

MONASH UNIVERSITY RECEIVES AN AWARD FROM THE UN FOR AN INNOVATIVE PROJECT TO COMBAT CLIMATE CHANGE WITH MINSAIT COLLABORATING AS A TECHNOLOGICAL PARTNER

- **Minsait, an Indra company, is collaborating in the development of a microgrid as a key part of the Australian university's Net Zero Initiative, which is based on its solution to manage networks with distributed energy resources and automatically balance generation, operation and demand, thereby reducing environmental impact and costs**
- **The Net Zero Initiative, which has been awarded the UN Momentum for Change Award at the UN Climate Change Summit in Katowice (Poland), was also recognized in Spain with a new award, the enerTIC Award in the category of "Smart International Projects" for microgrid development**

Madrid, December 19, 2018.- The Net Zero Initiative, developed by Monash University, and in collaboration of Minsait, an Indra company, on its microgrid component, has been awarded the "UN Momentum for Change Award" by the United Nations Climate Change secretariat (UNFCCC) at the COP24 (Climate Change Summit in Katowice, Poland). The panel of judges described the initiative as "an innovative, scalable and practical example of a large-scale response to climate change."

The "Net Zero Initiative" is a radical transformation in the use of energy on Monash University's four Australian campuses with the aim of eliminating polluting emissions from the built environment by 2030. To achieve this, the project includes the development of a key state-of-the-art microgrid based on Active Grid Management (AGM), Minsait's intelligent network solution with high penetration of distributed energy resources (DERs). This will automatically balance generation, operation and demand, thereby reducing costs and environmental impact and improving the reliability of the electrical system.

The United Nations Framework Convention on Climate Change (UNFCCC) aims to showcase practical examples of what has been done to combat climate change, awarding "innovative and transformative solutions that address both climate change and economic, social and environmental challenges that arise." Monash University's project was one of the 15 award-winners among over 560 proposals evaluated by the judges across four categories.

In addition, in Spain, the microgrid project, developed with Minsait, within the Net Zero Initiative framework has received the enerTIC 2018 award in the "Smart International Projects" category. The goal of the enerTIC Awards, organized by the enerTIC Platform for the past seven years, is to give recognition to the organisations and managers that drive, through innovation and technology, energy efficiency and sustainability in the digital age.

The Technical Committee of the enerTIC Platform evaluated the 116 projects submitted and selected the winners in each of the 15 award categories, based on the following criteria: degree of applied innovation, usability of Information and Communication Technologies, impact on the reduction of energy consumption and CO₂ emissions, setting an example or applicability in other organizations/environments and the use of metrics and improvement indicators.

Less emissions and more affordable energy

The project that Minsait is developing with Monash University envisages the operation of the microgrid on the Clayton campus in Melbourne as a basis for the development of a generation and consumption model based on sustainability and energy efficiency. This is one of the actions that form part of Monash University's goal of

reaching zero net emissions by 2030 through the Net Zero Initiative, designed to completely eliminate dependence on fossil fuels.

The Monash and Minsait collaboration is showing how a network powered by renewable energy sources and with a strong penetration of distributed energy resources such as batteries, electric vehicles or photovoltaic generation, can operate safely and efficiently. It serves as a model for a more decarbonized economy to demonstrate how value could be provided back to its customers and the broader electricity grid.

This network is being managed by Active Grid Management (AGM) an Internet of Things Industrial solution developed by Minsait to facilitate the dynamic, proactive, distributed and intelligent operation of medium and low voltage networks. The PoC (proof of concept) test performed has allowed the validation of the operation of the platform, which is already collecting data in real time from the network assets, in addition to validating its ability to send control orders in fractions of a second.

The following phases of development of the micro-network include objectives such as increasing control in the predictive capability of assets, the creation of a *peer-to-pool* market (transactional energy market) and the study of new activity domains in collaboration with various service providers for distribution networks (DNSP) and Monash researchers.

The United Nations Framework Convention on Climate Change (UNFCCC) holds a Conference of the Parties (COP) annually, attended by around 200 countries, with Monash University also in attendance as an observer organisation, which is the largest global initiative to reduce greenhouse gas emissions (GHG) and to curb global warming. The COP24 was held in the Polish city of Katowice until last December 14, 2018. This new summit is key to designing the instruments that make it possible to effectively and efficiently address compliance with climate objectives.

For its part, enerTIC's mission is to contribute to the development of the transformation potential of Information and Communication Technologies in the field of energy efficiency in Spain, with the support of associated companies and public institutions, to foster a more competitive and sustainable economy.

Yasmina Dkhissi, Net Zero Program Strategy Manager, said: "Minsait's platform will provide real time monitoring and control over our various grid-connected assets. The flexibility that's solution provides is a key asset, enabling integration with multiple equipment manufacturers and third party technologies, while using the intelligence of the various systems in place. Our partnership with Minsait will ensure that the solutions developed here are replicable well beyond our campus boundaries".

About Minsait

Minsait, an Indra company (www.minsait.com), is a leading firm in Digital Transformation Consultancy and Information Technologies in Spain and Latin America. Minsait possesses a high degree of specialization and knowledge of the sector, which it backs up with its high capability to integrate the core world with the digital world, its leadership in innovation and digital transformation, and its flexibility. Thus, it focuses its offering on high-impact value propositions, based on end-to-end solutions, with a remarkable degree of segmentation, which enables it to achieve tangible impacts for its customers in each industry with a transformational focus. Its capabilities and leadership are demonstrated in its product range, under the brand Onesait, and its across-the-board range of services.

About Indra

Indra (www.indracompany.com) is one of the leading global technology and consulting companies and the technological partner for core business operations of its customers world-wide. It is a world-leader in providing proprietary solutions in specific segments in Transport and Defense markets, and a leading firm in Digital Transformation Consultancy and Information Technologies in Spain and Latin America through its affiliate Minsait. Its business model is based on a comprehensive range of proprietary products, with a high-value focus and with a high innovation component. In the 2017 financial year, Indra achieved revenue of €3.011 billion, with 40,000 employees, a local presence in 46 countries and business operations in over 140 countries.