

From the Top Flavio Sakai, of AEA

IN THIS EDITION WE
REVEAL AT FIRST HAND
THE FUTURE PRODUCTION
PLANS OF THE MAIN
AUTOMAKERS INSTALLED
IN MERCOSUR

CARLOS Zarlenga

The executive talks
exclusively about
negotiations that
can guarantee a
new cycle of GM
investments in
Brazil

FORD SAYS Farewell to ABC region

USS 4.5 billion loss in South America since 2013 helps explain the shocking decision

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LENSES

The backstage of the automotive industry. And the situations in the hornet's nest that nobody pokes

FROM THE TOP

Flávio Sakai, new president of AEA, talks about the transformation of engineering as a profession

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We choose a theme monthly and invite a specialist to respond 48

PEOPLE & BUSINESS

Executive moves and other news from the Brazilian automotive industry **END OF CHAT**

The most relevant and irrelevant headlines of the month, handpicked by our editors

» EDITORIAL

The future of tomorrow and after that

Leandro Alves, editorial director

his AutoData 353 has dedicated its efforts to the events that will shape the Brazilian automotive sector in the future. We were moved by the signs of last year, when uncertainty became a trending topic [very popular, in the social media language] for the executives and leaders of that industry.

After the elections, the first moments of a new central government and a disappointing GDP that repeated the 1.1% of 2017 - with the dangerous warning of 0.1% registered in the fourth quarter - other totally not-planned events carried colors of uncertainty at this time.

For all that, an attentive look at the future became necessary. We had to understand GM's reasons for negotiating with the so-called stakeholders and ensure the next investment cycle in the country. So we were the first specialized news agency to talk to Carlos Zarlenga about the subject - the second to publish an interview with him in Brazil.

We went back to the past and revealed the massive losses of the centennial Ford which may be the tip of the iceberg for the decision to close operations of its historic factory in Taboao later this year.

We also raised a crucial issue for the chain which is the necessary technological evolution of the national content of Brazilian vehicles. So: will those advanced items be produced in Brazil?

Judging by the cover story that is on this AutoData edition, the auto parts companies will have many challenges: AutoData reveals with absolute exclusivity the product plannings of the main manufacturers in Brazil - with some of those projects going to Argentina - in the next decade.

At the international atmosphere, the future is also in vogue. In Latin America, the intelligent cities start to inhabit the experts' dreams, but bus operators and manufacturers of that future still sponsor the reality nightmare.

All those who maybe don't want to see the future should read the results of KPMG's study, exclusively revealed for AutoData, showing the cooperation trend for companies to survive, rivals companies till then.

Because the future is now. And, by the way, we will be here to show what comes next.









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REPLAY?

The Rota 2030 soap opera have new chapters. The program that became law was subject in Diário Oficial da União's publications earlier this year: companies interested in the tax benefits that contemplate research and development projects subscribed and the move led to the publication of ordinances in the official media of Brazil. February came and the number of interested ones diminished. Lenses commented with a government source that has not seen those publications anymore, and it promptly replied, "And neither will you see". It is hoped, in Brasilia, DF, that the program will go through analysis with regard to the incentives: "But not now. And. maybe, not even later".



By Vicente Alessi, filho
Suggestions, criticism,
comments, offenses
and the like for this column
can be directed to the email
vi@autodata.com.br

GOIABINHAS TIME*

Truths have disturbed since before The Red and the Black was written. especially to those who make extreme good judgment of things that very appreciate. As the Brazilian dominant class, the one that manages to keep its obturations up to date, in relation to achievements that Brazil has achieved in more than five hundred years, such as the automobile industry and the automotive sector, and always ignoring the contexts because it does not understand them: knowledge is rare and hermeneutic, it must be some hidden science, even because no one knows what that is. And life goes on with guava trees and with Stroessner turning himself into a statesman and with a governor disguised as a realtor. The always the same General Motors as usual, tactics fail, comes up with the threat of leaving Brazil, and Ford, which by the way, reveals its willing with regard to its activities in the country, are our subjects in this Lenses. And the beginning of this conversation. dear reader, is just a reminder: we are a poor, third or fourth world country, dependent, almost extremely poor, of the dominant class obtuse to say the least and whose vehicle market means incredible 2.6% of the world's total.

GOIABINHAS TIME 2

Yes. 2,6% is our nominal importance in the global universe of vehicles. This is us in this universe. Cheers! Cheers?

*Stanislaw Ponte Preta, named Sérgio Porto, as a witness of the story, ate goiabinhas (a Brazilian guava candy) with his characters of Febeapá, the Festival de Besteiras de Assola o País, generated by the dictatorship establishment in April 1964. In fact, he died without having seen everything: those cops were amateurs.



So when a company threatens to leave for lack of profitability, and another says it will close factory for the same reason, it breaks our hearts for the social chaos that will surely create. But... was not that, after all, the choice of most of the population, in a plebiscite, some time ago?, by the capitalist regime? Because the capitalist regime itself contains the principle of free competition and free will of companies: they maintain themselves here, or there, because it is profitable, because after investing and receiving a lot of subsidized money their shareholders smile with satisfaction. When profitability abandons them, for good and often bad reasons and in this case the Great Detroit, in the State of Michigan, is a strictly exemplary case - they reserve the necessary money, pay their bills and seek out their biggest and their best interests. We have seen this happen. The quality of management is very little guestioned because even the stones that roll in the roads prefer to point out the inefficiency of the state and the infrastructure that it maintains, the internal interest rate in effect, of the tax burden that even exported vehicles carry. And they charge that population as if it were from the first world.



GOIABINHAS TIME 4

And what is the current imbricate of business that is not exactly sympathetic to the Brazilians interests and needs? Well, the world has changed, and in the specific area of vehicles, it is right there, up ahead, a period of massive investment in new things, the so-called innovation, perhaps as the segment has never experienced another one like that before. Since the electrification of vehicles and their autonomous virtue will require such an amount of money that the industry itself is afraid to calculate. At this moment, all operations have to be necessarily very profitable to sustain new needs and continue to support the current ones. With what eagle eyes over the magnifying glass will financial executives of the companies see the results of an unknown region known as Brazil, 2,6% market share and in the red?

GOIABINHAS TIME 5

There is no doubt that GM logic and Ford logic regarding Brazil follow the fundamental logic of the capitalist business - which is neither worse nor better than any other. It is, of course, dust with which it is reasonable to live with under normal circumstances - but there are no normal circumstances in this field today. It is necessary to pay the trillion dollars that, it is estimated, will cost the general vehicles' electrification process and to make them autonomous. There is nothing evil in the process, nothing bad, nothing personal: it's just business.

GOIABINHAS TIME 6

I know less about the General Motors case, which for very good reasons sold its crown jewel, Opel, to the PSA Groupe, and a little more about Ford's case. Ford has announced, for more than a year, a powerful business restructuring around the world, following the logic of the need for trends it has detected by its old experience and that go beyond electrification and vehicle autonomy: they hit the new ground known as mobility, which only a few fully understand it. And in that great game of which we are all witnesses. every company gets ready as it can or how it can figure: that company desperately needs every cents that its subsidiaries can generate. Because as the clever Herbert Hubert Demel, former Volkswagen in Brazil, former Fiat in the world, among other things, and that knows everything, this is a battle of giants - and having 2,6% market share in the world's industry business is too little.

BY THE WAY

On Tuesday morning, 19, the mayor of Sao Bernardo do Campo. SP. aimed at his industrial future: "We have plans to attract employment, with incentive by the way". The happy face gave way when the subject became Ford and the future of its operation in the region: "Here in the cabinet all the presidents come and go. Ford? Never".

BY THE WAY 2

In the afternoon, an announcement in which Ford made official its departure from the South American truck market and the factory closure, the mayor's scowl became an ice skiff, such the surprise caused by the news, said interlocutors in the City Hall. And a cry coming from the cabinet came to cut the air like a new razor: "Cowards!" He couldn't maintain the cordiality in the text of the official note that he would have to release at night. A press representative rushed to justify his cancellation: "He wrote with the liver". The solution was to record a video in which, calmer, he promised to maintain the Ford workers' jobs.

A tough but necessary message

ince the beginning of the year, AEA(the Brazilian Automotive Engineering Association) has a new president for the 2019-2020 biennium: Flávio Sakai, director of Harman, an infotainment and automotive connectivity company.

He, an electrical engineer,

came to the automotive sector in 2003 via VDO and later its successors, Siemens VDO and Continental, from which he was transferred to Harman, in 2016.

The fact that an engineer which was not born in the automotive industry presides AEA says a lot about the current moment of

the profession, which for Sakai is a scenario with no way back - but, he understands that "engineering does not die, it transforms".

Sakai granted that exclusive interview during a visit to the AutoData headquarters, in Sao Paulo. Check out the main excerpts from this conversation.

How do you see AEA's role today?

A little technical orientation work and a little of the Brazilian engineering development: they are interconnected issues. If engineering does not strengthen itself and grow, it will make no sense in existing a technical guidance entity.

What is the current moment of the Brazilian automotive engineering? Your own experience is not directly linked to the core business of the industry...

There is a process of change in progress, which is natural. The technology areas inside the automakers and tiers have been strengthened in terms of engineering, the companies have invested in that area.

And outside the technology area?

The automakers know that they need to adapt: in order to be competitive, they need to advance in new technologies and the companies are investing in that area. There are many local projects in

that area, including for global platforms.

But there is at least one case of automaker that had a global product development center here in Brazil that was completely dismantled...

Of all the automakers, only one is a bit slow in that area, and I think they will change. We have global technology projects being done in Brazil, with products that have software, cybersecurity, digital cockpit.

