

Global Future Council on Mobility

Corporate Mobility Transport Challenge

Platform on Shaping the Future of Mobility

December 2019



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Foreword



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Only through a concerted effort between governments, companies and civil society organizations can the 2030 Agenda for the Sustainable Development Goals be realized. Transportation is essential to the global economy as it gets people to their jobs and goods to their destinations. It also contributes to pollution and congestion. Solving the transport question in our cities and metropolitan regions must be tackled at all levels of society. Much of the focus in the past decades has been on policy. But how can companies contribute to sustainable transport systems that are safe, clean and inclusive?

The Global Future Council on Mobility comprises leading experts in the movement of people and goods, ranging from heads of innovation at large corporations to executive directors at advocacy non-profits. As a group, the Council recognizes the need for the public and private sectors to come together to achieve this transition. Rather than focusing on transforming the whole mobility environment at once, the Council examined how two subsets of the system – the employee commute and product distribution – operate, often in indirect ways.

In May 2019, the Global Future Council on Mobility launched the Corporate Mobility Transport Challenge, seeking nominations for innovative programmes showing companies leading the way in sustainable commuting or product distribution. Interestingly, nominations came from departments across an organization – some companies maintain dedicated transportation-focused teams while, for others, the responsibility falls under the purview of human resources, operations or sustainability teams. Some companies were motivated by the 2030 Agenda for the Sustainable Development Goals, while others were driven by practicalities such as limited parking spaces for a growing number of employees. So many solutions are proven to work, such as commuting programmes encouraging electric bicycle sharing or app-enhanced carpooling, and product distribution strategies that use electric vehicles, alternative fuels and switching from roads to rivers.

This compendium represents a sample of the 50 nominations we received, narrowed down to the current selection of case studies based on programme type, geographical region and uniqueness of programme. We hope the various case studies will illustrate the different ways in which concepts can be implemented and, in some cases, combined. As will be evident, the ideas are not necessarily new or perfect; instead, each company has managed to adapt simple concepts to its reality and has succeeded in getting its teams and partners on board. The case studies illustrate that the transition to sustainable mobility is not only possible, but it is already happening.

We are grateful to all of the companies that put forward their cases and were willing to share insights about their experiences. We also wish to thank the members of the Global Future Council on Mobility for their time, energy and commitment.

Introduction

With the advent of Fourth Industrial Revolution technologies, the need to accelerate strategies to decarbonize the transport sector, and the growing popularity of commercial sharing options, the typical employee commute and standard product distribution are poised for a change towards a more sustainable future. However, consumer adoption of sustainable practices is limited. Challenges to widespread adoption include issues of convenience of use of shared transport, lack of available information to make informed, sustainable mobility choices with accessible and reliable public transport and adequate infrastructure for active transportation, and lack of a diversity of efficient, affordable solutions and options.

The effect companies have on shaping mobility, both in moving people and products, cannot be overstated. Companies can influence their respective sectors and peers more broadly. Moreover, strong collaboration with government authorities could ultimately help shift public perception about the need to control polluting vehicles and vessels and create a ripple effect in society at large. Ultimately, more sustainable corporate mobility can lead to enhanced performance, an improved corporate profile and secondary effects across sectors through facilitating programmatic replication by other companies facing similar challenges.

Aware of the unique potential corporations have to make change happen quickly, efficiently and at scale, the Global Future Council on Mobility developed the Corporate Mobility Transport Challenge to spotlight innovative commute and product distribution programmes that help support the 2030 United Nations Sustainable Development Goals (SDGs) and the Paris Agreement and to inspire others to do the same. The challenge attracted cases from companies across the world, with stories highlighting how different entities are challenging the status quo – encouraging a transition towards more sustainable commuting and product distribution.

This compendium highlights a sample of cases from companies around the world that offer innovative, sustainable solutions to the movement of employees and products or goods. One of the main aims of this exercise was to highlight the importance of addressing both areas when thinking about long-lasting sustainable mobility. Although considerations and existing alternatives for each one might be different, they are inextricably part of the same process and it is hoped that other companies will take inspiration from some of those cases and emulate them both.

Nominations related to commuting and product distribution illustrated that the path to a company's transition to sustainable mobility practices is not instantaneous. Three important stages were identified as part of the journey towards sustainability, namely: diagnosing employee and customer needs; educating and motivating staff, suppliers and customers; and finally, investing in technological, operational and behavioural solutions.

Diagnosis

The first step in solving a problem entails accepting that a problem exists. Companies have an opportunity to lead the way to sustainable mobility by first recognizing issues with the status quo and, second, by understanding their role in amplifying these issues of congestion, emissions and exclusivity, and, therefore, the important part they play in developing the path towards a better future.

In order to move forward, companies should invest the resources - financial, human and time - to conduct a thorough examination of their current transportation practices. Gathering information through surveys, employee, supplier and customer interviews and other tools is crucial in crafting an appropriate response. Here, context and intersectionality are also important. For instance, in Europe, encouraging people to travel to work by public transport is not such a difficult proposition. But in the Global South, mass transport systems and infrastructure are often deficient to the point that this kind of approach is not always a realistic option. Travel patterns differs by gender, race, income and age, making a thorough analysis of user profiles crucial. Similarly, the type of solutions available to make the movement of goods and products more sustainable differ from one transportation mode to another and from country to country. Notwithstanding the fact that each company has its own configuration, all must confront the reality that mobility challenges have a direct impact on performance. In this way, the important thing is to start somewhere and progress incrementally.

Educating and encouraging

To ensure that programmes will last, it is of fundamental importance to raise awareness about the need to change. Acknowledging that commuting and access to goods and products shapes our life and ultimately determines a large part of its quality, companies must identify achievable goals to get the conversation started and engage individuals effectively.

Giving people real choices through the provision of options (such as bicycles, rideshare options or a corporate shuttle, often referred to as "new mobility"), as well as providing ways to have fun (through gamification tactics), are vital to expanding a commuter's perspective on transportation. Providing incentives by building reward systems (such as cash reimbursements, time off or public recognition) to ease the on-boarding process is equally important – so much so that some local authorities in the United States are testing loyalty programmes to attract people to public transport and compete with ride-hailing companies. Similarly, national governments in places such as Costa Rica recently began providing tax incentives to companies encouraging bicycle commutes.

Companies that outsource the distribution of goods and products can encourage and collaborate with their suppliers through their procurement or Green Freight Programs, such as SmartWay in the United States.

Technological solutions

Investing in digital platforms might not be possible for all companies due to limited resources, but there are many possible concepts being implemented across the globe. From free smartphone apps, which provide maps, intermodal integration options and traffic information, to tailor-made digital solutions allowing all employees to find a suitable commute option, technology can fit within a company's resources and culture. Popular programmes do both – they use existing tools for vehicle sharing (carpooling, bicycle sharing etc.) while incorporating and branding them into their corporate realm. Likewise, other companies have expanded their thinking to include electric vehicle incentives and have used telecommunications technology to create flexible work opportunities.

Technological solutions can also be applied to making the movement of goods and products more sustainable. For vehicles and vessels, these range from alternative fuels, tyre and aerodynamics equipment to electric and automated trucks. Digital platforms supported by transport management systems make it easier to connect suppliers to buyers of freight services and enhance efficiency.

Other ways to commute and move goods and products more sustainably

For employees unable to utilize shared mobility modes, corporations are helping with ways to electrify their commutes. By providing charging infrastructure or by partnering with providers operating electric fleets, employees can utilize low carbon vehicles to travel to and from work. Other institutions are creating mass transportation options to better connect themselves to the cities in their region – expanding the commuting options for their employees and providing access between locales. Finally, some institutions explored home office measures, with flexible start and stop times, to better balance personal and professional needs.

Companies can also look at how to use their fleets and assets better; for example, by combining heavy and light products or avoiding empty return trips by working with other companies. Using available modes and assets smartly can reduce fuel use as well as shorten trip lengths and reduce congestion. The growth in freight demand can be managed, for example, by redesigning the supply chain or through local production. Resources, infrastructure and regulations vary greatly from region to region, and it is clear that context matters. From examining needs and educating and motivating employees, suppliers and customers to investing in high-tech solutions, companies can find ways to move employees and products in a more efficient and sustainable way.

This compendium aims to recognize the efforts made by the corporate sector; however, it is not a comprehensive study of existing initiatives. In its first iteration, the Corporate Mobility Transport Challenge sought to engage with players in the private sector and encourage a dialogue that will result in further interrogation and exploration for suitable options. After all, companies' roles are not determined by their size, number of employees or sector. Large or small, services or industry, all companies have a unique role to play in the mobility sphere.



Location: Paris, France (headquarters), with sites in 43 countries across the world, including São Paulo, Brazil Company size: 5,001–10,000

ALD Automotive offers fleet management and long-term vehicle leasing solutions to companies in 43 countries in four continents with more than five strategic alliances covering an additional 12 countries with more than 1.66 million vehicles worldwide. International and local teams work together to build tailored partnerships that best fit the client's needs, including innovative tools and services to facilitate everyday business and be ready to meet new challenges. In Brazil, ALD Automotive manages a fleet with more than 32,000 vehicles, offering service to more than 400 clients.

Challenge

ALD Automotive is working to reduce greenhouse-gas emissions, provide more mobility options to employees and increase the mobility portfolio of clients.

