UK-LATAM Partnership on Net-Zero and Resilience



















About the UK-LATAM Net-Zero and Resilience



Led by Connected Places Catapult with support from the UK Government, the UK-LATAM Net-Zero and Resilience Programme aimed at identifying barriers to achieving carbon neutrality and with the potential to be solved through LATAM and UK innovation and new technologies. The first phase of the Programme, implemented in partnership with ICLEI South America and ICLEI Mexico, Central America and the Caribbean, was funded by the Department for Science, Innovation and Technology. through the Science and Innovation Network in Buenos Aires (Argentina), Campinas (Brazil), Guadalajara Metropolitan Area and Monterrey (Mexico). Porto Alegre (Brazil) and Santiago (Chile) were observer cities in this initial phase of the Programme and could challenges and will be able to replicate the model developed with the four identify additional core cities to accelerate local decarbonisation.

Cearching to tackle climate challenges by placing small and medium enterprises (SMEs) at the centre of collaborations between the UK Government and Latin American cities, the programme also encourages the development of green solutions in the innovation ecosystem and facilitates opportunities for new businesses to access funding from development banks and the private sector. Implementation is in its early stages and will seek additional funding to deliver a range of activities over the coming years, in the next phases of the programme.

Results of the first phase of the Programme: 💝



In January 2023 an Open Call was launched for SMEs to stimulate the formation of partnerships. Between February and March, over 150 local leaders and stakeholders participated in face-to-face workshops in Buenos Aires, Campinas, Guadalajara Metropolitan Area and Monterrey to identify and select their priority challenges for decarbonisation and climate resilience, and drive the matchmaking of innovative solutions. At last, in March, a Delegation of 11 selected startups from the UK and Latin America participated in an Innovation Mission to Brazil, visiting government and private organisations in São Paulo and Campinas, ending up at the South Summit Brazil, in Porto Alegre, to showcase their solutions to a strategic and qualified audience.

Guilherme Johnston



Head of Global Partnerships at Connected Places Catapult

"We have been working with cities such as Monterrey and Guadalajara, in Mexico, Buenos Aires, in Argentina, and Campinas, in Brazil, trying to understand what kind of challenges they have. In addition, we are also very happy to be working with the cities of Santiago and Porto Alegre, as observer cities in this project, as they are developing their own Net Zero profiles. I'm sure we will continue this collaboration between the UK and LATAM, so that together we can address the climate crises and bring innovative solutions for cities around the world. '

Full testimonial here



Head of Trade & Investment at British Consulate in São Paulo

"We help British companies to find opportunities in Brazil and help Brazilian companies to find opportunities in the UK. Today, I am at South Summit, in Porto Alegre, it is amazing, an incredible event, loads of energy and people. What we are trying to do here is to bring

British startups together with Brazilian startups, working with Connected Places Catapult and ICLEI, to try to make sure they gather innovators together and get both Brazil and the UK to Net Zero more quickly. That is the aim."



Rodrigo Corradi



Deputy Executive Secretary at ICLEI South America

"It is a pleasure to be here, from the South Summit 2023, in Porto Alegre, the place where we were able to finalize this fantastic project that we have delivered in collaboration with Connected Places Catapult. ICLEI is delighted to be in a continued partnership with Connected Places Catapult, supporting the British government and British Embassy in Brazil, trying to emphasize how those connections are necessary to create local development in a way that connects sustainability to innovation. We are completely onboard to make those solutions happen in the territory."





Results of the first Phase of the Programme:

- Internal teams and local ecosystem stakeholders mapped and identified;
- Desk research to identify market trends and understand the regional context conducted;
- Interviews with 26 expert stakeholders from academia, government and industry;
- City Academy workshops in the four cities to present research findings and co-design detailed challenges for resolution in the next phase of the project: +100 participants;
- Workshops with stakeholders in the four cities to understand the challenges and opportunities for designing a test bed to deploy and test technologies: +50 participants;
- 11 selected SMEs solutions;
- Local leadership buy-in and willingness to try new approaches;
- Research and scenario building on the possible impacts of implementing specific solutions compared to maintaining the status quo in the territories;
- Market scanning to identify organisations innovating in challenge areas in the UK and in each of the participating cities;
- Investigation of similar and relevant initiatives already underway in partner cities;
- Business Matchmaking between SMEs with relevant innovations in the Guadalajara Metropolitan Area, Monterrey, Campinas, Buenos Aires and the UK;
- Testing scope defined, potential testing locations identified and testing potential partners engaged;
- UK-LATAM Net-Zero and Resilience Programme featured in three South Summit Brazil panels: "Innovative Solutions for Cities to Achieve Net-Zero and Resilient", on The Next Big Thing stage; "UK-LATAM Net Zero and Resilience Pitching Event", on Explore stage; "The Importance of Bilateral Collaboration for Net Zero", on Demo stage;
- Networking sessions; exchange of experiences; possibility of opening new markets and business prospects (e.g. joint venture between two SMEs in Monterrey).

South Summit Brazil 2023:

- 3 days of event
- 8 stages with simultaneous panels
- +22,000 participants
- +900 speakers
- +100 investment funds





Monterrey



UK-LATAM Partnership on Net-Zero and Resilience

The Challenge

Water Resilience | Implement changes and solutions that improve the city's water resilience.

The workshops

Took place on <u>23 and 24 February 2023</u>, with over 40 participants.

Gentian



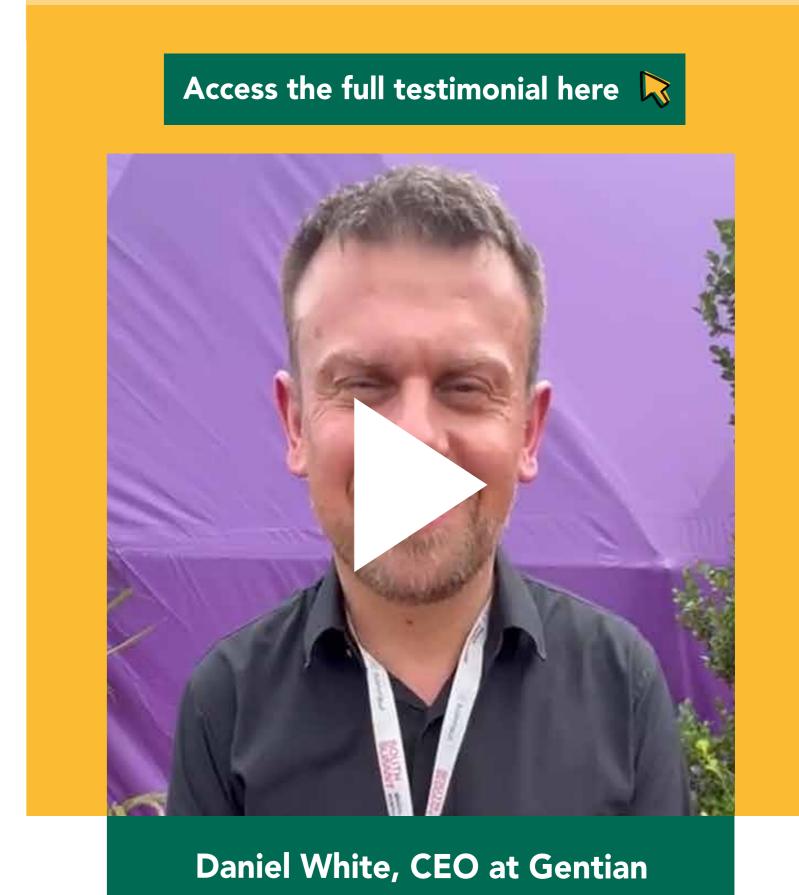
Location: London, United Kingdom.

Company Overview: Software company that has developed a remote sensing tool to monitor biodiversity, using AI, satellite imagery and deep ecological knowledge. Gentian helps landowners, property developers, energy companies and governments to assess rural and urban biodiversity cost-effectively and with a high level of precision.