Let's talk about vehicle platforms: that same manufacturer will soon launch in Brazil a new generation of products developed in China.

In fact there is the question of global product platforms and they all work that way. The base is usually developed abroad and eventually the adjustments are made here in Brazil. What I see for the Brazilian automotive market is hard work on the user experience and there are local adaptations to do that.



"It's clear that the automotive engineer needs to become a mobility engineer. The world is no longer just the car, the product: it is service, infrastructure."











Will it be just that, therefore, the vocation of the Brazilian engineer?

The Brazilian engineer profile is very good. Our problem has been competitiveness and not capacity. Manufacturer A or B lost projects abroad not due to lack of technical capacity but to cost per hour and labor issues. If the Brazilian engineer participates in a global project, that professional will have to work at any time. When it is day in Brazil the people of China and India are talking to us, working at night. They have a time flow and a demand that allows them to work practically 24 hours.

But that does not happen with the European and the American engineer...

No, but they are the know-how owners, they transfer a very large development mass to Asia.

But if we have such capacity, why do we have to submit to an Asia's logic and not the opposite?

We have to be competitive first. They are not bad, they have learned how to be good, they learn very fast. Here in Brazil there are several restrictions linked to the amount of hours worked, additional costs etc. that make us lose competitiveness. The global projects have that characteristic, the periods of work are intense, they stay out of the normal flow. We lost projects purely for competitiveness, cost is the question. There is a business case and the projects involve not thousands, but millions of dollars.

Is it possible to calculate that loss?

Let's say that if the cost in India is 50, it will be 75 in China, from 100 to 110 in Brazil, and in Mexico something between China and Brazil.

"Here in Brazil, manufacturer A or B lost projects abroad not due to lack of technical capacity but because of cost per hour and labor issues."

"I do not see conflict or competition regarding the AEA with the SAE and the IQA. I think it's important that the professionals have access to varied opinions from different associations."











They are not quite distant. Wouldn't it be more reasonable to imagine that China's cost will increase more than Brazil's cost will decrease?

When I say that we have to be competitive I don't mean that we should mass-increase the engineering, as it happened in India and China. We have to search for some areas where we have higher conditions to compete: the objective is to identify them and invest in that specific formation. Ethanol, for example, is important, we can't let it die just because the world is investing in the electric vehicles.

What is the future of the automotive engineer in Brazil in terms of education? Many people today don't want to pursue that career anymore.

Let's take my own example: I wanted to be a physicist, but thinking about career I chose electrical engineering, specializing in electronics and telecommunications. At first it was a segment that had nothing to do with the automotive one, but over the years the connectivity has entered the automotive industry and I came

"We can't say that Anfavea, AEA, Sindipeças and the government will find a solution to keep 100% of the engineers working on our market."

along, and now the car future points to electricity. What I mean is that it is very difficult to predict the profession of the future, but it is clear that the automotive engineer needs to change to a mobility engineer. The world is no longer just the car, the product, it is mobility, there is the product but also the service, the infrastructure. We have to change focus, it's no longer just making a product, a car, an engine, a dashboard, the world is not just that and neither is engineering.

What would that mobility engineer be like?

Maybe we could call him an infrastructure engineer. And there are several infrastructures: telecommunications, electrification, systems integration, etc. The fact is that previously, when a supplier's professional went to a manufacturer, he or she talked to the engineer of that product and that's it. Today, we talk to that person and the person in charge of IT besides the responsible for the connectivity... we don't talk just about the product anymore, we talk about the system.

And how to explain that to the student who is in college today, or about to graduate?

Everything is in R&D, which is the goal of Rota 2030, by the way. We can't be a sustainable industry without advancing in some technologies. The motivation for the future professional is in showing that the area is wider than developing, manufacturing or adapting a product. It is no wonder that much of the new mobility business is connected to startups. Today's career is not just life in a company: we can't limit ourselves to that anymore because mobility, today, is much more than the automaker, the suppliers and the dealerships.

From the talent retention point of view, isn't that bad for the automotive industry? A practical example is in two proving grounds that we have in Brazil, extremely structured but abandoned in terms of professionals and demands...

They are different things. One thing is when the professional sees that the world is not just the product and another is, in the product, defend the things that we can do. The proving grounds will be useful for the electric and hybrid vehicles, for example, which have different weight, shock absorbers and vibrations. It will be necessary to study, develop, test.

"During the development, you talked to the product engineer and that's it. Today, you talk to him, to the responsible for the IT, the connectivity guy..."



Isn't that too little? In twenty years our fleet will not be mostly consisted by electric cars...

We will have a migration, it may be 50%-50%, 60%-40%. It is part of the global economy. But the industry will be totally different in twenty years from now, that migration does not mean that the Brazilian engineering will end, but that it will change. If you reduce the volume of work in the proving ground, the engineer will not be unemployed, he or she will be doing other things. Let's analyze: during the whole process of Rota 2030 and now with Industry 4.0 it was said, and will be said, that automation reduces the number of jobs. The change will happen, and the challenge for the engineering professionals is to understand that they need to get ready for those changes. And do that from the moment they receive their diploma. Engineering does not end, it changes and it transforms.

What about those who are already out of the market? Is there any way to return?

It's not easy. Today, the professions in the human relations area are more disputed than the exact sciences ares, it is the profile of the new generation. There is, therefore, a lower number of people who will look for the automotive area, of the mobility, and we only see news of one company firing people and another one transferring the engineering to another country. Our job here is to get closer to the university, to show that the area is interesting. It is something that needs to be done and it doesn't happen overnight. But the return is a more complex question because we don't control technology, it comes and runs over us. It's a huge challenge for a 40, 50, 60-year-old person to keep up to date and compete with another person that was born virtually connected and that's why it's forcing that technology change. The world is changing, of one hundred people who are graduated and want to stay in the area thirty will be successful and seventy



will have to migrate. It is not bad news because people have to understand that the world is changing very fast, and that also involves the engineer and it's part of the engineering culture. We can't say that Anfavea, AEA, Sindipeças and the government will find a solution to keep those one hundred in our market.

There are several associations of the segment in Brazil, such as AEA, SAE Brasil, IQA... Taking advantage of that moment of change which you refer to, wouldn't it be time for them to join or work in the same direction?

I do not see conflict or competition, even if we promote events and so do they. I think it is important that the professionals have access to varied opinions from different associations. But, yes, I do think we can sit down and discuss works in the same direction, synchronized.



REMOVING THE COVERS

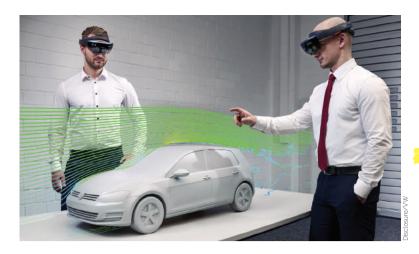
uture productive programs are, by nature, classified. But in the automotive industry, because of its unique characteristics, keeping secrecy is usually harder, despite all the efforts of the manufacturers: there are many people, areas and companies that supply parts and services which have contact with the plans. It is kind of that old popular saying to ensure that to keep a secret between three people, only killing two of them.

With that, one or another leaks and reaches the pages of some specialized publication - something even practically traditional and common since our industry is industry.

However, in this issue, AutoData has climbed a step in this kind of revelation. In an absolutely exclusive way, we removed the covers which hide the future projects that are already under development in Brazil and Argentina of most of the manufacturers installed in Mercosur. And besides we added their respective production start dates and code names.

Most of these projects circulated in the automakers aisles in complete and absolute confidentiality, surrounded by attention and care to avoid leaks. But that was not enough: find out, now, what they did not want you to know.





BMW

The next generation of the X3 model is scheduled to be produced in Araquari, SC, from May 2024.

FORD

Ka and Fiesta will be replaced at the same time by only one new compact model, which will have hatch versions, code B680, and sedan, B680S, produced in the unit of Camacari, BA, from July 2021. The models will use the same platform of the current Ka, Fiesta and EcoSport, the B2E, perfected.

The new generation of the EcoSport, code BX563, will be launched in 2020, but will maintain the same platform of the current model, B2E, perfected.

A new SUV, slightly larger than the EcoSport, code BX755, is scheduled to be produced in Camacari, BA, from August 2022. The model will use the same platform as the current Ka, Fiesta and EcoSport, the B2E, perfected.

The new generation of the Ranger pickup truck, code P703, is expected to be launched in 2022 and will continue to be produced in Argentina

HYUNDAI

The new generation of the HB20 will be launched later this year and will use the new H-K Small 2 platform instead of the current TB.

The new Creta generation is scheduled to be produced in Piracicaba, SP, in 2024.

FCA

A new small pickup truck, smaller than Strada, will be produced in Betim, MG. Its timeline for its start of production was anticipated from June 2020 to November 2019, with face-lift scheduled for November 2022. Its code-name is 192.

A Jeep model with three rows of seats will be produced in Goiana, PE, from April 2021. There is a face-lift scheduled for April 2025.

An SUV based on Fiat Toro will be produced from September 2022 in Goiana, PE, with face-lift scheduled for September 2026.

A compact SUV with the Fiat logo, code name 362, based on Argo, will be manufactured in Betim, MG, from September 2021. There is a restyling process scheduled for September 2025. This new model is should be exported to Mexico.

A Fiat mini-SUV, competing with Renault Kwid and based on Mobi, is scheduled to start being produced in Betim, MG, from February 2021, with a face-lift scheduled for February 2025. This model should also be exported to Mexico.

The new generations of Renegade, Compass and Toro are scheduled to be produced in 2023.