Description

Launched: August 2017 Location: São Paulo, Brazil

The e-bike sharing programme was designed as an innovative solution in the ALD Automotive business. The pilot project focused on the employees. The first challenge was to demystify that "cycling is dangerous" through workshops. Results show that, currently, at least 15% of employees use an e-bike to attend meetings, return home or go out for lunch. Recognizing that the majority of users are men (81%), ALD is conducting surveys to understand the travel patterns of women better. There is also a broader assessment being conducted to map the trips of all workers to devise a mobility strategy that offers more and better-designed options for daily trips to work.

Impact

Over 300 bike loans

Over 1,500 km travelled by bike (considering 5 km x 300 bikes)

Long-term estimated impact on society:

- Better health of employees
- Better air quality for society

Impact for ALD Automotive:

- Brand awareness
- Make our team proud to belong

Replicability

The e-bike sharing programme is now part of ALD Automotive's portfolio to clients in Brazil.

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We launched e-bike sharing and expanded our solutions that endorse environmental awareness and bring mobility and sustainability to the corporate context.

Pedro Reis, Chief Executive Officer, ALD Automotive





Bottom photo by Sergio Souza



Location: Charlotte, NC, USA (headquarters); the company serves clients through operations across the United States, its territories and approximately 35 countries Company size: 10,000+

Bank of America is one of the world's leading financial institutions, serving individual consumers, small and middle-market businesses and large corporations with a full range of banking, investing, asset management and other financial and risk management products and services. The company provides unmatched convenience in the United States, serving approximately 66 million consumer and small business clients with approximately 4,300 retail financial centres, including approximately 2,400 lending centres, 2,600 financial centres with a consumer investment financial solutions adviser and 1,900 business centres; approximately 16,600 ATMs; and award-winning digital banking with nearly 38 million active users, including approximately 29 million mobile users. Bank of America is a global leader in wealth management, corporate and investment banking and trading across a broad range of asset classes, serving corporations, governments, institutions and individuals around the world. Bank of America offers industry-leading support to approximately 3 million small business owners through a suite of innovative, easy-to-use online products and services.

Challenge

Bank of America is committed to accelerating the transition to a sustainable, low-carbon economy. One of the ways we seek to do that is by enabling our employees to reduce their carbon footprints and scaling the use of electric vehicles. To meet this challenge, we offer our Low-Carbon Vehicle and Workplace Charging programmes.

Description

Launched: September 2006

Location: United States, Canada, Ireland and the United Kingdom; the Workplace Charging programme is implemented in the United States, the United Kingdom, Switzerland, the Netherlands, Turkey, the United Arab Emirates, France, China and Taiwan.

Bank of America launched its Low-Carbon Vehicle Program to provide assistance to employees when purchasing or leasing vehicles with hybrid or electric technology. This programme was launched in conjunction with human resources and is managed by the bank's Global Environmental Group. Our goal is to make it easy and affordable for employees to choose environmentally friendly transportation and to support the clean transportation business sector as well as help educate employees on how they can contribute to becoming a better environmental steward in the communities where they work and live. This programme has provided over 10,200 reimbursements since its inception in 2006. Through this initiative, employees receive a \$4,000 reimbursement for the purchase or \$2,000 for the lease of a new, eligible, highway-capable electric or hydrogen fuel cell vehicle.

Bank of America is committed to adding charging stations for electric vehicles in our parking facilities through our Workplace Charging Program. Since 2016, Bank of America has installed more than 100 workplace charging ports, with more planned in 2020. Charging is offered free to employees, which complements the bank's Low-Carbon Vehicle Program.

Additionally, Bank of America is a member of The Climate Group's EV100, a global initiative to accelerate the market shift to electric transport by 2030. To date, more than 2 million vehicles are committed under EV100 and members will provide millions of staff and customers with additional charging infrastructure by 2030. EV100 members have committed to install charging infrastructure at around 2,000 workplace and customer parking sites. The initiative now brings together 31 leading companies with a combined revenue of over \$500 billion.

As a member of both EV100 and its companion programme RE100 (which entails commitment to 100% renewable electricity, a goal we seek to achieve by the end of 2020), the bank is extending efforts to accelerate the transition to a low-carbon economy and support innovation that can help us rethink how we use transportation and energy today. Bank of America is working to reduce its operational footprint, while providing programmes to help its employees reduce their impacts on the environment and in their communities. Almost 50,000 employees have access to electric vehicle (EV) charging stations at work.

The two programmes continue to have overwhelming employee interest, which is a great result, and Bank of American reviews its budget each year to ensure it can accommodate adoption of these benefits.



Impact

The impact of Bank of America's Low-Carbon Vehicle Program is tracked annually based on the number of new participants and the carbon dioxide equivalent (CO2e) avoided by them from their new EV vehicle. In 2018, new participants in the low-carbon vehicle programme achieved an estimated (cumulative) emissions reduction of over 1,600 metric tons of CO2e. This is a significant increase in impact from 2010, when 669 new participants avoided over 700 metric tons of CO2e. This doubling of the emissions avoided in eight years is a clear sign of the success of this programme and the advancements in vehicles available.

The first year of our participation in EV100 was 2018, though Bank of America has offered charging stations since 2016. In 2018, we had 129 chargers at 36 office premises around the world. Bank of America is committed are committed to providing EV charging stations for its employees across its portfolio, including sites with over 500 Bank of America employees and with parking available as well as other sites deemed feasible; in 2018 this was 62 sites. In 2018, approximately 140 MWh of electricity was delivered via our chargers, which is equivalent to the electricity consumption of 12 homes.

Replicability

Any organization can implement a low-carbon vehicle programme and track the avoided emissions based on the transition from the traditional fuel vehicle to the new low-carbon vehicle. One perceived limitation is a lack of financing available to fund the programme. Electric vehicle charging stations can be installed in almost any parking area. In leased office space, landlords were receptive to installing charging stations. A perceived limitation in highly urban locations is that these locations may not offer parking access to employees or have enough parking available to dedicate multiple spots to electric vehicle charging.

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Bank of America is extending our efforts to accelerate the transition to a low-carbon economy and support innovation that can help us rethink how we use transportation and energy today. We are working to reduce our operational footprint, while providing programmes to help our employees reduce their impacts on the environment.

Alex Liftman, Global Environmental Executive



Location: Detroit, MI, USA (headquarters) Company size: 501–1,000

Detroit-based Bedrock is a full-service real estate firm specializing in acquiring, developing, leasing, financing and managing commercial and residential buildings.

As part of Bedrock's commitment to developing urban cores, it incorporates a Mobility Team that designs, implements and oversees projects for new commute and transit options. These projects include the coordination of the company's involvement in citywide commuter and bike programmes, carpooling, ride-sharing, vanpooling and public transit services. Bedrock also deploys charging stations in its garages and has deployed multiple autonomous vehicles in the city.

Challenge

The MyCommute solution was developed to encourage Bedrock team members and visitors to Detroit to try alternative modes of transportation in response to an increased demand for parking within the city.

Description

Launched: December 2018 Location: Detroit, MI, USA

MyCommute was implemented through a collaborative effort between the Bedrock Parking and Mobility Team and Quicken Loans, powered by cloud-based commute management software developed by external partners at Luum. The MyCommute platform serves as a central resource to educate team members about existing and new commute options while offering cash incentives to encourage the use of alternative methods of transportation. Team members are asked to self-report their mode of transportation on their online commute calendar to earn these daily incentives. To ensure data integrity, MyCommute integrates with an access control system to automatically report when team members use their company-assigned parking space.

The programme also delivers seminars to educate and prepare team members who are interested in trying alternate commute options – including public transportation, carpooling services, shuttles, etc. To date, more than 3,800 users have logged at least one commute using an alternative mode of transport. The major focus of the programme is to drive behavioural change, and since its launch, it has seen nearly 25% of the targeted audience increase individual usage of alternative modes of transport.

Impact

The impact of this programme is primarily measured by looking at bicycle, carpool, public transit, ride hail, vanpool and walking commutes as a percentage of all trips logged and tracked in MyCommute. These alternative modes of transportation made up 14.3% of all commutes logged in the first 30 days of implementation. That percentage has steadily increased over the past seven months, rising to 18.2% in June 2019. This change represents an increase of 21,500 trips using alternative modes of transportation. This resulted in an average reduction of 316 parking spaces used per day in the month of June and helped to prevent more than 3.4 million pounds of CO2 emissions.



Bedrock plans to scale the MyCommute programme to its locations in Cleveland, OH and Phoenix, AZ. Additionally, in early 2020, it plans to expand MyCommute as a part of its suite of services to business tenants. The company does not anticipate any limitations in scalability; the MyCommute platform exists and has been operating for eight months within Bedrock's largest market, positively affecting Detroit team members' commute to and from the office.

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Our goal is to deliver the best possible commute experience, and that starts each and every day with the trip downtown. Bedrock embraces innovative transit programmes, combined with easy access to varied mobility options, all contributing to a more vibrant city. Detroit is the perfect backdrop to change the dynamic of mobility as we know it.

Kevin Bopp, Vice-President, Parking and Mobility



Location: Bogotá, Colombia Company size: 501–1,000

The Ean University has a vision focused on entrepreneurship, which has taken on a new meaning: sustainable entrepreneurship, a concept that reconciles economic, social and environmental prosperity with leadership and innovation. For more than 50 years, the university has earned an important reputation not only in the education sector, but also in industry, because of the practical implementation of its key philosophy: At Ean, students are encouraged to develop their abilities in entrepreneurship and sustainability.