The Solution to the Challenge: Having already delivered 13 projects, Gentian joined in with Water Offsets during the UK-LATAM Net-Zero and Resilience Programme. Through their technology and from connections and partnerships, the companies can jointly contribute to Monterrey's water resilience.



"We are a software company that measures biodiversity. We use satellite data and artificial intelligence to monitor vegetation on the ground to very high levels of precision. We are having a great time in Brazil, we are meeting lots of fantastic companies here at the South Summit related to renewable energy, construction and also investors. With another company, Water Offsets, we are looking to create a more water resilient city in Monterrey using nature and also water resilience as an outcome."





Water Offsets

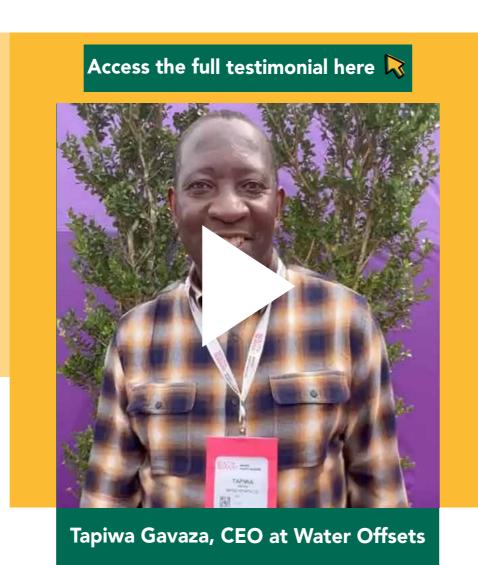


Location: Hertfordshire, United Kingdom.

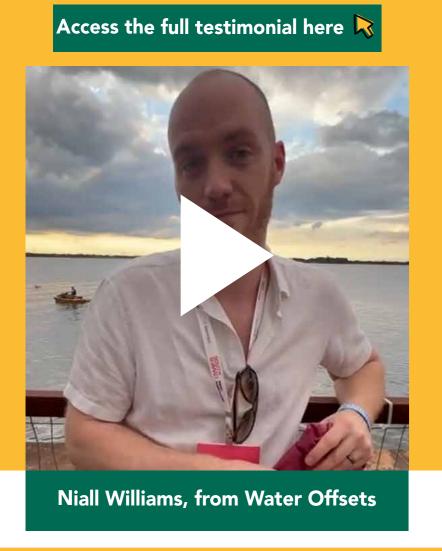
Company Overview Startup with solutions to support cities on the path to water neutrality and resilience. The software developed is backed by engineering expertise, combines technology solutions holistically and can be rapidly deployed and scaled to deliver tangible and effective results. Over 3,000 households use the solution and are water neutral.

The Solution to the Challenge: Through a partnership between Water Offsets and Gentian, innovative software can help monitor and achieve water resilience at both the city scale and household and individual levels, facilitating recycling and water use reduction and maximizing the value of ecosystem services.

"If you give us 1,000 buildings we will be able to save 60 billion liters of water. Our mission is to help deliver water resilience and water security cities. We are also working together in partnership with another company to deliver blue green infrastructure to manage water better in these cities. It will help manage flood risks."



https://www.wateroffsets.co.uk/



"We have had a really successful few days in the event, we have met with some investors and I even had been invited to talk in a university course here. We also have been approached by some funders already, we have several funders interested in helping us develop the programme and facilitate these transition cities. We even just started to look at signing a joint venture with one of the other candidates, to introduce a new water treatment system.



Monterrey



UK-LATAM Partnership on Net-Zero and Resilience

BMA



Location: Leeds, United Kingdom.

Company Overview: Helps clients profitably transition to resilient, low-carbon business models, using proven and Al-assisted decision making. Through the Decisio™ decision processor, BMA helps build the most complete understanding of its clients' businesses and the ecosystem in which they operate.

The Solution to the Challenge: Monterrey faces a critical challenge in implementing changes and solutions that improve water resilience in the city. And BMA's Decisio™ can help the city make and coordinate strategic, tactical and operational decisions (involving topics such as finance, operations, engineering, etc.) to better address this challenge.



"We digitize the end to end value chains for being the best in terms of achieving sustainability and decarbonization. What does that mean? Looking at things like water, the end to end value chain for water and optimizing that, as well as hydrogen transition and any other energy transition applications. In this particular example, we focused on Monterrey and the challenges around water resilience, where we can model that and help them make decisions around their investment planning and the delivery of more reliable infrastructure. Here in Brazil, at the South Summit, we have seen a lot of opportunities both in Brazil and with other companies abroad to take the same modeling approach applied to water as well as to energy transition."





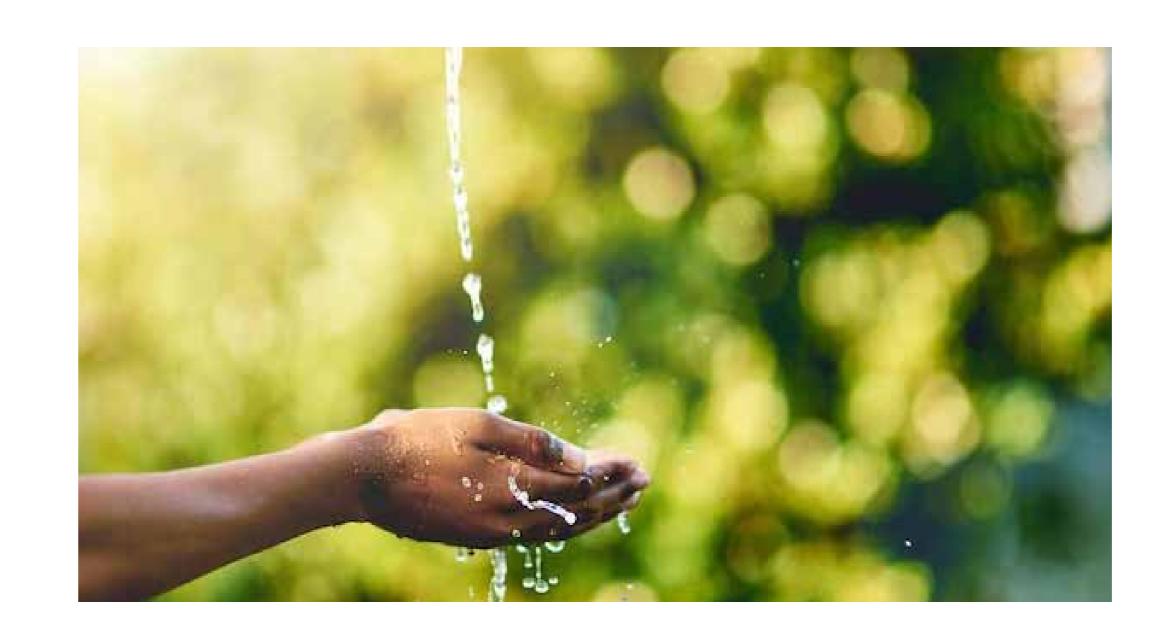
ALIS

ALIS

Location: Monterrey, Mexico.