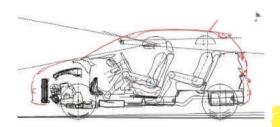




HONDA

The next generation of Fit is scheduled to be manufactured in Itirapina, SP, from January 2021, with the current model's end of production in December 2020.

The new generation of the HR-V model will be produced in Itirapina, SP, from 2022.



NISSAN

The new generations of March and Versa, codes BO2E and LO2D, will be manufactured in Resende, RJ, in 2021. They will be based on the new CMF platform of the Renault-Nissan-Mitsubishi Alliance, which is already used by the current Kicks and will also be shared with the future models Renault Sandero, Logan and Duster. Today, those Nissan models use the V1 platform.

GENERAL MOTORS

The next generation of the Onix model, code JBJC1, and Prisma, JBSC1, based on the new GEM platform, will be produced in Brazil in 2020.

Also in 2020, GM should produce a compact SUV in Brazil, code JBUC1, to replace Tracker, imported from Mexico. This model will also use the GEM platform.

In March 2021, another SUV, smaller than Tracker's substitute, will be manufactured in Argentina. It will also be based on GEM.

The new generation of Montana, code S4103, will be launched in 2021. The new generations of Spin, code JBNC1, and Cobalt, JBSC1, will arrive in 2022 - all three models will also use the GEM and are expected to continue in Sao Caetano do Sul, SP.

The unit in Gravatai, RS, will produce a new pickup truck, intermediate of Montana and S10, a rival for Fiat Toro, from April of 2023, also using the GEM platform.

In Sao Jose dos Campos, SP, GM decided to extend the life of the current generation of models produced there: the end of Trailblazer production was extended from September 2019 to March 2023 and, therefore, the start of production of the new generation was transferred from October 2019 to April 2023, with a face-lift scheduled to April 2028. Meanwhile, the maintenance of the current S10's life was lengthened from March 2022 to September 2022, with the new generation scheduled now for the following month and a face-lift in September 2027.

The end of the current production of Cruze in Argentina was also extended from March 2021 to March 2023. Likewise the schedule of the new generation jumped from April 2021 to two years later, with restyling scheduled for April 2026.

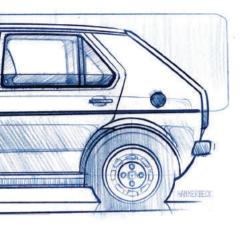
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JAGUAR LAND ROVER

The next Evoque's generation, L551, will be produced in Itatiaia, RJ, from July 2020 - a schedule anticipated in three years.

The next generation of the Discovery Sport model will be produced in Itatiaia, RJ, from October 2022.

The Jaguar XE will be manufactured in Itatiaia, RJ, from July 2020: at first, the schedule provided that the model would have Brazilian production still in July 2019. A delay, therefore, of one year.

The Jaguar F-Pace will also be manufactured in Itatiaia, RJ, from July 2020.

PSA

The current generation of the C3 model in Porto Real, RJ, should no longer be produced in March 2019, but will be extended until May 2021. Therefore, production of its new generation, code-named C21, was rescheduled from April 2019 to June 2021.

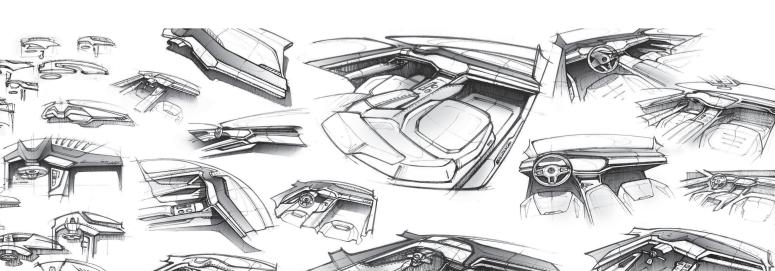
A medium Citroën model, code C26, will be produced in Porto Real, RJ, from February 2024. It will play the role of regional substitute of C4's new generation in Europe.

A Peugeot sedan, code P43, will be produced in Porto Real, RJ, from February 2021. The model will represent a regional replacement for the new European generation of the 408.

A Peugeot medium hatch, code P25, will be manufactured in Porto Real, RJ, from September 2022. The model will represent a regional substitute for the new 308 European generation.

Regarding the current Aircross generation, it had its life shortened: the line should continue until December 2023, but it will run until February 2022. That way, its face-lift was also anticipated from March 2020 to October this year. On the other hand, the production of the model's new generation, originally scheduled for January 2024, was brought forward to March 2022. There is a face-lift planned for March 2025.

The end of production of the current Citroën C4 generation in Argentina was anticipated from March 2022 to January 2021. The end of the 308 and 408 models there was brought forward as well: the 308 would be in December 2023 and was transferred to February 2021 and with regard to the 408, from December 2022 to the same February 2021 - both stopped being sold in the Brazilian market in February 2019.





RENAULT

The Dokker commercial vehicle will be produced in Argentina to replace Kangoo. The commercial name of the model will also be Dokker, retiring the name Kangoo.

The new generations of Duster, in 2019, and Sandero,
Logan and Oroch, in 2021, will use the new CMF
platform of the Renault-Nissan-Mitsubishi Alliance,
the same as the current Nissan Kicks. Today, those
models have the P1 platform as base.



TOYOTA

At first, the Yaris Sedan would be called Vios in Brazil, as in some Asian markets. The company decided, however, to change the name for the Brazilian market.

VOLKSWAGEN

The end of Fox's production in Sao Jose dos Pinhais was postponed from March 2019 to December 2019.

There is a plan for the production of a one-ton pickup truck, a Fiat Toro's rival, in Sao Jose dos Pinhais, PR, having the MQB platform as its base. The global alliance with Ford, however, could change it.

The start of production of the SUV Tarek in Argentina will be delayed: originally scheduled for January 2020, it will start only in June 2020. There is a face-lift already scheduled for January 2023. At first, the model would use in South America the same name adopted in the Chinese market: Tharu.

The new generation of the Volkswagen Gol, code VW240, will be produced inside the unit in Taubate, SP, from July 2020, based on the AOO platform and not the MQB. There is a possibility that the new model will not be called Gol anymore. The same should happen with the new Voyage, code VW241.

The new generation of Saveiro, code VN277, will be launched in 2020 and will use the MQB platform instead of the current PQ24.

In 2020, a new compact SUV based on Polo will be manufactured at the unit on Anchieta Highway, in Sao Bernardo do Campo, SP.

In 2020, a new generation of the Up! model, code VW130, will be manufactured at the unit in Taubate, SP, replacing the current platform PQ12 by the PQ13.

AUTOMAKERS » FORD By Marcos Rozen

18

HARD TO SWALLOW



Disclosure/For

In the middle of its centennial celebration in Brazil, Ford announces the decision to close the historic factory in Taboao, Grande ABC region of SP.

ven if it wasn't entirely surprising the news came as a bombshell in the Brazilian automotive segment, at end of February: Ford decided to close the Taboao plant, in Sao Bernardo do Campo, Sao Paulo, its owner since the acquisition of Willys, in 1968.

In a video addressed to the employees Lyle Watters, Ford's president for South America, said that "the performance in South America is not acceptable and clearly not sustainable, requiring us to keep reformulating our business urgently".

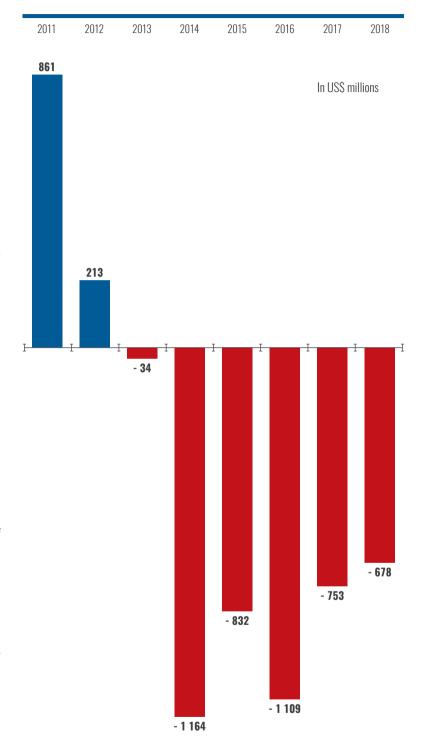
The executive also said that "while this was a difficult decision in a personal point of view, the realities of the business were evident. The decision to leave the truck business in South America came after months of viable alternatives search, including possible partnerships and selling operation. The business would require an expressive volume of investments to meet market needs, including new technologies and the increase of regulatory actions, without a viable way to profitability".

He continued: "This decision is a fundamental step towards creating a more compact, efficient and agile business. I know it will have a significant impact on our employees and partners, and we are working to mitigate them as much as possible, but the alternative of not taking decisive attitudes at this time would be much worse for the entire organization of South America".

Watters ended his statement with a message to the employees, affirming that "this decision is not a result from you or the work you perform for Ford. We have been going through challenging times and we need to make some difficult decisions now to protect the viability of the long-term business. Thank you for your continuous work and contributions to our company".

Ford's initiative had all the related ones caught by surprise: employees, suppliers, dealer chain and the City Hall of Sao Bernardo do Campo, initially, reacted in a catatonic way, shocked with the revelation. Except for the employee representatives who knew about the decision almost half

Ford's financial results in South America



an hour before the official announcement, no one was informed by Ford, but by the press.

The decision to leave the truck business took away the production of the Fiesta model in Sao Bernardo do Campo as well, which also caused some strangeness: it would, at least in theory, be perfectly possible to manufacture the car in Camacari, BA, since it shares the same platform as the Ka and EcoSport produced there. The Fiesta itself, by the way, was actually produced in that unit in the previous generation, while the Ka was produced in Taboao.