There are 9,249 university students and 912 employees who live in 20 localities around Bogotá. All of them must travel to the main campus located in the west of the city.

Challenge

Since 2015, the Pedalling to Campus programme has promoted cycling to reduce CO2 emissions and contribute to Bogotá's sustainable mobility. The programme is open to all university students, lecturers and employees.

Description

Launched: March 2015 Location: Across Bogotá, Colombia

Identifying the bicycle as the best means of transportation – as it avoids CO2 emissions, optimizes time and encourages physical activity – Ean University created the shared bicycles programme, Pedalling to Campus, to promote sustainability.

In March 2015, the university, in collaboration with the Institutional Environment office, launched Pedalling to Campus with 50 bicycles. At the end of 2015, there were 869 active users among students, teachers and employees. Pedalling to Campus is a programme aimed at the entire university community that enables bicycle loans for a 24hour period through a virtual registry. Each time the user wants a bicycle, they can request it on the platform; they have the option to keep it at home and return it the following day. The programme seeks to ease travel and offer a better quality of life to students and employees.

Within the framework of Expo Bike Colombia 2015, Ean University was nominated and received an award in the category "best bike-friendly university" in recognition of its efforts to encourage the use of bicycles: 58% of employees use this service to travel to campus, including some who ride their own bicycles.

In 2019, the programme was significantly improved with the introduction of better-quality bicycles and the digitalization of the process so that the process is personalized and bicycles are released electronically. In addition, complementary activities have increased, including a recent bicycle caravan organized in collaboration with the local government.

Impact

The 2019 report showed the following results:

The university stopped emitting: CO2 22,852 kg; total time saved: 618 hours, equivalent to 25 days. Average monthly time saved per user: 9.4 hours; Potential accumulated savings: 9,142,000 COP (\$3,047); total distance travelled: 20,373 km, equivalent to almost three times the distance between Bogotá and Rio de Janeiro.

The university report (January–June 2019) highlighted the following: number of trips by April 2019: 4,626; distance travelled/km: 27,756; Savings CO2 emissions/kg: 648; time savings in days: 88; money savings 21,279,600 COP (\$7,093).

Since 2015, the following has been documented:

- Approximately 92,800 trips within Bogotá city limits
- 475,000 km have been covered by bicycle
- Approximately 75,000 CO2 kg have been prevented

Beyond more sustainable transport behaviour, the programme has also created spaces for interaction and learning such as:

- Bicycle picnics
- Bicycle challenges
- Road safety workshops
- Bicycle mechanic training
- Learn to cycle programmes

This programme has won several competitions organized by local government highlighting their leadership in this area. These include first prize on the city's bicycle challenge in 2017 as well as second place as the university with the largest number of women cycling on the 2019 Car Free Day.



The programme was designed with the goal to make it fully replicable. The university has a vested interest in being a leader in the implementation of strategies for sustainable mobility. In the first place, the programme envisions alliances to unite with other universities and neighbouring institutions, to create routes that give security to users. Second, the fleet of bicycles is insured on a regular basis, making it more attractive to users. Third, the app is easy to use and allows widespread reach within the university community.

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As Chancellor of the Ean University, I am committed to promoting sustainable mobility, by promoting the Pedalling to Campus programme so that we can all enjoy our city and better share the road.

Brigitte Baptiste, Chancellor, Ean University



Location: São Paulo, Ceará, Rio, and Goiás, Brazil Company size: 10,000+

Enel is a multinational energy company and one of the world's leading integrated electricity and gas operators. Enel is present in over 30 countries on five continents, generating energy with a managed capacity of more than 89 GW and distributing electricity across a network spanning approximately 2.2 million km. In Brazil, the Enel Group is active in the generation, distribution and transmission sectors through Enel Brasil and its subsidiaries. In the generation sector, the group is the country's most significant solar and wind player in terms of installed capacity and project portfolio, with a total installed renewable capacity of around 2.4 GW. In the distribution sector, the Group serves over 17 million customers through its Brazilian subsidiaries in São Paulo, Ceará, Rio and Goiás.

Challenge

Trips done daily by ENEL's workers were identified as inefficient and expensive. Trips done by taxi from the City of São Paulo to other cities in the region could cost up to R\$450 (US \$112.50) while a daily car rental cost up to R\$120. An assessment showed that 18% of corporate journeys could be shared since they had very similar destinations. Mismanagement of resources available was not intentional, but rather a result of lack of information.

Description

Launched: October 2018 Location: São Paulo – for 3,000 employees

ENEL Distribuição decided to design measures to improve corporate mobility, integrating different contracts, and offering more solutions to their workers' needs. For this, ENEL developed an app for corporate trips, integrated with fleet telemetry (a taxi app), the 99 Taxi app and the Movida leasing system. The user chooses the route, including origin and destination, and the app determines the best travel mode. Once the mode is selected, the app books the trip and, when it identifies other users requesting a similar route, it directs both to pool the trip.

Impact

Today, technology has been a great ally in the search for mobility solutions for people in general, but little has been done to improve mobility within corporations. Besides, the departmentalization of companies makes it challenging to manage the use of the various possible models of options for corporate trips. Companies usually manage many different contracts separately. Integration of contracts and travel needs not only reduces trip costs but offers better fleet management solutions. ENEL estimates a cost reduction of R\$1.2 million (US \$300,000) per year only in São Paulo and can be even higher by deploying to all group companies.

Replicability

This project is already being implemented at ENEL São Paulo and can be implemented in all ENEL companies worldwide.

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I like the idea that it helps to reduce costs, leverages on a digital solution and is in line with the circularity concept.

A member of the ENEL Global Executive Committee



O FUTURO CHEGOU!

O PRIMEIRO APP DE GESTÃO MULTIMODAL







Location: Sunnyvale, CA, USA (headquarters), with US employees located in the San Francisco Bay Area, CA; Carpinteria, CA; Omaha, NE; Chicago, IL; Detroit, MI; Washington DC; and New York, NY Company size: 10,000+

Founded in 2003, LinkedIn connects the world's professionals to make them more productive and successful. With more than 660+ million members worldwide, including executives from every Fortune 500 company, LinkedIn is the world's largest professional network. The company has a diversified business model, with revenue coming from Talent Solutions, Marketing Solutions and Premium Subscriptions products. Headquartered in Silicon Valley, LinkedIn has offices across the globe.

Challenge

LinkedIn's vision is to provide economic opportunity for every member of the global workforce. LinkedIn provides employees with a great commute experience and options – enough that every employee has two alternative options to get to work, other than only driving alone. This investment helps with employee satisfaction and productivity.

Sustainability is at the core of LinkedIn's Rideln programme and LinkedIn recognizes the impact of single-occupancy vehicles on the environment. The company's goal is to help make commuting a little easier for everyone, not just for employees, which is why it also engages in regional discussions about traffic congestion and sustainability. Rideln also exists in response to local regulations, such as the requirements for a transportation demand management programme, as well as parking limitations.

Description

Launched: 2012

Location: San Francisco Bay Area offices – Sunnyvale, CA; Mountain View, CA; San Francisco, CA

LinkedIn's RideIn programme provides multiple commute solutions to employees travelling from all nine San Francisco Bay Area counties. RideIn is built around the existing public transportation system, and LinkedIn fills in the gaps where necessary.

Currently, the Rideln programme includes: monthly transit subsidy, last-mile shuttles to/from the train stations, support for cycling or walking to work, ride-sharing via vanpools and carpools and Wi-Fi-powered long-haul commuter buses. In addition, the Rideln programme manages on-site parking, electric vehicle charging, campus navigation and campus bikes. The goal of the programme is to transform the commute culture by encouraging every employee to try an alternative commute option at least two days per week.

Rideln has partnered with Scoop, a carpooling solution company, since August 2016 to help offset parking demand on campus and to provide an additional commute option for employees. Shortly after launch, LinkedIn's transportation team began receiving positive feedback from enthusiastic LinkedIn carpoolers whose commuting experiences had been dramatically improved by Scoop's Managed Carpool Program.

Within the first year, carpooling with Scoop had become a core tenet of Rideln, though some LinkedIn buildings were seeing higher adoption rates than others. To help address this, Scoop and LinkedIn started a marketing campaign that included on-campus appreciation events, digital slides, tabling events and in-app promotions. While there has been consistent year-over-year programme growth, it was not until Rideln launched a free rides carpool pilot with Scoop in August 2019 that the programme really took off.

Other programmes have scaled effectively as well. The longhaul commuter buses are a very successful programme for employees who live far away from the office and do not have a public transportation option available to them. With an average ride of over an hour, these buses allow employees to make their commute a productive part of their workday. Many employees take meetings, respond to emails, meditate or participate in LinkedIn Learning courses while travelling to or from the office. Recently, Rideln was able to move a stop location from one route to a newly launched one, which resulted in less time on the road for the original route, and a new service area for employees. Rideln also has a commuter bike programme managed by Bikes Make Life Better, which supports employees who ride into work. With indoor bike-parking facilities, lockers and showers, employees have the amenities they need to ride into work. Bike-repair stands, tools and bike pumps are provided in almost every building, and recently the Bike Champs programme began offering support to riders by providing a bike-repair toolkit in each building and training interested Bike Champs on how to assist their peers. Classes such as "How to Ride in the Road" and "Fix-aflat" are offered two times a month, and the on-site bike team has weekly office hours when employees can get customized trip plans for their commute.