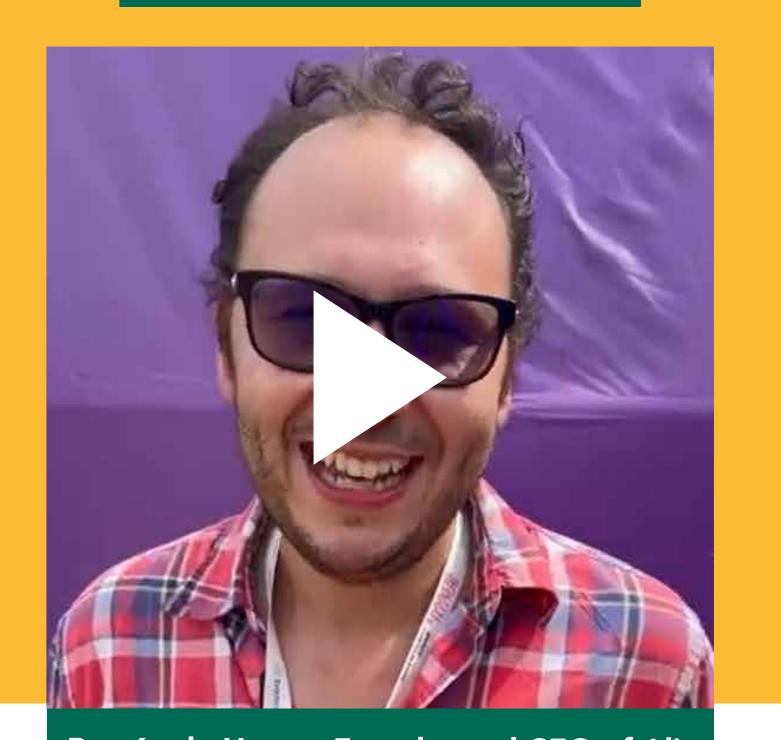
Company Overview: Biotechnology company focused on developing products aimed at preserving water, the environment and people's health with microalgae. The use of microalgae in water treatment has several advantages over traditional processes, uses no chemical or toxic product and is odourless.

The Solution to the Challenge: Microalgae are easy to grow and maintain, and because they use sunlight to consume contaminants from the water, they require fewer resources than other water treatment methods, making them a lower-cost, circular option. They are effective at removing nutrients and pollutants from water (including nitrogen and phosphorus) and can be used to treat domestic wastewater, generating feedstock for irrigation and/or clean water.



"We develop biotechnological solutions to reuse water, carbon capture, but also to generate ingredients for the food and cosmetic sectors using microalgae. We use them to treat water. Also we have another system that we use to grab pollution from the atmosphere, filter it through the microalgae, cleaning the air for us and also generating oxygen. We are very proud to be here right now. It is great to be in Porto Alegre, doing business with the people here. We are really proud to be part of the innovative cohort coming from Mexico. We will continue to develop new work opportunities."

Access the full testimonial here 🗟



Ramón de Hoyos, Founder and CEO of Alis





Guadalajara

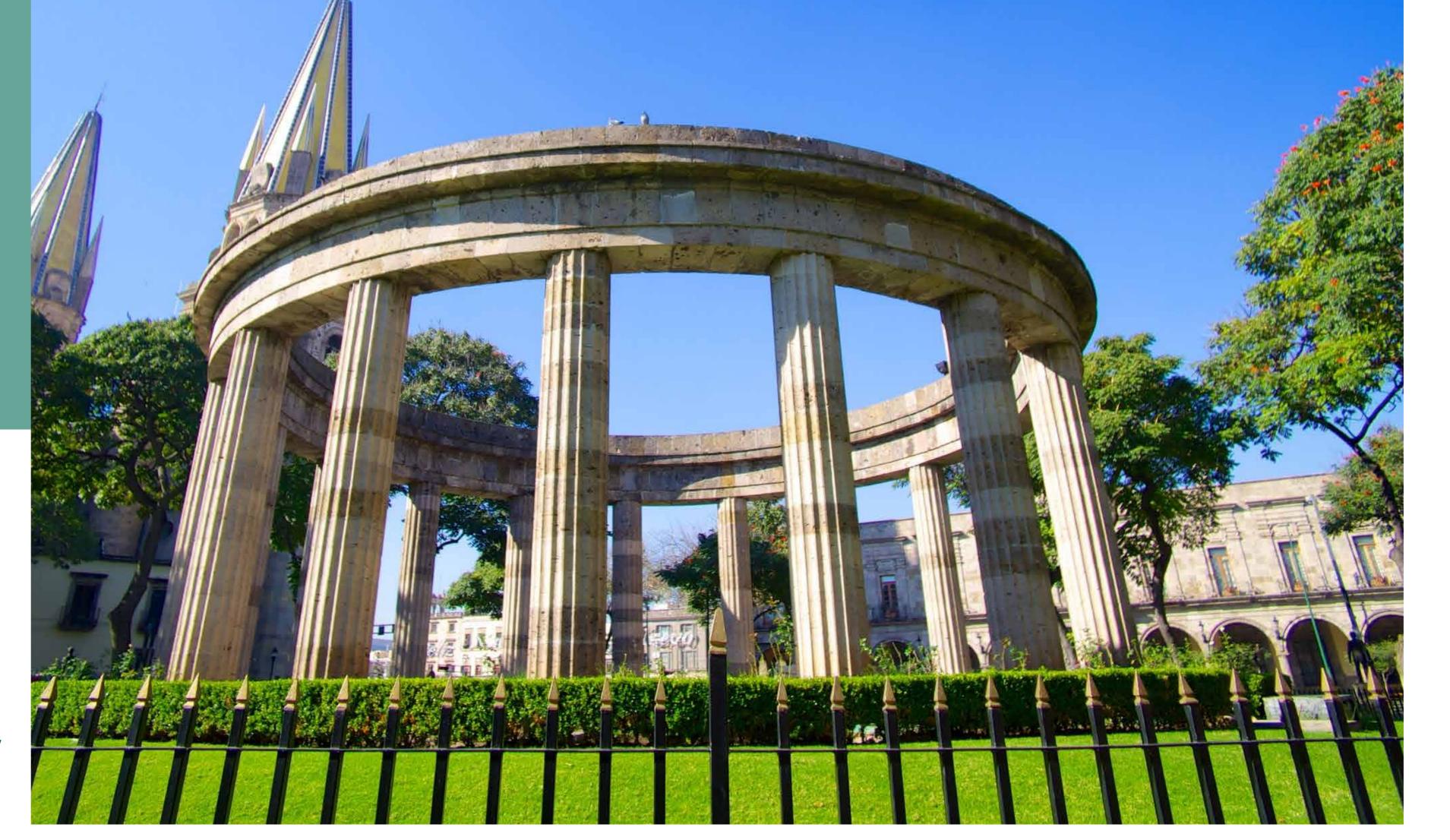
UK-LATAM Partnership on Net-Zero and Resilience

The Challenge

Mobility | Improving the public transport service by enabling data-based solutions to provide real-time information.

The workshops:

They took place on 28 February and 2 March, with over 40 participants.



ITP



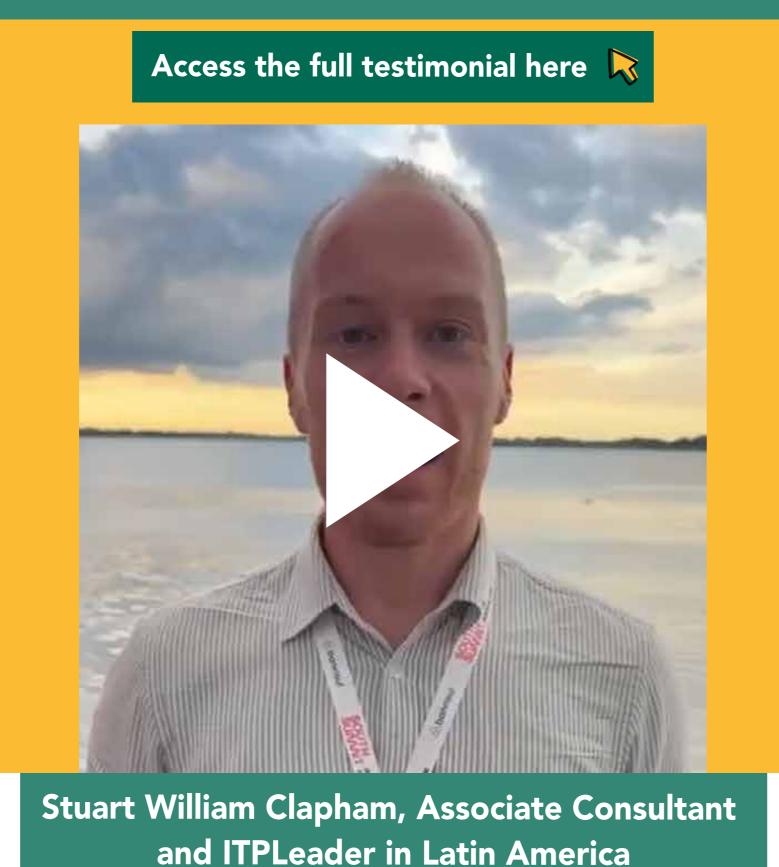
Location: Nottingham, United Kingdom.