IN THE RED

AutoData prepared a unique analysis of Ford's financial results in South America referring to the last years that, if it does not justify, at least helps explain the decision to close the unit in Taboao.

Since 2013, Ford has suffered losses in the region: in six years, in other words, until 2018, the accumulated negative result reached more than US\$ 4,5 billion. The worst year was 2014, U\$\$ 1,1 billion, which was repeated very soon in 2016. From then on the bleeding slowed a bit, but very slowly.

The decision to close the factory in Taboao will add at least another US\$ 460 million to the region's loss in 2019, according to Ford's own calculations. US\$ 100 million for the accelerated depreciation and amortization of fixed assets, while US\$ 360 million will directly impact the cash, intended for compensation of employees, dealers and suppliers.

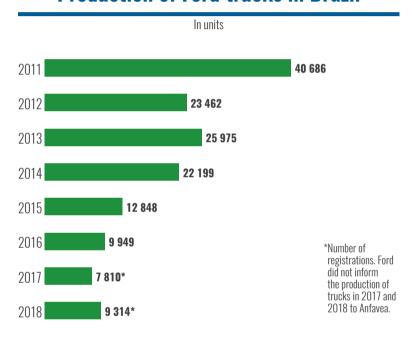
This number may increase, due to the probability of lawsuits or judicial and extrajudicial agreements and other negotiations with all parties involved.

Whatever the value, in any case, the decision certainly overshadows what should have been the main number in evidence for Ford do Brasil this year: the 100, one century in the country – it was the first vehicle manufacturer to arrive in Brazil. The first present, however, was quite hard to swallow.

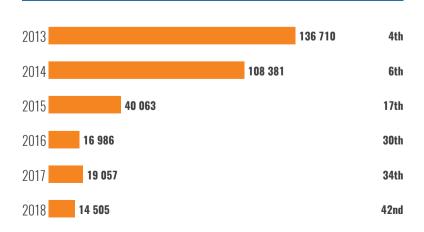
"The decision of leaving the truck business in South America just happened after months searching for viable alternatives, including possible partnerships and selling the operation."

Lyle Watters, Ford's president for South America

Production of Ford trucks in Brazil



Sales of the New Fiesta made in Taboao



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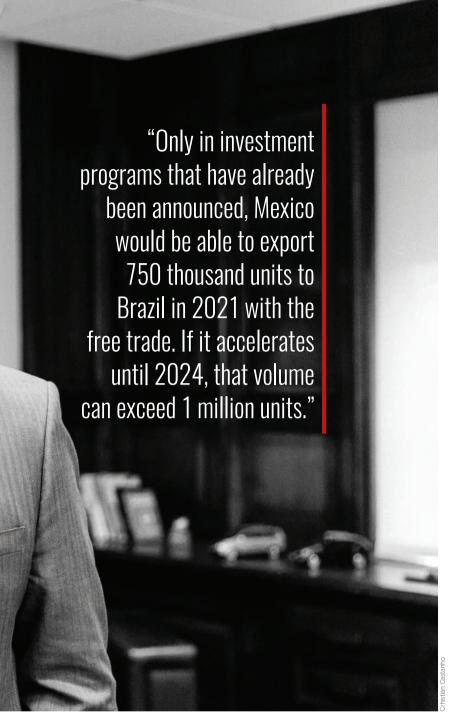
lected Personality of the AutoData Award 2018 in December, Carlos Zarlenga started this year shocking the automotive community by exposing the difficulties of GM's operation in Brazil. In a statement he called on employees, suppliers, dealers and even the government to contribute to making a new investments cycle viable and the future of the company in the country.

In an exclusive interview to AutoData - the second publication to speak with GM Mercosul's president this year - he

told that "after the increase in sales the financial results were not returning for several reasons. And when you have such long periods of losses the question that arises is: why are we going to keep investing?"

Until the closure of this publication the negotiations were still happening, but not concluded yet. On the other hand, Zarlenga no longer doubted that the investment in Brazil was already guaranteed.

Check out the main excerpts from that conversation:



Did the diagnosis come from the headquarters, which gave the mission of solving the problems, or did you present to your bosses a plan to reverse that situation?

GM is very disciplined in the way it decides investments around the world. For the leadership in the Mercosur it was evident that if we didn't have good reasons to continue investing in Brazil, it would be difficult to obtain the endorsement from the headquarters. So, we had to face the challenges to make viable a new possible

cycle in Brazil and this time we decided to expose all the problems to our partners so we could do it together. The objective was to find an equation so that, after all, the investment remunerated capital.

Was the conversations result positive?

Very positive. We have made great progress. And I would like to highlight a few points about that. I always knew that the dealers would be with us. And that's what happened: they understood the situation and supported us. With the unions, what I saw during the talks was a great maturity. It was a clear and honest relationship. We shared our points, they also expressed their questions and we quickly came to an understanding. I was surprised by the response from the suppliers. We had a meeting with the CEOs of 67 suppliers. And we realized that all of us have very similar problems. In fact, many left Brazil thinking about doing the same in their companies.

Will those negotiations be enough to ensure the investments in Brazil?

I see progress in all areas and I am confident. This is the plan. If negotiations are successful, GM will make the investment, R\$ 10 billion until 2024.

Even the conversations with the government of the State of Sao Paulo were productive?

We are also moving forward and I am confident we will have a positive outcome. Of all the negotiations the most difficult is the one regarding the suppliers because we are talking to many companies at the same time.

Is there any possibility of a regression?

I don't think so. Everyone understood a very important thing. By entering into an agreement you really convert a relationship that is good into a long-term partnership. In that deal we are working on, we are talking about maintaining the fixed price for a long time and we will work hard to generate efficiency together. Imagine, then, the relationship with us. It's amazing. The friction in the negotiations has ended. And it [supplier] ended up acquiring a ticket to propose changes such as parts replacement, change of material or any other example that generates efficiency.

Regarding the inefficiencies of Brazil: what you have been saying is nothing new.

A big problem of the industry's profitability has to do with the country's exchange exposure. To reduce this risk, which is the same as saying that my investments will have a much more predictable and stable return, I need to export. Export relevant volumes. And there will be competition with other factories in the world. In the current scenario we lose to everyone. To Mexico, Korea, Japan. We even lose to Europe.

But it is not the only obstacle.

Another big problem is the tax pressure, among other inefficiencies. Besides, there are companies that abuse the benefits and generate a huge cost for the industry. That's not a novelty. We believe that this moment is the best opportunity we have to discuss. The new government wants a market opening. Not just in the automotive industry.

An example of market opening is the free trade with Mexico.

That is a case which exposes our inefficiencies. Producing here or there and selling here, it doesn't matter from the exchange point of view. I can make only one investment and export to Brazil besides other markets, since the costs in Mexico are more competitive from 20% to 25%. Not to mention the tax issue. The products are the same, the company is the same. Why would I invest in Brazil?

But a policy to open Brazil's market seems inevitable in the short term.

If that's really the project for the country, you need to work on enormous

tax inefficiency. You have to start there. And then continue to adjust the lack of competitiveness. Because the way it is, even opening the market with Mexico is impossible.

And how to do that?

We could start with a program exclusively for exporters. Creating conditions for those who export more than 50% of the volume or the value with differentiated collection. What can't be done is to export tax burden.

Do you believe that there would be opportunity for companies with that profile?

The cost of the factory from the inside is not much different in Brazil compared to the rest of the world. With a competitive program for exporters we would isolate the exchange and have an industry with sustainable scale and profitability. And I refer to global profitability levels.

Even so, the structural problems would remain still.

We understand that a broad discussion about all the points that generate inefficiency in the industry is something that will be on the table from one moment to another. We have several domestic problems and the tax burden is one of them. We are saying that there is an opportunity to attack those problems and, if we look at it with the objective to increase the export vocation, we can generate a lot of investments.

What would be the impact of a measure like that?

If we have 60%, 65% of costs in reais and the rest in dollars, we need to export those 40% in value to protect ourselves from the exchange rate impact. And it has to be extra-Mercosur export because we are trading currency that does not relieve the exchange pressure in the region. I want to reinforce that I am not seeing all of that as an opportunity to grow. I am looking at that as an opportunity to define the vocation of the Brazilian industry.

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Lucas Di Grassi, driver

He spectacularly won the race in Mexico City of ABB Formula E, in February, making a very difficult overtaking maneuver only a few meters from the final flag. Aside from the excitement, the competition of electric cars has true spokesmen of that new technology in its drivers, which can transform the mobility in the world forever. Di Grassi talked about that near future in his team's pit box before the qualifying race that set the starting grid.

Are the electric engine advantages really that great?

When we don't use an internal combustion car in urban centers, such as the city of Sao Paulo, the benefits are immediate. Anyone who has a habit of doing physical activities at Ibirapuera Park knows that with the traffic jam there at 6:00 p.m., the nose can be irritated due to the poor air quality. That will change a lot with the electric cars.

What other advantages can you identify?

It makes much less noise, you don't have problems of noise pollution, it doesn't have air pollution problems, it can reduce the incidence of respiratory problems offering more health... anyway, it brings several benefits that people don't consider. The main function of the electric car is to generate improvement in life quality for all.

Vehicles, in general, are not the only villains of the emissions.

Exactly. Vehicles represent from 10% to 15% of CO2 emissions. Many activities are more polluting than automobiles. The immediate benefits are the reason to put the electric cars and buses as the first option in that necessary transition that the planet is witnessing.



3

Are cities the ideal candidates for that type of mobility?

Yes. A fleet of electric cars operated by a mobility app, for example, can help reduce emissions by having lower operational costs. The maintenance is simpler, the fuel can be obtained almost for free... all that represents a margin in the businessmen spreadsheet.