Impact

The impact of the Scoop carpool programme is measured through employee sign-up numbers, match rates, rides shared and employee sentiment measured through internal surveys. Over the past three months of the pilot programme in partnership with Scoop, LinkedIn has seen a 126% increase in daily average cars out of the parking lot and is averaging over 2,500 carpool trips per week. Employees have reported an increase in productivity, and they are making friends. One employee even sold his personal vehicle and uses Scoop every day. To date (November 2019), programme metrics include:

- 2,793 registered users
- 152,230 one-way matched trips
- 770,167 pounds of CO2 saved

To ensure the shuttle system continues to work for employees, the Rideln team does a full-system analysis each quarter, looking at ridership, timeliness, employee feedback and employee origins. Periodic adjustments are made, and new routes are tested as pilots before full implementation. Because of these efforts, the programme has seen a 20% growth in ridership over the past year.

Since May 2018, the Rideln bike programme has seen consistent growth in ridership. The data collected from the weekly bike counts, which includes specific locations for each building, was recently used in a project to increase the number of bike parking spaces in the buildings experiencing the highest ridership. In addition, in early 2019, Rideln launched the Bike Champs programme, and to date there are over 40 active employees in both the South Bay and San Francisco offices.

Replicability

This type of programme, with a customized approach to addressing key business or regional priorities, is extensible across all different types of transportation demand programmes and locations. To begin, companies should start with looking at where the employees live and what commute options already exist that can be supported quickly. From there, it is a case of building upon the quality of those programmes, and once they are running smoothly, to begin focusing on the gaps in the system. Hiring external consultants is a great way to expand bandwidth and learnings. It is important to engage with and listen to employees and to share the programme's successes to highlight the impact a commute programme has on employee satisfaction, productivity and wellness.

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Our employees' commute experience matters to us. Whether they want to walk, ride a bike, take transit, carpool or drive, Rideln offers a variety of choices to make their commute outstanding and brings together a productive and successful workforce. *Jim Morgensen, Vice-President of Global Workplace Services, LinkedIn*



Location: Colombia Company size: 5,001–10,000

The goal of Movistar is to connect Colombians with quality, always, anywhere and from any device, so that they can discover a world of infinite possibilities. Since its arrival in Colombia, Telefónica Movistar has invested around COP 12.6 billion (\$3.7 million) in modernizing and expanding the capacity of networks and infrastructure to support mobile and fixed communications, as well as for the strengthening of our customer service platforms. These investments in telecommunications infrastructure in Colombia have allowed the company to incorporate new technologies – among these, the 4G LTE mobile incursion and VDSL technology to offer higher speeds (up to 40 Mbps).

The company offers services in 962 municipalities and has 92 Experience Centres nationwide located in 51 cities and municipalities.

Challenge

Sustainable mobility is central to Movistar's strategy towards emissions-reduction and awareness-raising. Movistar by Bicycle invites employees to put away their car keys and travel to work by bicycle and skateboard.

Description

Launched: October 2014 Location: Bogotá, Colombia (headquarters)

Movistar is committed to environmental protection as outlined in its Responsible Business Plan. Its Environmental Management System targets emissions and fuel reduction, employee sustainable mobility and climate change mitigation.

Sustainable mobility is part of the company's sustainability strategies aimed at reducing emissions and raising environmental awareness among employees. Movistar has invited employees to travel to work using bicycles, as an alternative means of transport. The initiative, called Movistar by Bicycle, has had a positive response. In 2014, it started with 25 bicycle racks. As people started to commute by bike, the company encouraged more people to follow suit by building showers, lockers and more bike parking. Today, there are 510 bicycle parking spots, between 380 and 400 bicycles are parked on a daily basis and on a monthly basis, an average of 500 different people cycle to work.

Bicycle Capital, an external service provider, supplies 20 rental bicycles and soon will include electric scooters. Employees who have undergone a theoretical and practical course can access the bicycles as a loan. The theoretical part is done online, and the practical piece is available every fortnight with the support of Bicycle Capital. Once the user has completed and passed both tests, they receive a username and password, to book the bicycle online. Bicycle Capital has a two-year contract, during which full maintenance of the fleet is provided. They also provide an online platform to track loans, the number of trips and bike status. One of the key challenges has to do with employees' fear of cycling; therefore, Movistar has carried out awareness campaigns to share safety recommendations, routes and the main benefits of using a bicycle for transport. Programme participants live, on average, 15 km from the company. In 2018, on average, more than 395 employees came to work daily by bike. Today, employees cycling to work help avoid emissions of about 265 tons of CO2 per year.

Impact

Involving people in a positive transformation for society, instilling a culture of well-being and improving employees' quality of life make up the greatest impact of this project. The programme is measured by the security unit, which compiles information such as number of bicycles parked, people going in and out by bicycle or skateboard and average trip distance measured by the digital tool implemented by Bicycle Capital. The initiative has increased environmental awareness among employees.

Some results include:

- 395 people cycling to work daily
- 790 daily journeys
- 8,295 monthly trips by employees cycling to work
- 14 km travelled per person per day on average
- 1,393,560 km travelled annually
- Up to 131,127 kg CO2 emissions saved annually (assuming conversion from private vehicle usage)
- 394 million COP (\$116,000) invested in showers and changing rooms annually



The initiative has generated environmental awareness among employees, particularly around the need to actively solve the problem of climate change. In addition to producing no CO2, cycling to work improves physical fitness and quality of life, allowing the saving of money otherwise required for petrol and car maintenance. One of the constraints is budget allocation. Nevertheless, the programme is easily replicable as long as management approves its roll-out. In this case, the Bicycle Capital model provided has been designed so that it can be implemented at any company.

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We place people at the centre of everything we do: Our employees are the main reason to reinvent ourselves and promote sustainable mobility as a key flagship programme.

Fabián Andrés Hernández Ramírez, President and Chief Executive Officer, Telefónica Movistar Colombia



Location: Rio de Janeiro, Brazil (headquarters), with a lubricants factory in Duque de Caxias, Brazil, offices in Salvador, São Paulo, Brasília and Porto Alegre, and 95 facilities and 7,700 service stations across Brazil

Petrobras Distribuidora (BR) is a joint-stock leading company in the Brazilian market for distributing fuels and lubricants. It also operates in the processing and sale of chemical products in the fuel supply for power generation, in the distribution of natural gas and the production and sale of asphalt products. Its logistic structure is the most extensive and capillary of the segment, with bases, fuel depots and more than 7,500 filling stations distributed all over the five regions of the country, interconnected by an outsourced fleet of more than 5,000 vehicles. In business-to-business marketing, BR's portfolio includes approximately 14,000 essential customers.

Challenge

BR's lubricants factory is in the Duque de Caxias' industrial zone, where there are no sidewalks/pavements or bike paths. Traffic is dominated by heavy trucks. The factory receives 871 workers daily, including outsourced professionals. The challenge was to identify hindrances to and opportunities for a more sustainable transport commute for the workers.

Description

Launched: July 2019

Location: At the headquarters and the lubricants factory, in Rio de Janeiro and Duque de Caxias, respectively.

In 2018, BR Distribuidora hired the Laboratory of Sustainable Mobility from the Federal University of Rio de Janeiro (UFRJ) to deliver a diagnosis of its workers' mobility patterns and to design a Corporate Sustainable Mobility Plan that will have a positive impact on energy, health, economy and the built environment.

In particular, the diagnosis takes into consideration different trip patterns according to workers' gender, race, income and educational level, resulting in a more comprehensive understanding of mode choice.

Two other academic partners engaged in the project – the Alberto Luiz Coimbra Institute for Graduate Studies and Research in Engineering at the Federal University of Rio de Janeiro and the Laboratory of Active Life at the State University of Rio de Janeiro. The scope of analysis included both the workers from the factory in Duque de Caxias and the headquarters in Rio de Janeiro.

Privatized in July 2019, the new BR Distribuidora understands that actions which value the safety and productivity of the workforce are fundamental to the company's excellent performance. Sustainability and added value are strategic pillars for BR, so interventions for corporate mobility that contribute to the company's economic, environmental and social impacts are fully aligned with our business.

Impact

Awareness of 100% of the workforce at HQ and the factory of the importance of sustainable mobility, including engagement of the company's decision-makers and outsourced workers' engagement

Production of data on the workforce's commuting patterns to support the elaboration of the BR Distribuidora's 1st Sustainable Mobility Plan

Contribution from academic research to the discussion of the Sustainable Mobility Plan

Of 3,360 workers, 2008 responded to the survey (60%)



The implementation of the Sustainable Mobility Plan is certainly replicable to several companies since the research questionnaire and the initiatives taken for awareness and data collection are done and can be shared with the corporations that have an interest in it. The interventions and indicators suggested by the Sustainable Mobility Plan may also be replicated and adapted in the future by any other company.

