



media release

Innovating for cleaner air and healthier communities

AirSynQ Systems' innovative air-quality solutions: Marking the International Day of Clean Air for Blue Skies, 7 September 2026

Air pollution in South Africa (SA) causes thousands of deaths and remains a growing country's concern. It continues to affect people and communities, often without being immediately visible. The [International Day of Clean Air for Blue Skies](#), observed annually on 7 September, provides an opportunity for the [National Science and Technology Forum \(NSTF\)](#) to honour AirSynQ Systems (Pty) Ltd, winner of the Innovation Award: Small, Medium and Micro Enterprise (SMME) of the [2026 NSTF-South32 Awards](#), known as the 'Science Oscars' of SA. Prof Bruce Mellado is the Chief Executive (CEO) of [AirSynQ Systems](#) and Executive Director of the South African Consortium of Air Quality Monitoring (SACQM). This company was recognised for commercialising an artificial intelligence (AI)-powered air quality intelligence platform that senses, interprets, predicts and acts on environmental data in real time. The Innovation Award is sponsored by the National Intellectual Property Management Office (NIPMO).

"Clean air should not be a luxury," the company says, "and African innovation can deliver world-class technologies that protect people while also helping organisations operate better."



Left to right: Ms Lindiwe Mashirbye, Deputy Director, Funds and Incentives Management, NIPMO; Dr Edward Nkadireng, Head: AI and Operations, AirSynQ Systems; and Mr Dominique Adams, Head: Marketing and Commercial Operations, AirSynQ Systems (on behalf of Prof Bruce Mellado); and Mr Nqaba Ngandela, Special Adviser to the Minister of Science, Technology and Innovation, Prof Blade Nzimande

About AirSynQ System (Pty) Ltd: A South African company specialising in AI, Internet of Things (IoT) and predictive analytics, is transforming environmental monitoring through innovative air-quality intelligence solutions designed to enhance workplaces, hotels, and business safety, health and productivity.

The company's advanced platform combines real-time air quality monitoring with AI and machine learning to provide organisations with actionable insight into their indoor and industrial environments. Their platform that continuously analyses environmental data, enables businesses to identify risks early, improve decision-making and support regulatory compliance.

AirSynQ's solutions serve a broad range of sectors, including mining, healthcare facilities, corporate offices, educational institutions, hospitality venues, shopping centres, and industrial operations. The platform's predictive capabilities can identify environmental trends and detect potential hazards, supporting proactive interventions and risk management strategies.

"Improving air quality is key to tackling the triple planetary crisis of climate change, nature and biodiversity loss, and pollution and waste. Yet, air quality continues to deteriorate despite the increase in laws and regulations seeking to address air pollution."

International Day of Clean Air for Blue Skies: Established by the United Nations General Assembly (UNGA) in 2019, the observance raises awareness about air pollution and encourages countries, organisations and communities to strengthen efforts to improve air quality and reduce pollution.

Poor air quality can have serious consequences for human health, contributing to underlying health issues such as headaches, fatigue, reduced cognitive performance and other challenges. It can also negatively impact productivity, environmental sustainability and overall quality of life.

The economic case for air pollution action has been outlined in the past, but never with the strength that it will have during this year's International Day of Clean Air for Blue Skies.

New findings brought by the United Nations Environment Programme (UNEP) and its convened Climate and Clean Air Coalition (CCAC) will be at the centre of the 2026 Clean Air Day campaign, with the launch of a UNEP Spotlight Report, based on the Global Economic Assessment of Integrated Climate and Clean Air Action.

Air pollution is one of the major environmental challenges facing the world, affecting human health, ecosystem and climate change. Pollution from sources such as industrial activities, energy production, transport, waste burning and other activities can release harmful pollutants into the atmosphere. Addressing these challenges requires coordinated action, supported by scientific research, reliable air-quality information, effective policies and innovative technologies.

This significant day, therefore serves not only as a reminder of the importance of protecting the air we breathe, but also as an opportunity to recognise the scientists, researchers, innovators and organisations developing solutions to air pollution. It highlights the need for continued collaboration and innovation to create healthier communities and a cleaner, more sustainable environment.

Call to action: The NSTF encourages government, industry, policy makers and communities to support innovative approaches to air-quality monitoring and management. Investing in science, technology and data-driven solutions such as those developed by AirSynQ Systems can help identify pollution risks, protect human health, improve workplace safety and support more informed environmental decision-making. Continued collaboration and investment in air-quality innovation can contribute to healthier communities and a more sustainable SA.

To young people: The NSTF encourages young people to pursue studies and careers related to the environment, conservation, ecology, geography, chemistry and biology, and STEM-related disciplines. (STEM = science, technology, engineering and mathematics.) These fields play a vital role in protecting natural resources, addressing environmental challenges, reducing pollution, managing natural resources, assessing environmental impacts and supporting sustainable development. See the [NSTF Careers Booklet](#), particularly related to environmental health, environmental management, environmental science, climate change and nature conservation, to learn more about careers that contribute to environmental sustainability.

Explore the NSTF's online learning platform, [STEMulator.org](#), where you can discover where STEM is found in the world around you, as well as a wide range of STEM careers. These resources are free and accessible, to inspire the next generation of innovators, entrepreneurs and problem-solvers.

About the NSTF and the NSTF-South32 Awards: NSTF is an independent non-profit stakeholder body and network – a civil-society forum of over [150 member organisations across six membership sectors](#), involved in science, engineering, technology (SET) and innovation in SA. The [NSTF-South32 Awards](#) is famously known as the 'Science Oscars' of SA that recognise excellence in SET and innovation across [16 categories](#). The [gala dinners](#) to announce this year's [winners](#) took place in two cities simultaneously (Cape Town and Johannesburg) on 16 July 2026.

Join the NSTF's conversations on social media:

- LinkedIn: [National Science and Technology Forum \(NSTF\)](#)
- Facebook: [@NSTFSA](#)
- X: [@NSTF_SA](#)
- Instagram: [@nstf_sa](#)
- YouTube: [National Science and Technology Forum \(NSTF\)](#)
- TikTok: [nstf_sa](#) (listen to [science career talks](#) on this platform)

References

- <https://businesstech.co.za/news/energy/866647/the-province-in-south-africa-with-the-worst-air-pollution-killing-16000-per-year/>
- [2026-08 - The infinite promise and application of tiny particles - Wits University](#)
- [International Day of Clean Air for blue skies](#)
- [Home | Airsynq Systems](#)
- <https://nstf.org.za/current-winners/>
- <https://www.unep.org/interactives/air-pollution-note/>

About the NSTF

The National Science and Technology Forum (NSTF), established in 1995:

- is a broadly-representative stakeholder body for all science, engineering and technology (SET) and innovation organisations in South Africa
- gathers stakeholders around burning issues of national and global interest, across the public and private sectors, including matters of public policy
- includes a network of professional societies in SET and STEM education (STEM = science, technology, engineering and mathematics) - the NSTF proSET membership sector.
- recognises, awards and profiles the outstanding contributions of individuals and groups to SET and innovation through the prestigious NSTF Awards
- runs and supports collaborative projects and youth outreach, including recognition of top performance in mathematics and science, role modelling, bursary and STEM career information
- runs and supports the STEMulator.org which attracts youth and educators to Explore>Discover>Learn the world of STEM including careers. (Established by NSTF proSET)

For more information
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