Do you believe that electric cars can help in the discussion about the need for initiatives to create robust vehicle recycling programs?

The batteries are totally recycled. And today, they can have a durability of 10 to 20 years, which is an automobile time of use. Of course that you have to discuss the ways of recycling the car as a whole. The lithium battery pollutes much less than lead-acid battery. The current battery plays a transition role of that technology. Ten years from now, we will have graphene batteries. Graphene is carbon, so we will not have so many harmful components.

How do you see the manufacturers participation in Formula E?

The concern of the automakers and the presence of many of them here in Formula E is a good surprise. They are more conservative companies, that's why I thought they would take more time for that. But from the third season, when they saw what was happening, many came here. The evolution of the electric car is here. Therefore, it makes total sense to act with the teams.



AUTO PARTS » STRATEGY

By Glauco Lucena

A WORRYING SHORT TERM

The challenge is set: Brazilian vehicles need to evolve technologically, but how much national content can they carry?

hat the cars sold in Brazil will have to advance quickly in technology over the next decade, that is a certain. This is the way to make the Brazilian vehicles more competitive with the cars from more developed countries, with double motivation: to increase the possibilities of conquering markets abroad and reduce the need for protection against imported vehicles, something always frowned by trading partners and by the WTO, World Trade Organization - which for this reason condemned Inovar-Auto, ended in 2017.

An example is the necessary advances in active and passive safety and also in energy efficiency, part of the requirements envisaged in the Rota 2030 program: these will, certainly, have greater presence of electronic components in the vehicles, which equally is present in equipment of connectivity and comfort.

From this inevitable scenario, a question emerges obligatorily: will those advanced items be produced in Brazil or imported?

INEVITABLE

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According to Besaliel Botelho, president of Bosch Latin America, the import of electronics will be inevitable: "Brazil has already missed the boat of superconductors to countries in Europe, Asia and also to the United States and Mexico. We don't



have electronics suppliers producing in Brazil and I don't think we will. The trend is that imports of those components for the vehicles will increase".

But Botelho recognizes that a growing demand for electronic devices could generate enough scale, in some cases, to motivate at least part of production in the country: "Bosch itself is a good example, as it has a factory in Brazil specialized in ABS brakes for more than a decade, and more recently in stability control systems. We produce locally the entire electromechanical part of those components, but the electronic content, like chips and sensors, comes from abroad".

MADE IN WHERE?
The dilemma is always
the same: there is lack of
volume and investment
capacity to nationalize
technologically more
sophisticated items.



The math that systems suppliers and auto parts do is simple: if the equipment has too many electromechanical components and the scale of production is worthwhile it is possible to think about local production, but with electronic items always imported.

For more complex safety items, with many electronic sensors and a sophisticated management center, however, it is more compensating to import the whole set, in the view of Bosch's president.

UNDENIABLE

Another case is regarding ZF South America. Wilson Bricio, CEO, reveals that the company has already made studies to evaluate the feasibility of Brazilian automatic transmissions, for example, but volumes per platform still do not justify such initiative.

"For each of them a homologation would be necessary, which translates into costly individual processes". For Bricio, production is justified only in competitive and very high volume environments, which is not the case of Brazil: "The growth regarding the adoption of automatic transmissions by the Brazilian market is undeniable, however, equally are the impasses that create obstacles in our competitiveness."

This gap in the local production of automatic transmissions is emblematic because they equipped no less than 49% of new cars sold in Brazil in 2018 according to a survey by Bright Consulting, from Campinas, SP. Cassio Plagliarini, consultant, understands that "today, those transmissions are very sophisticated and use many electronic components that would need to be imported. Only a volume of 500 thousand units/year would justify local production of automatic gearboxes, which would still have to be used by several rival manufacturers".

Sindipeças (The National Association of Brazilian Auto Parts Manufacturers), which participated actively in the debates about Rota 2030, bets that many items could be nationalized - even if not

Mandatory schedule

	New cars	All cars
Side airbag	until 2020	until 2023
Electronic stability control – ESC	until 2020	until 2022
Warning for the lack of seat belt use	until 2020	until 2021
Side direction indicator lamp	until 2021	until 2023
Daytime running lamps – DRL	until 2021	until 2023
Emergency stop signal – ESS	until 2021	until 2023
Rear view camera or parking sensor	until 2025	until 2027

the most advanced ones. According to Alexandre Pagotto, coordinator of the company's Vehicle Safety Group, local production of side airbags and lighting items is very likely to occur, for example: "Rota 2030 is an advance for the auto parts sector, bearing in mind that Inovar-Auto was discussed only with the automakers".

. . .

Botelho, from Bosch, recalls that Rota 2030, through the ex-tariff mechanism, allows the importation without tax of items not manufactured in Brazil. The part of the exemption, 2%, will have to be invested in research and development, although there is still a lack of regulation that specifies how exactly that counterpart will be given. "Bosch, which has heavily invested in R&D in Brazil, has already been qualified to keep doing that in the new automotive regime".

For Paulo Cardamone, director of Bright Consulting, Rota 2030 really contemplated the auto parts sector, but it will only be positive for the systems suppliers: "The program does not help the small and medium auto parts manufacturers, Tiers 2 and 3, that go through a moment of extreme difficulty and will not be able to enter the chain of more complex equipment or connectivity items, increasingly demanded by the consumers. With that, it will greatly increase the dependence on imported components, especially advanced safety items".

According to the schedule established in 2020 the new passenger car projects will have to offer standard side airbags,

electronic stability control and audible warning for the seat belt use. In the following years they will be mandatory for all cars sold in Brazil, including old projects. Pedestrian protection, parking sensors, daytime running lamps, side direction indicator lamps and emergency stop signal are also on the calendar.

PULVERIZATION

For Botelho, it is possible that some suppliers will nationalize electromechanical items linked to new generations of brake systems and automatic transmission, for example. But much of the novelties will have to be imported, he says: "It is important to remember that our market is recovering, but it is still far from pre-crisis levels. Besides that, Brazil has a pulverization of manufacturers and models like no other country in the world, which creates even greater difficulty for scale and standardization of components".

For the executive, Inovar-Auto failed to force an increase in production capacity for a market that did not evolve in volumes, generating great idleness.

Cardamone points out some worrying scenarios for the auto parts sector in the Automotive Brazil 2030 study, recently published in partnership with Neocom Inteligência Aplicada. One of the most likely scenarios is that of the current 350 small and medium-sized auto parts manufacturers less than one hundred should survive in the coming years: "That increases the dependence on imported components and can lead to a process of 'CKDization' of the Brazilian cars, disrupting even the systems suppliers".

Pagotto agrees that the challenges are great for a sector that has suffered so much and decapitalized during the crisis, but he has a more optimistic view: "The systems suppliers rely on the rest of the chain too much and many are helping on the recovery of small suppliers in need, but with good potential".

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INDUSTRY » PRODUCTION By Sergio Quintanilha

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THE ENGINES' BLACK BOX IS OPEN

An exclusive survey by AutoData shows the total number of Otto cycle engines produced in Brazil: there were a total of 2.6 million last year.

ow many automotive Otto cycle engines are manufactured annually in Brazil? For a long time that question remained unanswered, since Anfavea does not compile those data, the Ministry of Economy does not either, and let alone a specific association for this segment.

Therefore, this information was hidden inside the worksheets of every manufacturer installed in the country without any type of public sharing.

AutoData, however, threw itself into the challenge and reached a number: in 2018, almost 2.6 million Otto cycle engines were produced in Brazil for the domestic market and export - flex and gasoline.

The total is practically identical to the one regarding light vehicles with an Otto engine – consequently excluding Diesel – produced in the country in 2018, according to Anfavea, 2.6 million units as well. But comparatively the engine production is larger, since many Brazilian models use imported engines: it's the case of the Hyundai HB20 and Creta and the Toyota Corolla, for example, which accounted for about 245 thousand of these 2.6 million vehicles produced.

The difference in favor of the engines is in export: according to the AutoData survey, there were almost 559 thousand Brazilian engines produced for the foreign market

last year, either shipping only the engines themselves or embarked under the hood of exported vehicles.

The only manufacturers that did not disclose their engine volumes last year for this AutoData survey were General Motors and Ford.

In these two cases, we had the collaboration of Jato Dynamics, a specialist consultancy firm, to obtain them although these should be considered as approximate estimate.

According to the study, Volkswagen was the company that most produced Otto Cycle engines in Brazil in 2018.

VW, 601 THOUSAND

All the Volkswagen Group combustion engines are produced in Sao Carlos, SP, being 436 thousand destined to the domestic market and 165 thousand to export. Volkswagen produces two engine families there, the EA111 and the EA211. The EA111 today consists of only one engine, the 1.6 liter four cylinders for the models Gol, Fox, Voyage and Saveiro. The EA211 family is larger: 1.6 liter MSI for the Gol, Voyage, Saveiro Cross, Polo and Virtus, 1 liter MPI for the Up!, Gol, Voyage and Polo, 1.4 liter TSI for Golf, Jetta and Tiguan Allspace, besides the Audi A3 and Q3, and the 1.0 TSI with three cylinderr for the Up!, Polo, Virtus and Golf.

The 1.0 TSI and 1.4 TSI engines of Volkswagen's new compact SUV, the T--Cross, are also produced in Sao Carlos, which is expected to increase production in 2019.

GM, 476 THOUSAND

GM is the second in the ranking with estimated 476.3 thousand engines produced in 2018, of which 373.7 thousand are for the domestic market and 102.5 thousand for export. GM did not want to officially open its numbers, only reporting that it has manufactured "700 thousand engines in Joinville since the plant's inauguration, in February 2013, and more than 28 million engines and transmissions in Sao Jose dos Campos since 1959", absolutely irrelevant data to this survey.