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BR is ready to meet the mobility demands of Brazilian society, focusing on safety and sustainability. This project aimed at improving the corporate mobility of our workforce is an important step towards achieving our strategy

Phillipe Blower, Communications, Brands, and Sustainability Executive Manager, Petrobras Distribuidora



Location: Barranquilla, Colombia (headquarters) Company size: 201–500

Promigas is a holding company that develops energy markets, which involve the strategic transportation and distribution of electricity, natural and liquified natural gas. Promigas pioneered the regasification of liquid natural gas and in 1986 converted the first car in Colombia to natural gas. For over 45 years, Promigas has played an essential role in mass fuel usage in Colombia. The company prioritizes responsible measures to minimize contamination, restore biodiversity and run procedures in accordance with the SDGs. Promigas is committed to processes that will mitigate risks associated with climate change and guarantee a 10% reduction of the company's carbon footprint by 2025.

Challenge

The programme was born from the need to reduce the number of car parking spaces. Promigas identified a "theory of fun" to create a culture of sustainability among employees that aligned with the company's goals.

Description

Launched: June 2013 Location: Barranquilla, Colombia

In 2013, Promigas had a problem with available parking spaces at their administrative offices. There were 254 spaces for 334 staff vehicles. As a solution, the company started the Share Your Car programme. In 2016, in an effort to motivate employees to actively partake in the SDGs, the programme evolved to Sustainable Mobility. Since then, the programme has grown and includes new modalities: Walk from/to Home, Bicycle, Share Your Taxi and Change Your Car to Natural Gas.

Promigas encourages programme involvement to employees through a "theory of fun", which has been the key to the success of the initiative. The company creates a positive competition and reward system where employees who participate receive a number of points depending on the transport modalities used. Later, they can exchange these points for prizes or gift cards to travel agencies, gyms, restaurants or cinemas.

The programme implementation had some challenges. Initially, people were hesitant to carpool because they felt it was a loss of privacy and a big change to their commute routes. Promigas responded with a two-part strategy. First, the company created a large, interactive map of Barranquilla with each employee's home address marked. This enabled workers to know their neighbours and find ideal Share Your Car partners. Secondly, they used the platform ArcGIS Online to help people connect with each other and use interactive maps for shared travel.

Other obstacles included bicycle accessibility. As a solution, the company established a bike parking site and bought

several bicycles that employees could reserve daily and use if they wanted to participate in the programme. Finally, Barranquilla's weather proved to be a challenge. Participants who arrived at Promigas by walking or riding bicycles struggled with the high temperatures and humidity levels. The company overcame this by building private changing rooms with showers for employees, both for women and men.

Since the beginning of Sustainable Mobility, employee feedback has been positive, and the programme's annual costs never exceed \$10,000. In comparison, other solutions such as building additional parking lots would cost more than \$2 million. In 2018, Promigas included the Arenosa Station regulation, control and measurement facility in the Sustainable Mobility programme, in response to a request from the workers. It is a relevant action since it is the first step in our vision to expand our programme to each station and city where Promigas has offices. In 2019, the company will continue building this programme by adding more stations and premises to the initiative.

Impact

When the programme began in 2013, Promigas had 10 participants in total. Today, the programme has 172 employees involved, out of a total of 280. In other words, 61% of employees have responded positively and actively.

When Promigas started the programme, 100% of participation was through the Share Your Car modality. Today, 60% of members use an alternative mode of transport that does not generate carbon emissions, such as Walk from/to Home and Bicycle. These measurements are documented through daily control at the company's entrance, which allows monitoring and tracking of the five modalities of the challenge.

In 2016, Promigas received a national award for having the most significant company reduction of an annual carbon footprint out of 50 companies. These statistics and achievements reflect the growing success the initiative has had during the past six years.



This simple and effective initiative can easily be replicated by other companies. Implementation costs are low and do not require much capital expenditure. The company intrinsically motivates and extrinsically rewards like-minded employees to follow company values, engage in sustainable practices and live healthier lifestyles. Potential limitations are the safety measures involved for those who use bikes or walk, a monetary budget to develop the programme and its core reliance on the commitment of employees for success. It requires a strong structure and good publicity to be carried out. It is especially important to have the support of management, who lead by example to promote the programme and its goals.

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...Through the "theory of fun" we involved and committed our employees to our company's strategy to combat climate change and to guarantee a 10% reduction of our company's carbon footprint by 2025.

Eric Flesch, President, Promigas



Location: Gerlingen, Baden-Württemberg, Germany (headquarters), with nearly 130 locations across the globe Company size: 10,000+

The Bosch Group is a leading global supplier of technology and services. It employs roughly 410,000 associates worldwide. The company generated sales of €78.5 billion in 2018. Its operations are divided into four business sectors: mobility solutions, industrial technology, consumer goods, and energy and building technology. As a leading internet of things (IoT) company, Bosch offers innovative solutions for smart homes, smart cities, connected mobility and connected manufacturing. It uses its expertise in sensor technology, software and services, as well as its own IoT cloud, to offer its customers connected, cross-domain solutions from a single source.

Challenge

The largest percentage of Bosch employees work at 15 Bosch locations in the Stuttgart, Baden-Württemberg metropolitan region. The daily commute of Bosch employees in the Stuttgart region totals collectively 6.4 years across 1.6 million km and contributes to 257 tons of CO2 emissions. Considered a private trip, Bosch did not previously support the commute of employees in Stuttgart.

As a founding member of the "Bündnis für Luftreinhaltung" initiative, which is a clean air plan for the city of Stuttgart, Bosch committed to becoming carbon neutral by 2020 and, subsequently, launched Go for Mobility to reduce motorized, private transport commuting in favour of more climate-friendly mobility. Go for Mobility aims to change mobility behaviour and reduce CO2 emissions related to employee commutes.

Description

Launched: January 2019

Location: Stuttgart region, Baden-Württemberg, Germany

Go for Mobility seeks to encourage a culture of sustainable mobility at Bosch and is based on the hypothesis that the employee commute should be multimodal and follows an approach of nudging in order to influence behavioural change. The programme is implemented for 55,000 employees working out of the 15 Bosch locations in the Stuttgart region and encourages employees to use more sustainable transport modes, such as bicycles, public transportation, ride-sharing and corporate shuttles, in areas underserviced by public transportation. As the office locations in the Stuttgart region have diverse commuting needs, solutions cannot be standardized, so the programme is often tailored to fit different office cultures.

Prior to launching initiatives within the Go for Mobility programme, an extensive survey was conducted to understand the actual mobility behaviour, pain points and needs of Bosch employees. The participation rate of employees for the internal survey was high at 49%, indicating that everyday mobility does play a significant role in the well-being and daily lives of employees. Survey results indicate that single passenger car usage is the most common mode of transportation, so encouraging sustainable, multimodal commutes could be challenging.

Many employees indicated that use of public transportation was not preferred – reporting feelings of lack of convenience and low reliability of services. The core Go for Mobility team used these results as an opportunity to address these perceptions with local municipalities in the Stuttgart region as well as with organizations managing the region's public transportation. Bosch fundamentally supports and champions public transportation, noting that adjustments are necessary in order for the region's public transportation to be better used by employees commuting to and from the office. Bosch collaborated with, the town of Schwieberdingen, and its public transport agencies, resulting in a change to a bus route to service the Bosch office. Bosch also invested in building a bus stop in front of the office's main location. In addition, the Go for Mobility programme includes:

- Using a carpooling app with exclusive parking spots for ride-sharers
- Expanding shuttle bus services, which are equipped with Wi-Fi and app support
- Testing on-demand shuttle services
- Promoting cycling to work, providing bike leases and expanding bike infrastructure
- Establishing work-from-home opportunities
- Establishing Bosch co-working areas, which enable employees to work at locations closest to their home
- Contracting with a transportation consultant to include corporate mobility in long-term location masterplans
- Launching a campaign to educate employees on sustainable mobility options for their daily commutes



The Go for Mobility core team comprises a cross-functional mix of employees from real estate, government and public affairs, fleet management and human resources teams. The core team coordinates the mobility management network, communicates programme initiatives with employees, and exchanges ideas with other companies in the region. Mobility managers meet and communicate regularly via monthly calls and quarterly meetings. In addition, Bosch allocates a budget for central Go for Mobility activities.

Impact

The impact of the programme is measured by:

- Reduction of single-car commutes and increased car occupancy rate
- Implementation of alternative mobility modes by site and the implementation of a corporate mobility portfolio
- Usage of mobility modes and increase in usage of modes
- Balanced and future-oriented mobility concept per site (instead of building new parking spaces)
- Reduction of carbon emissions

As an example, a case study is provided for carpooling at the site location in Reutlingen:

- More than 1,000 employees (more than 12% of the population) registered for the carpooling programme in the first quarter of operation
- After three months, more than 2 tons of CO2 savings were generated, 7,500+ km were saved and more than 400 carpool rides between colleagues took place
- 20 preferred parking spaces close to the entry are dedicated to carpoolers
- The office committed to planting a tree when 1,000 rides are reached

We may be automotive suppliers, but specifically in conurbations we help our associates leave their cars at home.

Volkmar Denner, Chairman of the Board of Management, Robert Bosch

Replicability

The approach of a diverse and well-balanced mobility portfolio is replicable and customizable across Bosch locations and for other companies as it can easily be customized to accommodate specific contexts related to specific office locations and companies. The single portfolio elements can be adapted by other companies, either by implementing services such as bike leasing or corporate shuttles, employing ready-to-use platforms for ride-sharing or collaborating with local public transit authorities.