Company Overview: Sustainable urban transport consultancy. Provides creative and viable solutions to urban transport challenges for clients in over 60 countries on six continents. Work covers areas such as transport planning, public transport reform, electric mobility, decarbonisation, strategic planning, data analysis and economics

The Challenge Solution: ITP set out to support Guadalajara in its goal to improve the reliability of its public transport network and the information available to users by developing a data strategy to assess how real-time data technologies can be used more widely across the system; develop the technology specification; support system selection and implementation; and strengthen the city's capabilities to use this data to improve service. The provision of live public transport data is an important step, not only in providing information to passengers, but for a range of other service improvements.



"ITP works in public transport and sustainable transport. We also started to work with e-mobility and how cities can deploy electric vehicles in their fleets around the world. To the Connected Places Catapult project, we are proposing to work in Guadalajara. We want to help the city to really understand what their data needs are, both to provide information to citizens but also to improve the performance of their network and to contribute to long term planning as well. Here in Porto Alegre, at the South Summit, Brazil really knows how to do a summit. We already have some opportunities that we are looking at now here in the region, in Brazil and LATAM."





WhereIsMyTransport >>> WhereIsMyTransport



Location: London, United Kingdom.

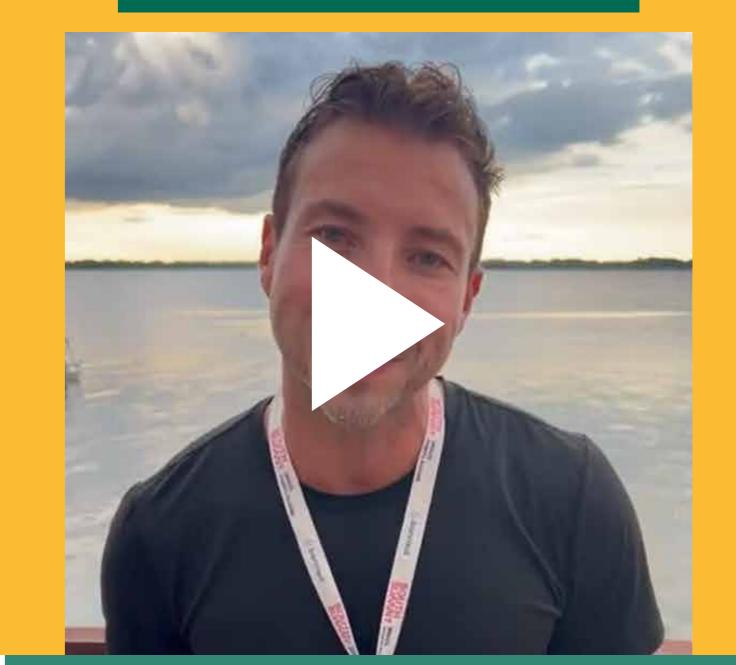
Company Overview: Leading industry technology company and source of mobility data in emerging markets. It makes the invisible visible, mapping vast formal and informal public transport networks - often for the first time - and revealing the needs, patterns and behaviours of mass market passengers. The data product is the most comprehensive and accurate of its kind in the world. Since 2020, the Rumbo app - currently in Mexico City, Lima and Bangkok - provides and collects data for millions of passenger journeys in emerging markets, eliminating the pain of long and unpredictable commutes and optimising routes in real-time to help users avoid delays and disruptions.

The Solution to the Challenge: The main challenge to providing real-time information and mass-market mobility solutions for passengers in cities like Guadalajara is the lack of reliable data - transit data and real-time data. By mapping transport networks, the data can be used by governments and operators to develop environmentally sustainable transport networks.



"If you are in London or San Francisco and you want to go from home to work, you might open one of those mobility applications and you would find all the information there. But if you are in Latin America, Africa or Southeast Asia that might not be the case, poor information or quality data is not reliable. This is what we do: we go and collect, produce and maintain high quality data, including formal and informal means of transportation, in emerging economies. Here at the South Summit I had the opportunity to meet so many startups, others colleagues and partners that could potentially boost our business, that would bid for us in other opportunities around the world. It has been an amazing experience."





Felipe Duque, Business Development Director at WhereIsMyTransport



Campinas

UK-LATAM Partnership on Net-Zero and Resilience

The Challenge

Last-Mile Mobility and Logistics | Enable data-driven transport planning and services to encourage transition to alternative and sustainable transport methods.

The workshop:

Took place on 1 and 2 March 2023, with 20 participants.



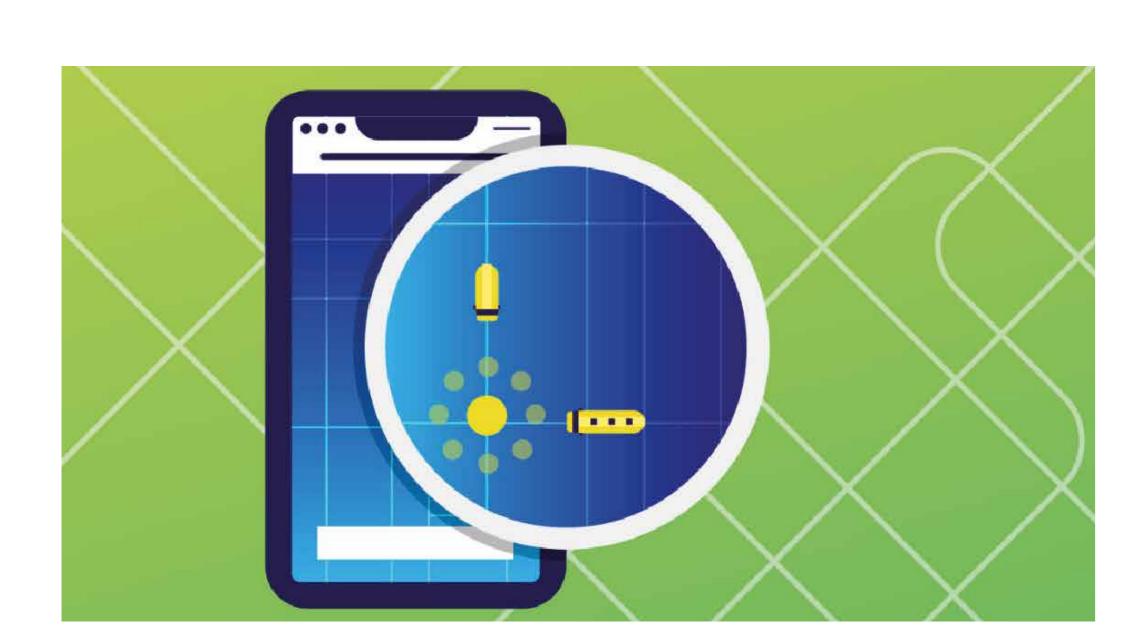
WeDRT

WeDRT

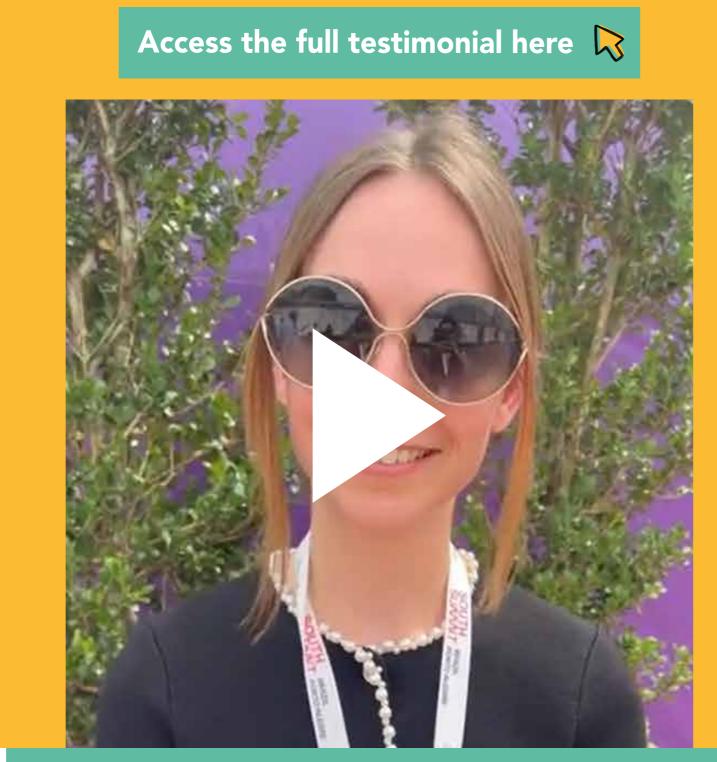
Location: Hempstead, United Kingdom.