The factories in Joinville, SC, and Sao Jose dos Campos, SP, produce the 1 liter engines for Onix and Prisma, 1.4 liters for Onix, Prisma and Montana, and 1.8 liter for

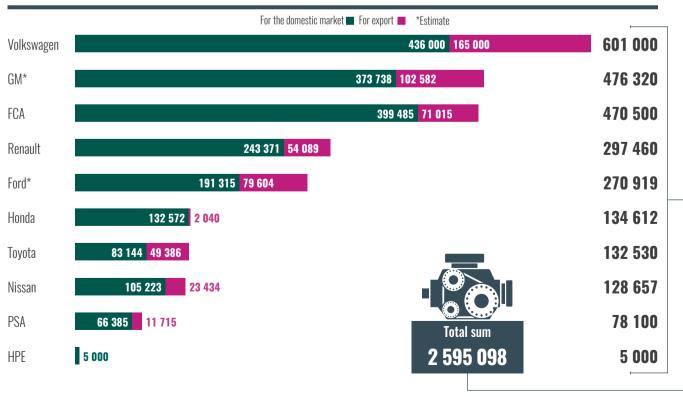
the Cobalt and Spin. The 2.5 liter flex engines for the S10 come from the United States and the 3.6 V6 gasoline for the Trailblazer come from Canada.

For the next few years, GM is expected to increase considerably the production in Joinville due to a capacity increase planned, from 120 thousand to 420 thousand engines/year.

FCA, 470.5 THOUSAND

The third place in the ranking of engines is occupied by FCA, with 399,5 thousand engines for the domestic market and 71 thousand for export, totaling 470.5 thousand. The Polo Automotivo Fiat in Betim, MG, produces the Fire families, 1 and 1.4 liter and Evo 1.4, and Firefly, 1 liter and 1.3 liter. Planta Motores in Campo Largo, PR, produces the E.TorQ 1.6 liter and 1.8 liter. The Fire family is also responsible for the largest production volume, with 193 thousand units/year. Followed by the E.TorQ family,

Production of Otto cycle engines – Brazil 2018



with 160,5 thousand. As for the Firefly family, it is responsible for 117 thousand units/year.

Regarding export, Betim destines 11% of its production and Campo Largo 23%. The 2 liter flex engine of the Compass model is imported, as well as the 2.4 liter flex of the Toro Volcano.

RENAULT, 297,5 THOUSAND

The Renault engines are produced at the Ayrton Senna Complex, in Sao Jose dos Pinhais, PR. In 2018, the unit was responsible for 243,4 thousand BR10, 1.0 three cylinders, and HR16, 1.6 liter four cylinders engines, both from the SCe family, made of aluminum. 54,1 thousand were exported: 29,6 thousand to Colombia and 24,4 thousand to Argentina.

FORD, 271 THOUSAND

Ford did not want to diclose its engine numbers, but the survey indicates an approximate estimate of 191.3 thousand 1 liter, 1.5 liter and 1.6 liter engines produced in Taubate, SP, and Camacari, BA, for the domestic market, and another 79.6 thousand exported, totaling 270.9 thousand last season.

Camacari is responsible for the 1.0 Ti--VCT with three cylinders, while Taubate is responsible for the 1.5 liter Ti-VCT three cylinders and the 1.6 liter Sigma four cylinders.

HONDA, 134,6 THOUSAND

The first Asian manufacturer in the engine ranking is Honda: 132,5 thousand engines for the domestic market and 2 thousand for export in 2018. They are two engine families, L and R. The L is formed by the 1.5 liter that equips Fit, WR-V and City, while the R family has the 1.8 liter of the HR-V and the 2 liter for the Civic.

Named L15, R18 and R20, Honda's engines are manufactured in Sumare, SP, and will continue to be made there despite the transfer of vehicle production from there to Itirapina, SP.

TOYOTA, 132,5 THOUSAND

Right behind Honda is Toyota, which reached 132,5 thousand engines produced in 2018, 83,1 thousand for the domestic market and 49,4 thousand to export. The production is concentrated in Porto Feliz, SP, where the 1.3 liter and 1.5 liter engines that equip Etios and Yaris come from.

The engines for the Corolla model are imported

NISSAN, 128,7 THOUSAND

Completing the trio of Japanese manufacturers, Nissan comes in eighth place, which produced 105,2 thousand engines for the domestic market and 23,4 thousand for export – therefore, a total of 128,6 thousand, although the company does not export engines separately but complete vehicles. The production is concentrated in Resende, RJ, with the menu formed by HR 1.0 for the March and Versa models and the HR 1.6 liter for March, Versa and Kicks.

The 1 liter engine could be used in the future for Nissan's e-Power project, possibly in Kicks, working to provide battery power to an electric engine, as it happens in the BMW i3.

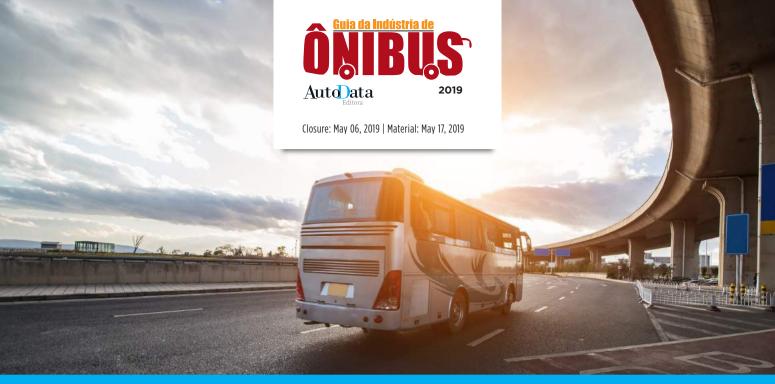
PSA, 78 THOUSAND

From the eighth to the ninth position there is a very big leap in volume: the total number of engines manufactured by PSA for the Peugeot and Citroën models in Brazil in 2018 was 78.1 thousand.

66,4 thousand served the domestic market and 11,7 thousand were destined to export, or 15%. The factory is in Porto Real, RJ, and produces the EC5 1.6 liter and the EAT6 engine.

HPE, 5 THOUSAND

The tenth and last manufacturer in the ranking is HPE, which produces Mitsubishi and Suzuki models in Catalao, GO. All of the 5 thousand 2 liter 4B11 flex fuel engines produced were destined to the Mitsubishi ASX. HPE is the only company in the ranking that does not export engines.



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FROM PARANA TO THE WORLD

The T-Cross produced in Sao Jose dos Pinhais breaks the boundaries of Latin America and reaches almost fifty countries

eginning next year, Volkswagen will start sending the T-Cross SUV produced in Sao Jose dos Pinhais, PR, to twenty countries beyond Latin America, breaking the kind of artificial boundary established in the last years and rarely surpassed by car manufacturers installed in Brazil. With that, according to the president Pablo Di Si, the model that has just arrived to the Brazilian dealerships will reach almost fifty markets – 29 only in the Latin American region alone.

Lack of competitiveness, logistical difficulties, unfavorable exchange and other arguments widely repeated by executives were obstacles for Brazilian cars to overcome the regional border. In recent years, more precisely the post-crisis that forced the automakers executives to put their briefcases under their arms and go out in search of other destinies to empty the production of their factories, Latin America was transformed into a natural destiny for the Brazilian vehicle projects, previously limited to Argentina. But the models that go to countries outside the region are very rare - and, almost all of them are trucks.

The T-Cross opens the world again for the Brazilian vehicle industry. Di Si affirms that countries in Africa, Asia and even





Agility in the transfer of ICMS credits in Parana put T-Cross on the global exports map



Europe will receive the SUV, a project slightly different from the one sold in the European market: "Algeria, Egypt and Turkey will be some of the destinations".

That decision was possible thanks to some peculiarities of the factory in Sao Jose dos Pinhais, which completes twenty years of operation. According to the president of Volkswagen South America, the proximity and logistical ease with the port of Paranagua and the ICMS credit transfers program of Parana's government, much more agile than in Sao Paulo, collaborated to put the factory on the export map.

Also contributing is that the T-Cross is a global Volkswagen project, which sees the future of the industry in the SUV segment in the short-term, before the electrification. During the global presentation at the end of last October - and simultaneously in Amsterdam, Holland, Sao Paulo and Shanghai, China - the company presented projections that pointed to SUVs as the responsible for 40% of its global sales in the future.

IN BRAZIL

Although being global, the Brazilian model was adapted to local consumer demands. Assembled on the MQB pla-



The factory in Sao Jose dos Pinhais turns twenty and continues as one of the most modern VW plants in Brazil

tform, it is 10 mm higher than its European model and has 88 mm longer wheelbase. The SUV is 4 thousand 199 mm long and 1 thousand 568 mm high, with wheelbase at 2 thousand 651 mm.

It will be exported to other countries with those dimensions. The versions that should be different - even because the T-Cross sold in Brazil brings the TSI engine under the hood, the Volkswagen turbocharged flex.

Following the purpose to simplify its portfolio VW offers the SUV in four versions: 200 TSI, 200 TSI Automatic, Comfortline 200 TSI and Highiline 250 TSI.

Only the entry version, for R\$ 84 thousand 990, brings manual transmission combined to the 200 TSI flex engine, which reaches up to 128 hp when fueled with ethanol. It offers, as standard, ESC, six airbags, electronic differential lock, electric steering with height adjustment and steering wheel distance, Isofix system

for child car seats, LED daytime running lights, support for smartphone with USB input, electric locks and windows, rear parking sensors, among other items. An optional package offers connectivity items and a more powerful sound system.