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Location: Ann Arbor, Dearborn and Flint, MI, USA Company size: 10,000+

The mission of the University of Michigan is to serve the people of Michigan and the world through pre-eminence in creating, communicating, preserving and applying knowledge, art and academic values, and in developing leaders and citizens who will challenge the present and enrich the future. The University of Michigan is No. 1 of all public schools in the United States for education, and the No. 1 public research university with \$1.55 billion in research expenditures in 2018. It also has 100 graduate education programmes rated in the top 10 for their discipline nationally. The university is truly a national and international institution with students originating from all 50 US states and 128 countries.

Challenge

The Detroit Connector was created as a means of providing transportation for university community members to engage in the cultural and sporting offerings of the city. It has grown to be a transportation resource for students, faculty, staff and members of the public who engage in Detroit, Dearborn or Ann Arbor.

Description

Launched: October 2013 Location: Ann Arbor, Dearborn and Detroit, Michigan

The Detroit Connector provides transportation between Ann Arbor, Dearborn and Detroit in support of curricular, co-curricular, research, service-learning, other communityengaged opportunities and daily commutes. The Connector also facilitates cultural enrichment, enabling residents of south-east Michigan to better use the region's rich arts and scholarly resources.

The service is available to the University of Michigan's 51,000 faculty/staff and more than 57,000 students, as well as the general public. Between Detroit and Ann Arbor, the travel distance is approximately 50 miles. Riders pay \$6 each way, but the service remains subsidized by the university. The programme works with the City of Ann Arbor on coordinating stop locations to ensure connecting transportation options are available at stops. It also supports transporting bicycles for riders who wish to use a bicycle as part of their journey.

Although originally designed to support research and educational efforts by the University of Michigan in Detroit, its ridership has expanded over time, as has the service – recognizing the need and developing demand. In addition to education, research and cultural-related trips, the general public can also use the Detroit Connector to access the same and more, including medical services in the University of Michigan healthcare system.

Initially the service was designed to support a modest level of ridership, in part because the original target ridership was limited in scope. But as word of the service expanded, so, too, did the ridership. More recently, the demand has increased considerably, and so the operation was expanded again. Currently the Detroit Connector operates seven days per week, except on major holidays, from 6:00am to 6:00pm, providing three round trips most weekdays and Saturday, four on Friday, and two round trips on Sunday.

The majority (86%) of the ridership is students, who use the Connector either to attend classes, work on projects or travel home and back for the weekend.

The Detroit Connector is one of many employee/student commute-supporting programmes that the university currently operates. The university also operates two commuter routes between the adjacent communities of Chelsea and Canton to and from Ann Arbor. These two commuter routes serve employees almost exclusively.

Impact

The impact has been measured primarily on the basis of use. In February 2019, the service provided 2,200-person trips, or 78.5 trips per day. The year prior, the service was providing an average of only 25 trips per day – so there has been a threefold increase in trips in one year. Assuming that each trip was otherwise taken in an individual vehicle, the service is eliminating about 24,000 trips a year. In instances where students are travelling home and back for the weekend, there would actually be up to four trips eliminated.

Lastly, while subsidized by the university, the service operates at 65% farebox collection. Most transit operations operate on only 20% farebox collection – a 45% reduction in subsidy required. In addition, the university is currently in discussions with an international high-tech company that has offices in both Ann Arbor and Detroit. The company would like to share the service so that its employees could travel between locations, and the additional ridership would mean that the university would no longer need to subsidize the service at all.



While the university operates its own transit fleet, this service is contracted out to a regional carrier. Others could similarly contract a service out and would not have to make a capital investment, find drivers, train drivers and pay vehicle maintenance and insurance. Advertising the service can be done through regular organizational communications. Some planning is needed to know where your employees live and the nature of their commutes, but this can be done via a survey. The limitation of providing such a service is that there needs to be a viable network of transportation options at any of the stops in order to support the starts and ends of the employees' commute.

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The Detroit Connector helps bridge the geographical gap between Ann Arbor, Dearborn and Detroit and supports curricular, co-curricular, research, service learning and other community-engaged opportunities.

Martin A. Philbert, Provost and Executive Vice-President for Academic Affairs, University of Michigan



Location: Americas, Asia Pacific, Africa, Europe, Middle East, India Company size: 10,000+

Wipro is a provider of IT services, including systems integration, consulting, information systems outsourcing, IT-enabled services and R&D services. It entered into the technology business in 1981 and has over 160,000 employees and clients across 54 countries.

Challenge

Wipro has a rigorous programme to drive sustainability initiatives across the value chain. Under the EV100 programme, Wipro committed to enhancing and promoting the use of electric vehicles (EVs). The company pledged to reduce the use of fossil fuels and increasingly use a cleaner alternative to help improve air quality in cities where it operates. Wipro considers providing transport facilities to employees as a benefit that also contributes to a healthier environment. The switch to electric mobility provides benefit to the employees, to the company and to the environment.

The programme was initiated for two reasons: Wipro's commitment towards cleaner air and the availability of a technology-based solution to run its fleet effectively.

Description

Launched: May 2018 Location: Hyderabad, India

As part of its sustainability initiatives, Wipro transitioned from internal combustion engine vehicles to EV fleets to cater to its employee transportation needs at its Hyderabad campus. The decision to commit to EVs was natural for Wipro since it involved public health benefits: cleaner air in cities as well as mitigating carbon emissions. In early 2018, Wipro became the first major Indian business to join the Climate Group's global EV initiative, EV100, to accelerate the roll-out of EVs, in collaboration with the World Business Council for Sustainable Development (WBCSD), and drive sustainability initiatives at an organizational level.

Through collaboration with Lithium, an EV fleet provider, Wipro's electric mobility transition has generated cost savings of 10–15%. Through this partnership, Wipro has been able to:

- Make practical strides towards integrating environmental sustainability in its operations
- Employ Lithium's algorithmic fleet planning and scheduling tools to maximize fleet use
- Establish a hub at the Hyderabad campus to ensure availability of vehicles, chargers and drivers
- Install charging infrastructure
- Pilot the programme first to generate familiarity with Wipro employees

Some of the issues Wipro had to address in order to implement the programme included: space requirements for installing charging stations and coupling the right solution with the right technology to make the EVs run efficiently. In addition, finding drivers with the appropriate skills was a challenge initially, as the vehicles had auto-shift gearboxes, which is a vehicle feature not common in India. A lot of groundwork was done along with Wipro's service partners – the fleet supplier and the operations team of the technology platform provider – to mitigate all possible challenges before the launch.

After initial success, Wipro aims to roll out 200 EVs to its Bangalore, Delhi and Pune offices. Charging infrastructure is one obstacle to replication. To enable future deployment at other Wipro campuses, Wipro is working with Lithium to set up charging stations in advance.

Impact

The impact of the initiative is determined by the amount of CO2 emissions abated by travelling an estimated number of green kilometres, the same number of kilometres that would otherwise be travelled using internal combustion engine (ICE) vehicles. By using this measurement method, Wipro can estimate the carbon emissions released by the ICE vehicles and the ability of EVs to negate the same with zero tailpipe emissions. By using 40 EVs, deployed in phase one of the programme, Wipro has saved 586 MT of CO2 while travelling 2.9 million kms.

Lithium's routing algorithm technology also helps to reduce travel time and maximize productivity. This is measured through the on-time arrival (OTA) and on-time departure (OTD) provided by the fleet management software.

The transition to EVs has had a resounding reception, as it has saved transportation costs by 10–15%, while also abating carbon emissions equivalent to adding 2 KBR Parks in Hyderabad. Furthermore, given the rising awareness about climate change, this initiative is timely and aligned to Wipro's overall sustainability drive. Employees have welcomed the use of EVs as they recognize the ecological benefits. They also report greater vehicle comfort and manoeuvrability. Wipro employees feel pride in using an EV, and in working for a pioneer company that embraces sustainability.



The deployment of EVs for employee transportation is easily scalable. The programme was initiated as an integrated package involving electric fleet, drivers and the technology platform. With multiple charging stations set up on the campus, the transition was seamless.

This experience of Wipro and Lithium in deploying costeffective, convenient and clean electric mobility solutions will help in convincing other corporations to "make the switch" to EVs. Wipro partnered with Lithium to develop a standardized operating model. As Lithium provides an integrated offering of an electric fleet, drivers and a technology platform, the programme is easily replicable.

In a recent study commissioned by CPO, Wipro was able to understand the life cycle environmental impact (LCA) of EVs as compared to diesel cars. While EVs have a higher footprint during production and materials acquisition, the LCA impact reduces substantially as renewable energy can be predominately used for charging EV vehicles. It is recommended that EV fleets are rolled out in locations that have a higher renewable energy share in electricity, such as those in Karnataka.

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Driving sustainability across the value chain has always been an important and integral component of Wipro's DNA. There are multiple programmes that are conscientiously designed and deployed to minimize the carbon footprint in Wipro. Adoption of electric vehicles for employee transportation and other mobility needs is in line with our commitment to the environment and our efforts have yielded impressive results.

Abidali Z. Neemuchwala, Chief Executive Officer and Managing Director, Wipro

Zurich Insurance Company

Flexing forward - Flexwork@Zurich to Flexwork 2.0



Location: Zurich, Switzerland (headquarters), with operations in 45 countries Company size: 10,000+

Zurich Insurance Group (Zurich) is a leading multi-line insurer that serves its customers in global and local markets. With about 54,000 employees, it provides a wide range of property and casualty and life insurance products and services in more than 210 countries and territories. Zurich's customers include individuals, small businesses, and mid-sized and large companies, as well as multinational corporations. The group is headquartered in Zurich, Switzerland, where it was founded in 1872.