Company Overview: Provides on-demand transport for cities and authorities. It aims to trigger modal shift from single occupancy cars. It is a customisable procurement platform for transport services, connecting buyers with a broad marketplace of suppliers. In the West Midlands (UK), the solution has reduced CO2 output by 12,972 kg (30%) in the last year, with savings of £225,000 for the city.

The Solution to the Challenge: The transport sector is responsible for 73% of the emissions in Campinas. WeDRT's solution aims to support the municipality to achieve greenhouse gas emission reduction targets and potentially zero by 2050.



"Instead of having really high demand at all times, we dispatch vehicles on demand so there's never over supplier or over demand and there is no extra emission or extra vehicles running around the world, but all the rights can be fulfilled. And here in Brazil we are starting to work with the municipality of Campinas. I had the pleasure to meet the Environment Secretary, Rogerio Menezes, and Gabriel Neves, Environmental Engineer, and we are hoping to set up a pilot very soon."



Eugenia Agell-Bernard, Business Development Manager at WeDRT



https://wedrt.com/

Inteliports



Location: Southampton, United Kingdom.

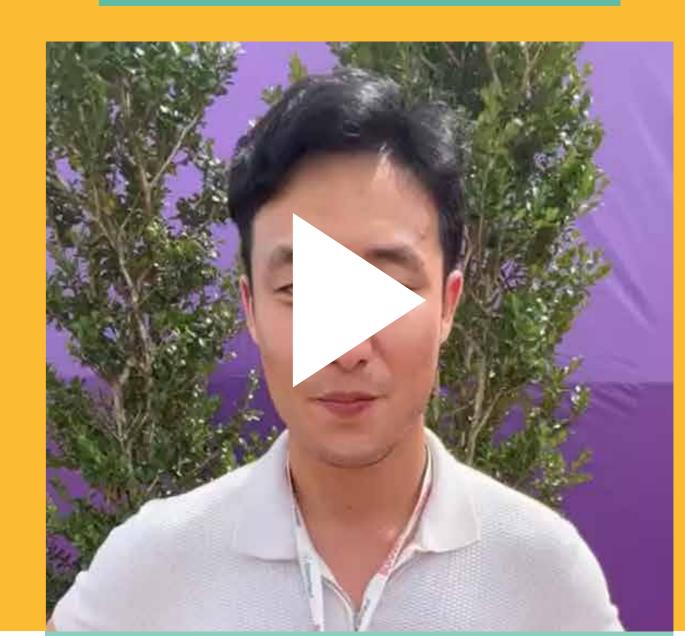
Company Overview: Combines expertise in robotics, Al, architecture and planning with a vision to operate automated drone logistics, contributing to the future of air logistics. Develops smart drones for maritime, medical, surveillance and parcel delivery sectors and rapidly deployable and modular drone ports. Acts to unlock end-to-end mobility and to integrate commercial drone operations into built environments.

The Solution to the Challenge: The challenges of how this technology is operated with commercial viability/scalability and also integrated into urban communities is still in question. But Inteliports has created solutions that automate all drone logistics in the process of flight, enabling operations that can substantially impact the last mile market. By providing effective alternatives to road transport, the solution can decongest streets and roads and reduce carbon emissions.



"E-commerce is booming, past delivery rates are soaring, the logistical cost behind any form of past delivery is reaching new heights of unsustainability. Drones, for certain, are becoming a huge disruptor in the logistical sector, offering up to 10 times faster speed and 30% of the cost and of course with the possibility of zero emissions. As part of the UK SMEs cohort, we have come to South Summit to build new relationships with UK companies, as well as Brazilians. We built partnerships with logistics companies, port authorities and shipping companies."