For R\$ 94 thousand 490, the transmission is automatic and the touch screen connectivity and automatic speed control are also included.

Still pushed by the 200 TSI engine, the T-Cross in the Comfortline version, R\$ 99,990, offers digital air conditioning, refrigerated glove box, 17-inch alloy wheels and multi-collision brake system. Four optional packages can make the vehicle more complete.

Finally, the top-of-the-line version, Highline 250 TSI, offers the 1.4 liter turbocharged VW engine, which reaches up to 150 hp. It has leather seats, LED interior lighting, fatigue detector, keyless system, start-stop, rain and twilight sensors. There are three optional packages available for the version, starting at R\$ 109 thousand 990.

It also brings VW Connect, a system developed by the company to attract smartphone users. What enables that integration with mobile devices is the app available for Apple and Android smartphones, for free. Besides allowing the owner to monitor information such as fuel tank level, tire calibration, mileage and detect mechanical faults, it allows the owner to transform the driving into a kind of video game, with the challenges.

It's nothing new for smartphone users, who have fun collecting points in apps like Waze, Swarm and inflate their egos with likes on Instagram and Facebook. The process is the same: points are added by means of distance traveled, driving to predetermined places and driving efficiency, with consequent fuel consumption reduced.

For Pablo Di Si the T-Cross equipped with VW Connect is a "watershed for Volkswagen in the region. It is the first connected car to be produced in Latin America".

PRE-SALE

Volkswagen did not reveal sales or production expectations for the model, which divides line with VW Golf and Fox and Audi A3 Sedan at the factory in Para-



The construction standard certificates the Brazilian T-Cross even for the European consumers

na. The president Di Si said that the goal is to be one of the two best-selling compact SUVs in the Brazilian market - the leader last year, Hyundai Creta, had around 50 thousand sales.

The first signs were positive. During the model's presentation and celebration of twenty years of operation in Sao Jose dos Pinhais a pre-sale was opened with eight hundred T-Cross models available, with differentials in relation to the other versions. In less than an hour, 131 consumers showed interest in receiving the model at first hand, by an advance payment of R\$ 5 thousand.

Volkswagen Brasil and its exporter DNA

Volkswagen is the company that exports the highest number of vehicles and components. Since 1970, more than 3,7 million vehicles have been exported to 147 countries.

One of the most famous cases was the contract that allowed the shipment of more than

170 thousand Passat models to Iraq, from 1983 to 1988. To Canada and the United States, from 1987 to 1989, more than 200 thousand Voyage and Parati were shipped. The peak of Brazilian VW exports was in 2005, when markets from Africa, the Middle East, Russia, Ukraine,

Turkmenistan and Azerbaijan received models produced in Brazil.

From 2005 to 2011, in the last great export action to outside the borders of Latin America, Europe received more than 305 thousand units of Fox models, a car entirely developed by Volkswagen do Brasil.

ASTILL DISTANT FUTURE

The talks for the development of smart cities in Latin America were productive. But there is still an abyss from speech to action.

atin America will face one of the biggest exoduses of the planet in the next 30 years. It is estimated that, in 2050, 89% of its population will be living in cities. The challenges to that transition are big because almost 700 million people are expected to live in urban centers. There are 100 million today, according to a UN Habitat study. This is the trouble's size which the region will face and, not surprisingly, was the main theme of the Smart Cities Forum held by Latan Mobility, an organization that brings together the main mobility and transportation professionals in the region, in Mexico City, in the middle of February.

The event took a ride on the Formula E Mexican gran prix, the fifth season with electric cars organized by the FIA, Federation Internationale de l'Automobile. Nothing is more convenient than gather in the same space the electric race cars, which have become a showroom of that automotive engine transition, with the specialists in mobility from Latin America. After all, there is little doubt that electrification is a road with no way back to the urban centers.



much affected by the combustion engines pollution.

Urban equipment such as traffic lights, subways, trains, bus stops, bicycle lanes and so many others working in a connected way and using artificial intelligence promise a transformation in the environment of the cities over the next thirty years. That is what is expected, although those solutions are still quite distant from reality.

Buses, trucks, cars, bicycles, electric scooters, on the other hand, are already a reality. Technologies to provide energy and keep that fleet in circulation are also known by the companies that wish to operate in that field. It is urgent, therefore, that tools convergence to start the smart city model.

It is also up to the public authority and society to make their contributions so that the necessary investments can be made to integrate all the actors of that complicated plot which is the vision of the mobility of the future in Latin America.

That is what the former president of Mexico, Felipe Calderón, one of the spokesmen of that discussion in Latin America,

ABB, one of the Formula E sponsors, has developed recharging solutions for all types of applications. At the Geneva Auto Show it will present its fast charger for buses, which will be used to transport visitors in the fair.

concluded during the opening of the Forum: "It is time to develop efficient public systems so that people no longer see the convenience of using a car as advantage".

During the day of discussions in the Forum, Calderon showed some efforts of cities in Latin America in order to change the opinion of the Legislative, the Executive and, mainly, the population.

Public transportation on wheels is seen as the most efficient, safe and the one that presents the lowest costs for immediate application in the big cities of Latin America. Especially because of the existing infrastructure for those vehicles to circulate. Electric and connected buses running on smart lanes that besides organizing the flow can also serve as charging stations for the batteries is the bet of the moment.

The current problem is what was classified as a mafia in one of the Forum panels: the operators of those bus systems. According to Gustavo Mañez Gomes, coordinator of climate change for Latin America and the Caribbean of Unep, the United Nations Environment Program, "there is no inte-





"It's necessary to regulate the transport options with bicycles, scooters and even walking on foot to truly offer sustainable and smart options. We still don't have that configuration in Latin America."

Felipe Calderón, former Mexico's president

rest because technological advances have costs that can make operations unfeasible. They [the operators] think they can break their companies".

On the other hand, society's complaints about the quality and efficiency of services provided, in addition to the effects of pollution generated by public transport in big cities, is starting to give a direction to those companies' investments, Gomes says.

Of course that a little help from the government has been necessary. In Argentina, for example, the province of Santa Fe defined the creation of public policies and laws that encourage quality public transportation as government program. The province's deputy, Joaquin Andrés Blanco, showed that the incentive by means of tax exemption with regard to the initiatives of the electrification and energy cost reduction for the use in transport will make a revolution in cities like Rosario, the biggest of the region, with a little more of 900 thousand people.

"We are looking forward to transforming urban transport by making it cleaner and more efficient. The first step, which is to legislate by setting priorities and encouraging the operators, has already been taken. That is just the beginning. We need to share our experience so far with other cities in Latin America to transform their inefficient practices."

WHAT ABOUT BRAZIL?

The urban on-wheels transport systems in Santiago, Chile, Cali, Medellin and Cartagena, in Colombia, were mentioned as examples that already offer real benefits to the users of those cities. The transition to electrification can start with those systems soon.

Ironically, those infrastructures have as inspiration the Integrated Transport Network of Curitiba, PR, a pioneer project in Latin America and well known in Brazil. However, in the Forum, there was no participation of companies representatives and the public authority of Brazil.

Questioning the event organization about the reason for the absence of bus manufacturers in Brazil, the region's productive hub, or representatives of government agencies of the country - the official response is that the guests had no agenda to attend the Forum -, a clear disconnection of the country with the discussions in Latin America was left in the air.

The signs of that detachment from the Brazilian industry are also perceived here. One week after the Smart Cities Forum's poll by the International Council for Clean Transport that the newspaper O Estado de S. Paulo had access to, showed that the new air-conditioned buses which run in the city of Sao Paulo emit 15% more CO2 than the old buses.

While the presentations in Spanish in Mexico City have shown a participatory future for urban transport in Latin America, Sao Paulo is a hostage of corporate groups that defend their interests by sponsoring a retrogression to the necessary evolution. And the industry is still conniving with that model because instead of contributing with cleaner and more efficient vehicles, it continues to produce and sell buses that are more polluting to those who have been called as mafiosi by the greatest mobility experts in the region. How long will the industry remain neglected?



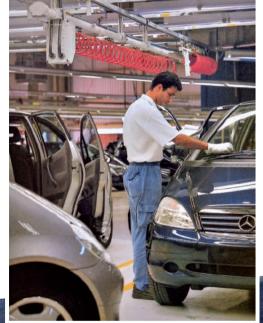
A COMMUNICATION AGENCY EXPERT IN STRATEGIC SOLUTIONS FOR THE AUTOMOTIVE INDUSTRY

Creation and implementation of corporate events, creation and management of relationship and networking campaigns in the automotive industry



Twenty years ago, Mercedes-Benz inaugurated its unit in Juiz de Fora, MG, the first automobile factory built outside Germany

When Juiz de Fora challenged Sao Bernardo do Campo



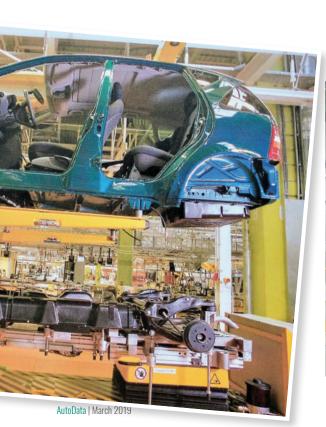


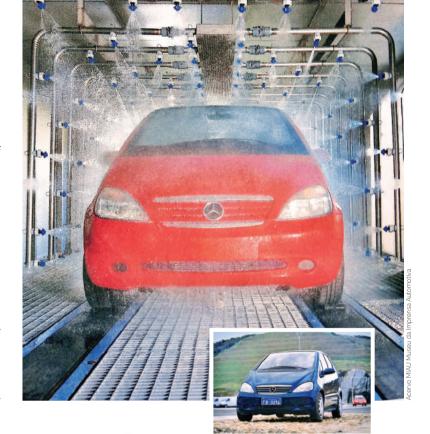
ebruary 17, 1999, was an unforgettable milestone for Mercedes-Benz do Brasil: at 2 o'clock in the afternoon, a red A-class 160 Elegance came out of the assembly line in Juiz de Fora, MG, its first automobile produced in Brazil.

