canvas. Dream boldly, publish rigorously, innovate relentlessly. To our partners and policy makers, walk with us. Support the scaling of these technologies. Help us align with national priorities. Let us prove that hydrogen is not the energy of tomorrow, it is the energy of today.

Today, with Standard Bank by our side, we are not only inaugurating a Centre. We are inaugurating possibility. The VUT is ready to lead South Africa's hydrogen revolution, to contribute to a just transition, and to place our students, our industries, and our communities at the heart of sustainable growth. Together, let us fuel the future.

I thank you.