Access the full testimonial here



David Park, Co-Founder at Inteliports

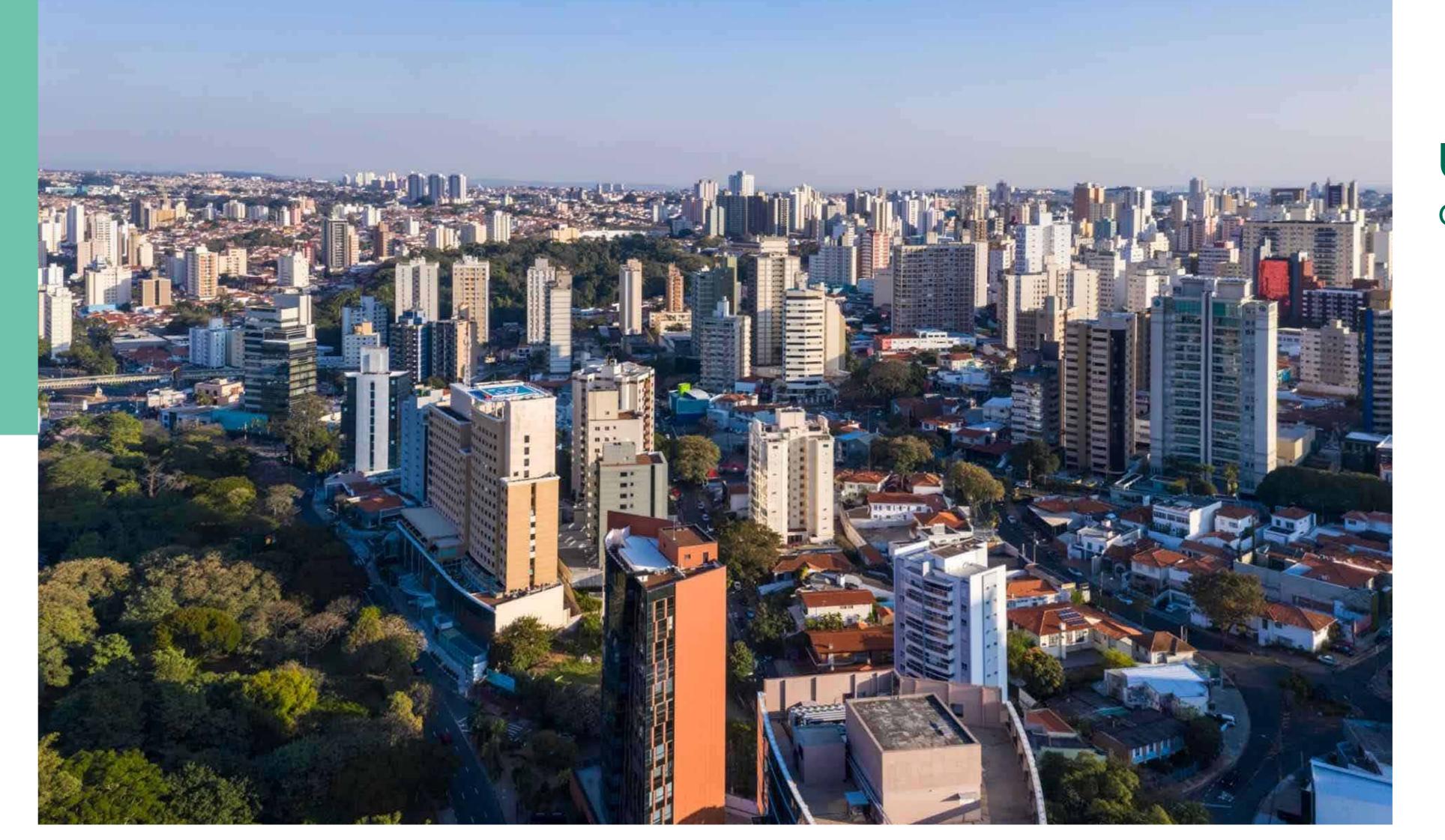


https://www.inteliports.com/





Campinas



UK-LATAM Partnership on Net-Zero and Resilience

Scipopulis

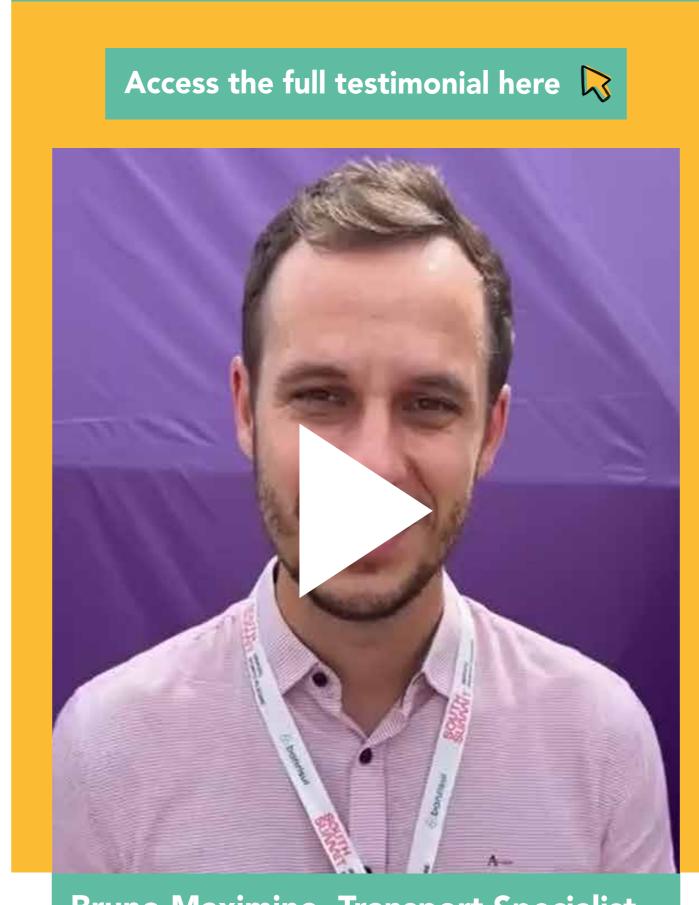
Location: São Paulo, Brazil.

Company Overview: With specialists in technology, urbanism and design, develops innovative algorithms and data integration and visualisation tools for smart, more human and sustainable cities. Through the Trancity platform, it assists transport agencies in the development of Evidence-Based Public Policies. The Plancity platform integrates and cross-analyses data from different sectors, such as health, economy, education, environment and sanitation.

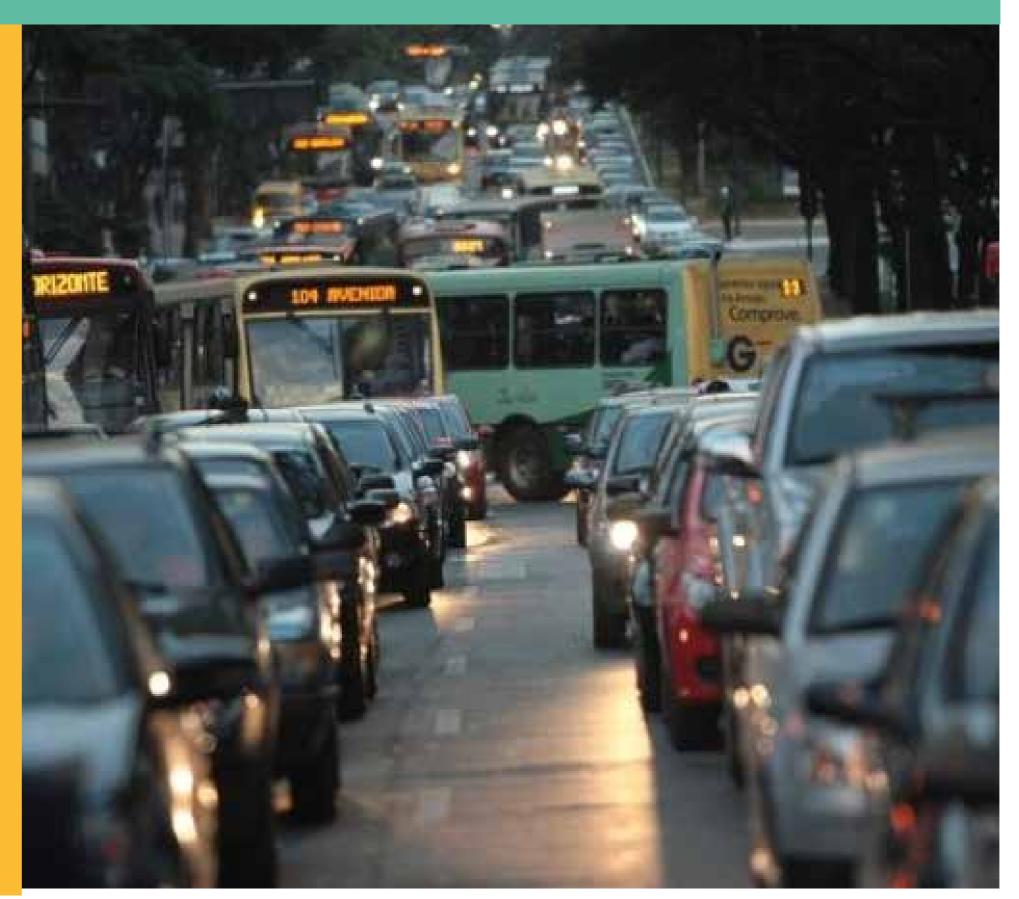
The Solution to the Challenge: The Trancity platform, which integrates static and real-time data from the public transportation network, is quickly able to support the planning of public transportation in Campinas. The indicators can be used by public managers to constantly adjust the transport network to improve the quality of public transport, attract more users, reduce the use of individual transport and greenhouse gas emissions and contribute to Net Zero.



"For Campinas, during the challenge, we're proposing to use our Trancity platform, which monitors in real time buses and the transport network. We can calculate and estimate a lot of indicators that are important for public authorities to plan, to manage and monitor their network. We also estimate the greenhouse gas emission from the buses. Here, during this mission, we met a lot of interesting companies and, at the South Summit mainly, we talked a lot with Rio Grande do Sul State's city halls and municipalities. We also had a lot of conversations with the Metropolitan Area of Porto Alegre's Association of Cities. Regarding the British companies, we think there are some that we could collaborate with."