Challenge

In 2015, Zurich implemented a flexible working solution – Flexwork@Zurich (Flexwork) – across its entire organization. Flexwork empowers people to work where, when and how they choose. It provides minimum constraints and maximum flexibility.

Flexwork is a framework that encourages employees to work in a way that achieves optimum results while responding to changing customer demands. It is neither an entitlement nor is there a "right" way to implement it. The focus is on collaboration within teams to find the best solutions that deliver results – and these differ across Zurich.

However, the results of the company's regular employee surveys (Employee Net Promoter Scores and the Economic Dividends for Gender Equality) in 2018 and 2019 showed that employee access to and uptake of Flexwork was inconsistent. It also showed that employees who had access to Flexwork gave higher scores in these surveys.

Through Flexwork, Zurich has improved its ability to respond to change, ensuring maximum productivity and creativity. Flexwork also empowers employees in a way that results in lower turnover and encourages managers to support a healthy work-life balance.

In order to realize the full benefits of Flexwork, Zurich recognized the need to evolve Flexwork@Zurich to Flexwork 2.0.

Description

Launched: July 2019 Location: Argentina (global roll-out launching in early 2020)

Based on the results of its employee surveys, Zurich's business units decided to support Flexwork 2.0 through IT investment and connectivity. The focus was on communication skills and technology to enable people to work in ways that best suit their individual needs – without limitations such as set office locations and mandatory office hours.

In addition, another focus is on the shift in mindset – from input to output orientation. Also, as part of Flexwork2.0, Zurich is looking at the lack of availability of part-time senior roles, as this was identified as a key barrier to career progression. Flexwork 2.0 has had a six-month trial period in Argentina – during which regular surveys and other data points have been collected locally to help the business to monitor progress and learnings, and implement further adaptations if needed.

To help with development and implementation of the new framework, groups of employees from around the world were led by human resources in a series of in-person and virtual workshops. These workshops were tailored to both general employees and people managers.

Flexwork 2.0 is possible because Zurich has a strong culture of maturity and trust, where employees understand that success is driven by their performance and commitment. Zurich does not underestimate the complexity of this cultural transformation. It is important that employees share their needs and preferences, managers feel confident that work is getting done, team members can count on each other, and business objectives are always prioritized.

Impact

The positive impact of Flexwork 2.0 has already been seen in the latest Employee Net Promoter Score survey results. Prior to the launch of Flexwork 2.0, 41% of participants said that their manager "almost always" supported work-life balance. This had increased to 68% after launch.



The global Flexwork 2.0 framework can be adapted to local needs and challenges. The results and impact of pilots across several business units will be discussed in global human resources leadership meetings, in order to scale certain initiatives globally and locally.

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For Zurich, it's important to give people the freedom to work where and when they want, to trust our employees in the knowledge that they have the engagement and expertise to perform excellently. We drive this through our global frameworks with the flexibility of local adoption.

Katja Raithel, Global Head of Diversity, Inclusion and Wellbeing, Zurich Insurance Company



Location: Essen, Germany (headquarters), with 2,100 office locations in 130 countries: 65% in Europe, 25% in Asia Pacific and 10% in the Middle East, Africa and the Americas Company size: 10,000+

DB Schenker is a division of the German rail operator Deutsche Bahn AG and provides transportation and logistics solutions. The company offers rail and land transport, air and ocean freight, contract logistics and supply chain management. Schenker caters its services to the automotive, building materials, chemicals, electronics, healthcare, marine and beverage industries. Sustainability and climate change are an integral part of all of its services to customers.

Challenge

DB Schenker can report and reduce its carbon footprint only by working together with its 40,000 service providers who generate around 95% of logistics emissions.

Description

Launched: January 2008 Location: Global

The programme is part of Deutsche Bahn AG's mandatory climate protection programme to reduce carbon emissions by 50% per unit from 2006–2030. The company has committed to carbon neutral growth by 2030 and to become completely carbon neutral by 2050. DB Schenker experts work closely with its carriers, external experts and non-profit organizations to calculate and report emissions that inform business decisions. Reported emissions are independently audited. In parallel, DB Schenker participates in standardization bodies (Deutsche Institut für Normung [DIN], the European Committee for Standardization [CEN] and the International Organization for Standardization [ISO]), as well as the Greenhouse Gas (GHG) Protocol, Global Logistics Emissions Council (GLEC), Clean Cargo Working Group (CCWG) and Sustainable Air Freight Alliance (SAFA) to harmonize methodologies across the supply chain. DB Schenker adds value for to customers as they integrate its data and methodology into their systems or receive advice on their own programmes.

Impact

Emission per tonne-km reduced by 26.6% from 2006 to 2019 including 26% in road transport, 9% in air transport and 62% in ocean freight. A key reason for success is that targets are also set for individual modes, accompanied with a clear roadmap of actions. Main measures are fleet modernization and eco-driving for road freight, vessel size, fuel and route optimization for marine freight, fleet modernization and operational improvements for air, and electricity and heating reduction for logistics sites. In addition, the switch to non-fossil fuels is driven together with policy-makers and research institutes. By 2030, all of DB Schenker's own vehicles up to 3.5 tons and half of all its vehicles between 3.5 and 7.5 tons will be equipped with electric drives or fuel cells.



The programme's structured blueprint meets both our customers' needs and helps working towards DB Schenker's 2030 and 2050 emission-reduction targets. Replication by other companies requires that they have the technical expertise in-house or provided by experts. To help all companies, DB Schenker is contributing to the development of a new ISO standard that builds on the GLEC Framework and the European standard EN16258. In addition, a company wishing to repeat our effort will need a tool that has to be updated continuously. DB Schenker helped found EcoTransIT, an industry tool to compile data and calculate emissions across modes.

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For DB Schenker, it is imperative to take the lead in transforming global transport chains into sustainable mobility structures. This encompasses an active role in restructuring the logistics industry's business model, exiting fossil fuels in our own fleet and helping all our air, ocean and road carriers alike to accomplish such a move.

Jochen Thewes, Chief Executive Officer, DB Schenker

Location: Hyderabad, India (headquarters) with a network across India and offices in China, Singapore, Hong Kong, Thailand and Nepal Company size: 5,001–10,000

Gati is a multinational logistics company with a presence across India and other Asian countries. It is known for express distribution and supply chain solutions, and also offers warehousing, freight forwarding, trading, cold chain, e-commerce and fulfilment services. Gati has over 3,100 business partners across India and operates a fleet of more than 5,000 vehicles to provide deliveries to 19,000 pin codes, covering 672 out of 676 districts in India with 608 physical offices.

Gati is one of the largest and most renowned players in express distribution and supply chain solutions in India. Gati has over 5,000 vehicles on the road, and a fleet of refrigerated trucks and warehousing facilities across India. It primarily provides distribution and integrated logistics solutions or supply chain management.

Challenge

To reduce the carbon footprint and local air pollution of last-mile delivery of IKEA products in India, with the aim of deploying a 100% electric fleet by 2030.

Description

Launched: July 2018 Location: Hyderabad, India

IKEA started its operations in India in 2018 and aims to have 25 stores across India by 2025. IKEA also made a commitment under the EV100 campaign of 100% electrification of home-delivery services worldwide.

Gati is the last-mile delivery partner for IKEA in India and embraced the initiative with enthusiasm. Gati derived a plan for a phased introduction of 100% electric delivery services by 2030. Gati now delivers close to 20% of deliveries through electric cargo rickshaws and is continuously conducting field trials with various original equipment manufacturers (OEMs) to arrive at the right product for the market. With successful field trials, the vehicles will be expanded with vans and trucks that can carry up to 10m3 as these become available and affordable.

Impact

Between August 2018 and November 2019 more than 10,000 packages were delivered to customers in Indian cities. This represents 17% of Gati's deliveries for IKEA.

The response from customers is positive as local air pollution has reduced because deliveries are made with electric vehicles rather than gasoline/petrol vehicles. Carbon emissions will be reduced in time as India switches from coal-fired power plants to cleaner electricity generation.

The main challenge is that only electric three-wheelers are currently available. The only suitable commercial electric van available is the E-Supro at three times the purchase price of conventional vans. For this reason, shipments of 3m3 or less are segregated from larger shipments. Larger shipments will continue to be made with trucks such as the TATA Ace and 407EX. Dedicated delivery routes and zones for electric three-wheelers ensure that efficiency is optimized.



This programme is highly replicable as delivery using electric three-wheelers has been operating successfully since August 2018 and the challenges of handling of electric vehicles are now well understood. It is highly scalable especially in e-commerce and hyper-local deliveries where retailers and customers are in the same area. A perceived limitation to this programme's replicability for other companies is the lack of availability of light commercial vehicle (LCV) electric vehicles (EV) and three wheeler cargo electric vehicles.

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Location: Singapore (headquarters), with offices in 38 countries on six continents; main hub offices in Geneva, Montevideo, Houston, Mumbai, Johannesburg and Shanghai Company size: 5,001–10,000

Trafigura is one of the world's leading independent commodity trading and logistics houses. The company offers crude oil, gasoline/petrol, fuel oil, biodiesel, condensates, concentrates, ores, refined metals, coal and iron ore trading services. Supported by industrial and financial assets, Trafigura Group moves physical commodities for its clients worldwide from where they are plentiful to where they are most needed.