http://www.scipopulis.com/



Buenos Aires

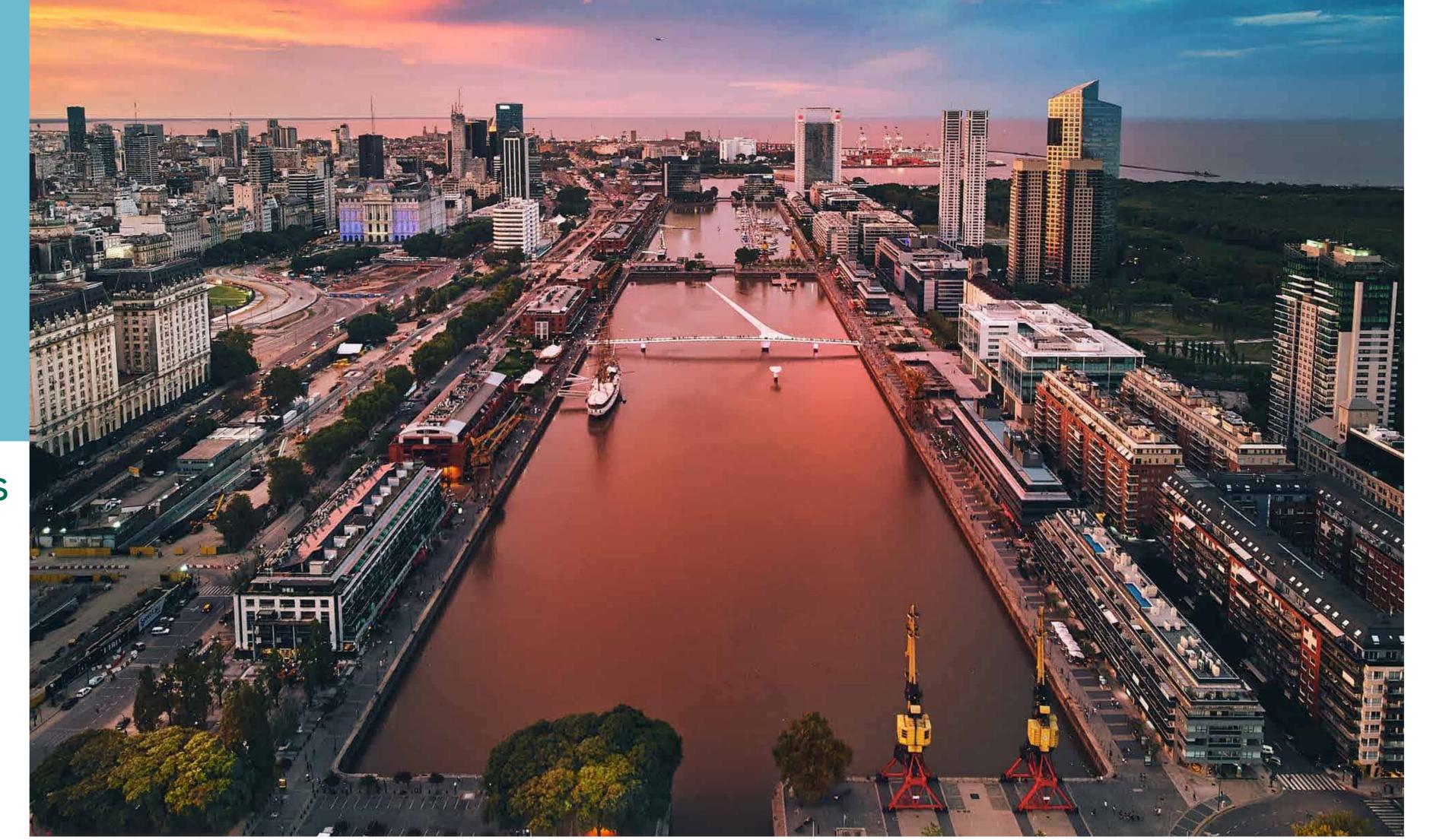
UK-LATAM Partnership on Net-Zero and Resilience

The Challenge

Last Mile Logistics | Optimise last mile logistics to meet the growing demand for deliveries and reduce the number of cargo vehicles in the city centre.

The workshops

Took place on March 7 and 8, 2023, with 50 participants.



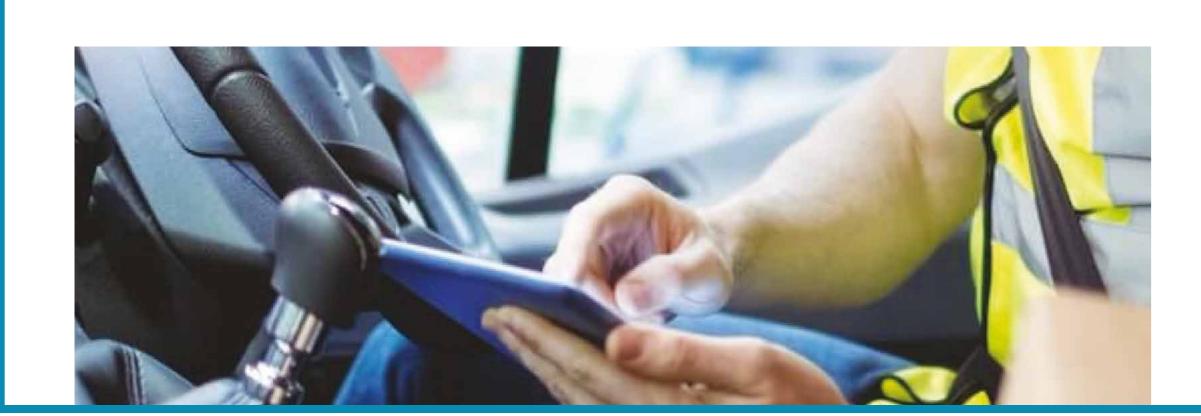
Grid Smarter Cities

grid™

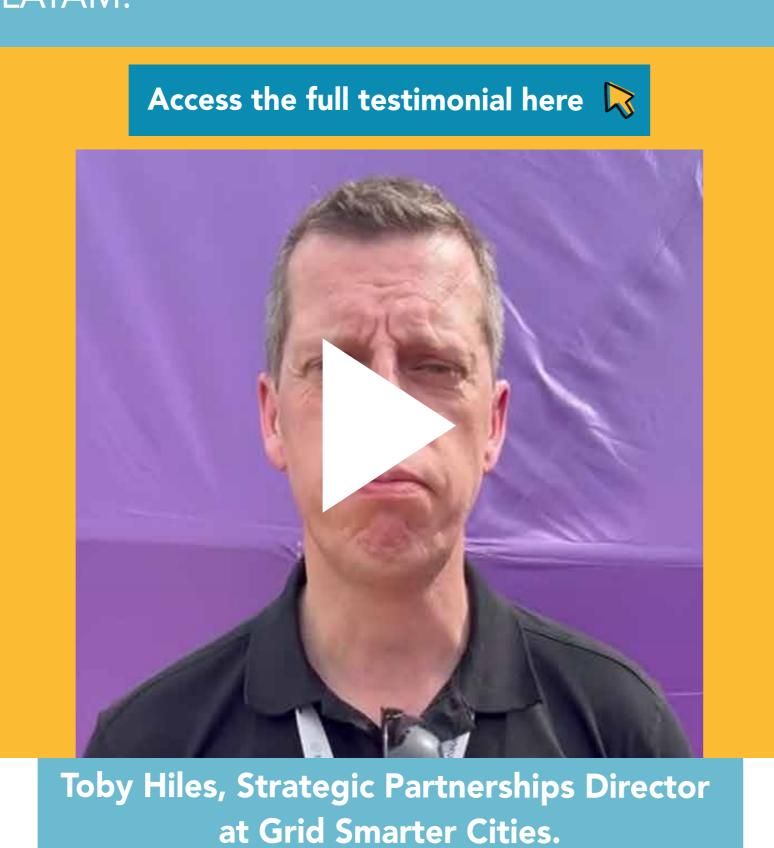
Location: Newcastle, United Kingdom.

Company Overview: Software solutions company specialising in pavement management to address key logistics challenges and environmental issues in cities. Grid's Kerb® is a patent-protected reservation application for cities to offer advance reservation of pavement space for freight companies. The initiative increases productivity for last-mile companies and promotes healthier urban spaces and new revenue streams for cities.

The Solution to the Challenge: Stantec found that using Kerb in London increased delivery efficiency by 21%, reduced 20.2 million km of business trips per year, saved 15,500 tonnes of carbon per year; and saved over three million hours of wasted driver time each year. Grid's platform can be used in Buenos Aires to optimise last-mile logistics and meet the growing demand for deliveries and reduce greenhouse gas emissions.