Challenge

To use the Magdalena River in Colombia to transport crude oil, petroleum products and other goods instead of transporting them by trucks on a stretched road network, resulting in reduced emissions and societal impacts.

Description

Launched:June 2015 Location: Colombia

Trafigura has developed a more sustainable way of moving commodities into and out of Colombia, working closely with the Colombian government and local partners. The aim was to transform Colombia's commodity transport network, which relies on trucking on a strained road network, to one that draws upon the vast and largely untapped potential of the country's river system. Trafigura invested \$1 billion in the construction of an inland river port at Barrancabermeja and the introduction of over 100 barges and 18 pushers on the Magdalena River. This investment has best-in-class infrastructure and warehousing services that underpin Trafigura's world-class multimodal logistics system. Each barge convoy is equivalent to taking 228 trucks off the road on the 658 km journey to the Colombian ports of Barranquilla and Cartagena.

Impact

Emissions were reduced by 36% (66,000 tonnes of carbon dioxide equivalent [CO2e]) between June 2015 and December 2017 and, combined with growth of volumes transported over the next decade, are expected to reach almost 1 million tonnes of CO2e savings.

Fewer trucks is also a benefit to communities already affected by excessive truck movements and a high rate of road traffic accidents on the current and strained road infrastructure. The 520 Colombia-based Trafigura employees also take satisfaction from making a positive contribution to the environment.

An important lesson is that actual results are heavily influenced by river depth. Less rain or a lack of riverbed dredging means that waters are shallower. This means reduced volumes (weight) on each barge and fewer barges per convoy. If river depth was maximized, emission reduction would be significantly higher. It is estimated that reductions could be as much as 67%. The actual reductions were independently assured by consultancies Environmental Resources Management (ERM) and RCE and a tax credit of \$330,000 will be assessed by the Ministry of Environment.



The replicability of this programme relies upon developing the infrastructure of a country to improve efficiency by facilitating the shift from traditional logistics to a more efficient means of transportation. A key factor for success is the collaboration between the private sector, governments and local players.

Other opportunities to optimize transportation logistics using the multimodal system exist. Trafigura is actively investigating opportunities in other countries where a similar multimodal approach can improve the efficiency of the commodity supply chain. Shifting commodities to barges is not the only opportunity and improved rail infrastructure is also being considered.

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Multimodal logistics play a key role in the Trafigura Group operating model. We are positioning our business to support the transition towards cleaner, more efficient fuels and more sustainable methods of transportation.

Jeremy Weir, Executive Chairman, Trafigura



Location: Atlanta, USA (headquarters); UPS serves more than 220 countries and territories, along with domestic delivery service within 54 countries Company Size: 10.000+

UPS is a global leader in logistics, offering a range of solutions, including transporting packages and freight, facilitating international trade and deploying advanced technology to more efficiently manage the world of business. Founded in 1907 as a messenger company, UPS has evolved into a Fortune 50 global company and one of the world's most recognized brands. With 3% of global GDP flowing through our network each day, we are the world's largest package delivery company, transporting more than 20 million packages a day across 220 countries and territories. UPS operates one of the industry's largest private fleets of alternative fuel and advanced technology vehicles. Approximately 80% of employees are based in the United States, and 20% in other regions.

Challenge

No company can act on climate alone. To deliver sustainable logistics solutions, UPS must collaborate with partners and stakeholders who are willing to be at the forefront of innovation through experimentation.

Description

Launched: June 2005 Location: Global

UPS through its rolling laboratory works with fuel suppliers, original equipment manufacturers (OEMs) and manufacturers and other stakeholders to develop and scale alternative fuels and vehicle technologies. In 2019, UPS announced the largest purchase ever of renewable natural gas in the United States to reduce more than 1 million tonnes of emissions through 2026. Together with electric vehicle manufacturers ARRIVAL, Tesla and TEVVA, among others, UPS is a frontrunner in switching to electric vehicles for city deliveries and long-distance freight. UPS is collaborating on innovative last-mile delivery solutions that reduce congestion and pollution in dense urban centres, with more than 30 projects currently under way around the world.

Impact

Since 2009, UPS has invested more than \$1 billion in alternative vehicles, fuels and infrastructure globally. UPS's fleet of 10,000 alternative fuel and advanced technology vehicles drives more than 1 million miles each business day. These efforts have helped UPS reduce carbon intensity by 16.5% since 2007, and the company aims to reduce absolute emissions by 12% across global ground operations by 2025. Renewable energy is critical to achieving this target, so UPS is accelerating the use of renewable energy across its operations:

- 40% of the fuel used in its ground fleet will come from sources other than conventional gasoline/petrol and diesel by 2025 (22% as of 2018)
- 25% of vehicles purchased in 2020 will be alternative fuel or advanced technology vehicles (13% as of 2018)

Replicability

The concept of the rolling laboratory is rooted in replicability. We leverage our expertise, scope and scale to evaluate and test the viability of various existing and emerging fuels and technologies in real-world operating conditions. This strategy allows us to deploy and scale new technologies where and when the time is right. For example, our expansive natural gas fleet and infrastructure have positioned us to quickly implement early pilots of renewable fuels, such as renewable natural gas (RNG). As a result, UPS is now the largest user of RNG in the shipping business.

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I am proud of the ingenuity UPSers bring to develop innovative business and sustainability solutions. I am confident that the investments we are making today will accelerate progress toward our goals. David Abney, Chairman and Chief Executive Officer, UPS

Volkswagen Group Logistics

Location: Wolfsburg, Germany (headquarters); Volkswagen Group has 122 production plants in 20 European countries and a further 11 countries in the Americas, Asia and Africa; the Volkswagen Group sells in 153 countries Company size: 10,000+

Volkswagen is one of the world's leading manufacturers of automobiles and commercial vehicles, reaching more than 10 million customers and with a car market share of 12.3%. Brands include: Volkswagen Passenger Cars, Audi, SEAT, ŠKODA, Bentley, Bugatti, Lamborghini, Porsche, Ducati, Volkswagen Commercial Vehicles, Scania and MAN. The Volkswagen Group Logistics company ships 2.7 million vehicles and 250,000 containers for all brands each year.

Challenge

The Volkswagen Group has committed itself to the Paris Climate Agreement. Its target is to be net CO2-neutral by 2050. Therefore, Volkswagen Group Logistics is looking for ways to reduce emissions from transporting cars and parts for vehicle production in the short term e.g. by looking at the fuel type, while its long-term target is zero-emissions marine shipping and trucking.

Description

Launched: July 2014, operational from July 2019 Location: Europe and North America

Volkswagen Group Logistics collaborates with transport providers, fuel companies, vessel producers, municipalities and certification companies to reduce carbon emissions from the distribution of cars by ships and trucks. The goal is to demonstrate what can be done today and drive market change, thus contributing to Volkswagen's emission reduction targets in the short and long term. Two liquefied natural gas (LNG)-powered car carriers were built for deep-sea transportation as part of a nine-car carrier fleet that serves the European and North American markets and will come into operation in December 2019. Five LNG long-distance trucks started to operate in Germany in July 2019 – adding to a total number currently of 65 in Europe altogether.

Impact

LNG-fuelled car carriers are expected to reduce by up to 25% CO2 emissions compared to heavy fuel oil (HFO). In addition, up to 30% less NOx and up to 60% less particulate matter are emitted, and sulphur oxide emission (SOx emissions) are eliminated (all figures tank-to-wheel). LNG trucks reduce up to 15% CO2 and up to 80% particulate matter emissions. In the future, bio-LNG or synthetic gas can reduce CO2 emissions by up to 90% (all figures well-to-wheel).

Key to success was that ships and trucks are used exclusively by Volkswagen Group Logistics. An open process and transparent data (environmental, technical and financial) were important for partners and investors to embrace the use of LNG. The project helps customers and transport providers to reach emission reduction targets, too, and they are approaching Volkswagen for similar opportunities. Employees feel proud to be part of such innovative and market-influential projects.

Replicability

In the maritime sector, LNG technology is one of the few solutions available today to reduce relevant emissions. The replicability is highest for chartered vessels with single customers who have full operational control and thus the decision power to adopt new technologies. Volkswagen Group Logistics' situation is unique, however, because the main business model is for car carriers to serve multiple customers.

For road freight, solutions depend on the service level and distances travelled. At present, LNG fits best for longdistance services up to 1,000 km. For shorter distances, other solutions may be more suitable, such as electric trucks or compressed natural gas (CNG).

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The Volkswagen Group acknowledges its responsibility for reducing carbon dioxide emissions. Therefore, Volkswagen has created the environmental mission statement "goTOzero" to ensure environmentally friendly and CO2neutral mobility. The launch of the worldwide first LNG-RoRo ships in service for the Volkswagen Group Logistics is an important step to pursue these mission objectives.

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About the Global Future Council on Mobility

The Global Future Council on Mobility seeks to identify the points of innovation or cultural transformation on the brink of impacting the movement of people and goods. The Global Future Council on Mobility is part of the World Economic Forum's network of <u>Global Future Councils</u>, which is the world's foremost interdisciplinary knowledge network dedicated to promoting innovative thinking to shape a sustainable and inclusive future for all. The network convenes more than 700 of the most relevant and knowledgeable thought leaders from academia, government, business and civil society, grouped in expertise-based, thematic councils. It is an invitation-only community, and members are nominated for a one-year period.

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