"With cities becoming increasingly congested and delivery fleets finding it harder and harder to access the kerbside, we decided we could make a solution. So the Kerb platform is a two sided platform which allows the cities to provide bookables time slots for delivery vehicles, to then book and reserve their time slots in places where they are doing their business. So it is Airbnb for kerbside. That is the solution that we are bringing here. It is fantastic to be in South Summit, because it allows us to make connections not only just in Brazil and with the councilors. We can expand our offer and we can create a lovely social environment and eco impact for both us and all the cities in LATAM."



https://gridsmartercities.com/

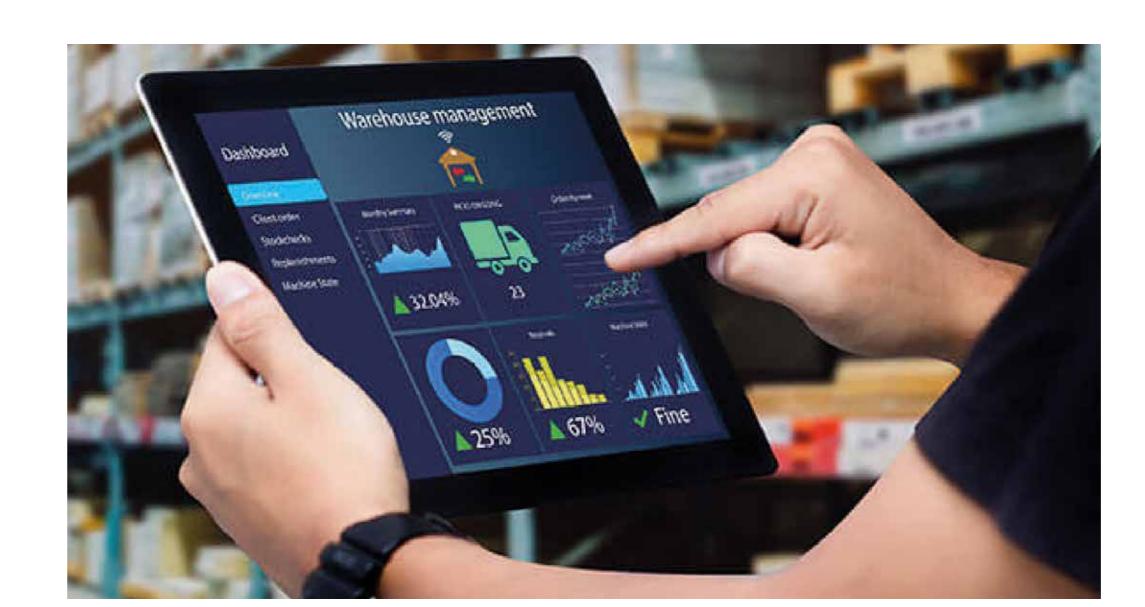
Moova



Location: Buenos Aires, Argentina.

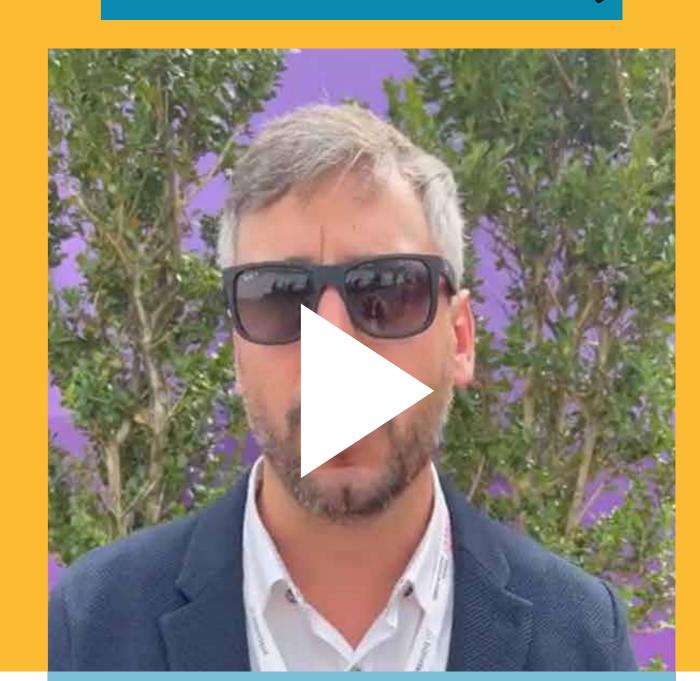
Company Overview: It is a platform that optimises last-mile delivery through connectors to all significant e-commerce engines, with Al-based clustering, route optimisation and real-time tracking. It transforms idle logistics capacity into high-efficiency, low-cost and eco-friendly delivery solution.

The Solution to the Challenge: Using Moova promotes benefits such as connecting companies with idle drivers, empowering urban logistics players by giving them access to cutting-edge technology for real-time routing and optimizing costs. In addition, during delivery, logistics companies connect to the network and make shipments in spaces that would otherwise be empty, reducing idle capacity by an average of 40%.



"Moova is a digital platform that optimizes last mile delivery to all significant e-commerce and chains. All best cluster route decision and real time tracking. We transform the shipment capacity to a high efficiency, low cost, environmentally friendly solution, without adding cars into the streets. We have the largest footprint in LATAM, our technology controls shipments in more than 9 countries, from Argentina to Mexico. We are already developing a new product, a management product, in California, USA. Last year we won the supply chain category at G20 in innovation network startups competition."

Access the full testimonial here



Lucas Jaime, Country Manager for Peru and Chile at Moova.





Buenos Aires





Rasic LTD

Location: London, United Kingdom.

Company Overview: Intelligent mobility and logistics systems integrator and consultancy. Focuses on operational efficiency, end-user experience and greenhouse gas reduction/management. Seeks to deliver cost savings, new revenue streams or other forms of value to the customer base. Offers low-cost computerized vehicle routing and scheduling systems designed to work in lightly regulated and regulated urban areas.

The Solution to the Challenge: Through Rasic LTD's software, it is possible to design routes quickly, process data and collect information from sensors in vehicles and mobile devices, communicate with drivers, locate vehicles, etc. The software was designed specifically for the Latin American market, so it takes into account the uncertainties of the Geographic Information System (GIS) and the informality of many infrastructures and housing



"We are a consultancy company from the UK in logistics and transportation and we have developed a routing software that is owned by us and designed by us. It means that we can modify the routing software according to the needs of the company. In Colombia, we are replacing vans of 20 thousand dollars for electric vehicles of 2 thousand dollars. They make 50 deliveries, but the thing is you need to understand these new technologies and modify the software so you can plan with this kind of vehicle. This is an example that is happening now in Bogota. We are working, we have the technology. So we expect companies that want to use this kind of technology in any sector in logistics."





About Connected Places Catapult CATAPULT Connected Places



Connected Places Catapult (CPC) is the UK's innovation accelerator for cities, transport and places. CPC provides unbiased 'innovation as a service' to public bodies, businesses and infrastructure providers to catalyse major improvements in the way people live, work and travel. CPC connects businesses and public sector leaders to cutting-edge research to stimulate innovation and develop new markets. CPC also runs technology demonstrators and small and medium enterprises (SMEs) accelerators to scale new solutions that drive growth, spread prosperity and eliminate carbon. On climate action, CPC convenes markets to drive disruptive innovation and resilience technologies, developing the business and operational cases for deployment. Since January 2021, CPC delivers Net Zero and resilience related projects across Latin America. Demand for such projects has been growing and strong partnerships between the UK and Latin America have been created. The UK-LATAM Net-Zero and Resilience Programme is the result of all previous engagements on the topic.

About ICLEI-Local Governments for Sustainability



ICLEI - Local Governments for Sustainability is the leading global network of local governments committed to sustainable urban development. With over 2,500 member local governments in more than 130 countries, it influences sustainability policies and drives local action for low-carbon, nature-based, equitable, resilient and circular development. Its team of experts work together providing access to knowledge, partnerships and capacity building to generate systemic change for urban sustainability. Recently, ICLEI South America has also been outstanding in the development and execution of projects in the area of innovation. The ICLEI Innovation Programme aims to unite the innovation agenda and the sustainable urban development agenda of local governments, through the promotion and support of local innovation and entrepreneurship with a focus on sustainability. The implementation of the UK-LATAM Net-Zero and Resilience Programme is a result of this positioning in favour of innovation through sustainability.









REALIZATION