The factory, the first for M-B cars built outside Germany, an investment of US\$ 400 million, was then considered the most modern in the world: it applied its just-in-time and just-in-sequence systems, with nine systems suppliers installed in or around the unit.

The commercial failure of the model was a strong hit to the unit, which experienced moments of tension: while the project to produce the Smart there failed, it produced a small volume of the C-Class model to export. Mercedes-Benz negotiated with at least one high-volume automaker to sell the factory, but in 2010 the company decided to convert the plant into a truck-producing unit, spending another US\$ 450 million for that: the new home of Accelo and Actros.

Today, the factory concentrates the welding and painting operations concerning all cabins of Mercedes-Benz trucks produced in Brazil.







STUDY » KPMG By André Barros

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PARTNERSHIPS: A NEW TREND.

One of the points identified by KPMG's annual study, released in February, is about the union of rival companies to develop joint products or services

nusual partnerships with direct competitors, in the same segment, should set the tone for the global automotive industry in the coming years. That was one of the trends identified by the Global Automotive Executive Survey, an annual survey sponsored by KPMG with global executives and industry consumers, and in 2019 it reached its twentieth edition.

Aline Todd, a global executive of the

consulting automotive segment, said that those partnerships - called as co-competition - are a solution to a problem identified by KPMG in the study, and also recognized by industry executives: the decrease in profitability. Vehicle manufacturers, according to her, still deliver positive financial results, but at a slower pace than other industries, such as mobile device manufacturers.

"The answer to that is those coopera-

tion partnerships on specific topics, like Ford and Volkswagen, and more recently BMW and Daimler", said Todd. "And I don't think it's too late to start, but we need to create an environment to enable those partnerships."

One of the obstacles to that co-competition, she says, is the different business cultures that, from one moment to another, need to integrate to collaborate towards the same goal. There is still a certain prejudice: the reception by some vehicle manufacturer directors, when presented to this scenario, is of strangeness and denial.

That explains the need to create that environment, since large investments will be necessary, especially in the area of autonomous vehicles and electrification. Todd also projects that, in some cases and in the long term, that co-competition may become a merger, creating a scenario of consolidation in the sector.

ELECTRICS

The survey also presented a little divergent views regarding electric cars, especially when the region cut costs. The Chinese, for example, don't care so much about the cost of those models - even because local government has a subsidy program - while the South Americans do not believe in segment evolution exactly because of the electric cars' price.

That's where the KPMG islands theory comes in: although we are talking about a global industry, regional trends are still fundamental for the automakers' decisions. Still in the field of electrics, Todd mentioned the availability of raw materials for the batteries as a possible obstacle to the mass-production of electric models.

As a result from the responses of more than 1 thousand executives and 2 thousand consumers from 41 countries - 66 executives and 113 consumers from Brazil, around 6% to 7% of the total sample -

"The answer to the performance decrease of the companies is those partnerships for cooperation on specific topics. Like the agreement between Ford and Volkswagen."

the research was presented in four big chapters: Megatrends beyond Obvious, Product Value, Consumer's Value and Ecosystem's Value.

The main topics discussed in the meeting rooms of companies inside the sector, such as the future of combustion, electric and autonomous vehicles, connectivity trends, mobility and regional trends are contemplated in the study released by the consultancy firm in February.

BRAZIL

In partnership with AutoData, KPMG, in celebration for the 20 years of the Global Automotive Executive Survey, will produce the Brazilian version of the survey in 2019. Dozens of questions were elaborated so that executives and consumers may collaborate to draw a scenario for the Brazilian automotive industry in the coming years.

The results will be presented at the AutoData Seminar Revision of the Perspectives, on June 24th, in Sao Paulo. The full content of the survey will be available after the event.

HONDA INVESTS

Moto Honda announced an investment of R\$ 500 million in its factory in Manaus, AM. for the next three years: improvement in processes. construction of new building and lines repositioning. The works have already begun with a new area which will house the production of engines. improving the logistics and reducing the manufacturing term. There are six thousand employees and five lines that produce approximately 3,7 thousand motorcycles/day.



THE SPARE TIRE IS GONE

Ford launches the EcoSport 2020 line (!!). The greatest novelty is the absence of the spare tire for the top-of-the-range Titanium version, eliminating with it its holder next to the trunk lid. The spare tire ceases to exist by the adoption of tires Michelin ZP type Run Flat, which can travel up to 80 km at 80 km/h even empty. Also equipped with electric sunroof, seven airbags, blind spot monitoring and cross traffic system, keyless start, SYNC 3 with 8-inch screen and 17-inch alloy wheels: R\$ 104 thousand.



SUBSCRIPTION PLAN

Audi started its recharging service for electric vehicles in Europe, based on a subscription system by card that provides access to 72 thousand devices in sixteen European countries. There are two types of plans: City, for essentially urban users, five euros per month, and Transit, for larger trips, 18 euros per month. The tax for charging goes from eight to ten euros and remains fixed in countries beyond the German borders.



By Marcos Rozen Suggestions of issues for this section can be directed this the email rozen@autodata.com.br

STILL MARRIED

FCA and PSA Group have extended until 2023 joint ventures that they have had for light commercial vehicles in Europe for 40 years: production of Fiat Ducato, Peugeot Boxer and Citroën Jumper vans at the Sevel Sud plant in Val di Sangro, Italy, will continue, besides complementary versions for Opel and Vauxhall - brands now in the hands of the French group. For this, expansion of the productive capacity of that unit is planned.

AUTOMEC 2019

Free registration is open for visits to Automec 2019, from April 23 to 27 at São Paulo Expo: interested professionals from the area of automotive spare parts and repair can register on www. automecfeira.com.br. According to the organizers, there will be 1,5 thousand brands participating in the exhibition, Brazilians and foreign.

TOYOTA RECORDS

Toyota revealed that 2018 was the year in which it achieved its best commercial performance in Brazil in history, started in 1958: more than 200 thousand units sold. And for 2019, the goal is to break a new record, with 219 thousand. The local production volume is expected to reach 225 thousand units, 7,6% above last year, of 209 thousand, also a record figure.

FUSION LINE GETS LEANER

The 2019 Fusion line has arrived at the dealerships: small aesthetic touches and the end of the entry version with a 2.5 liter flex engine, a place now occupied by the SEL 2 liters EcoBoost, 248 hp at R\$ 150 thousand. There is also the Titanium 2 liter EcoBoost AWD, full traction at R\$ 180 thousand, and the Titanium Hybrid, gasoline-electric hybrid power gasoline-electric with 190 hp, at R\$ 183 thousand.







BELINI

Cledorvino Belini was appointed by the governor of Minas Gerais as the new president of the stateowned Cemiq, Companhia Energética de Minas Gerais. He is a former president of Fiat and Anfavea.



MELLO

Daniel Homem de Mello is Volvo's new director of communication, marketing and branding for Latin America. He succeeds Solange Fusco, who left the company.



COSTA

Vander Costa was elected president of CNT, National Transport Confederation of Brazil, for the 2019-2013 mandate. He succeeds Clésio Andrade, who held the position for 26 years.



PARASKEVOPOULOS

Eduardo Paraskevopoulos is Waze's new head of marketing for Latin America. Formerly, senior business executive of Google Brazil. Former Samsung, Unilever and Outback Steakhouse.

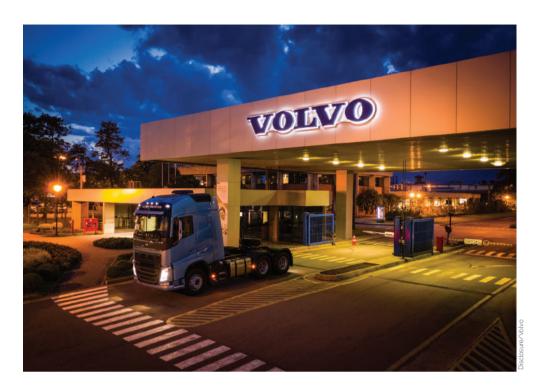


GÓFS

Claudia Góes took over the management of the new VW area, Digital Communication. She will perform in Priscilla Cortezze's team and has previous experience at Samsung Electronics. Weber Shandwick and In Press Porter Novelli.

VOLVO INVESTS

Volvo Group announced the financial injection of R\$ 250 million by the end of 2020 in Brazil. The investment will be destined to all businesses in the country, in other words, trucks, buses, construction equipment and marine and industrial engines, besides R&D. It also hired three hundred people to expand the second shift of truck production in Curitiba, PR.



ZF WINS

ZF received from Receita Federal (Department of Federal Revenue of Brazil) the OEA certification, acronym of Authorized Economic Operator. With that, the company is now recognized as a safe international business operator and, thus, can enjoy logistical advantages such as significant reduction of time in customs clearance in ports. The search for certification began two years ago and involved the areas of foreign trade, purchasing, engineering, logistics, heritage security, information technology, human resources, legal and marketing.

LOGIGO INTERNATIONALIZES

Logigo has initiated a process to create a subsidiary in the United States: it intends to outsource multimedia systems production and then open a factory there. In Brazil, it inaugurated the first unit in Itatiaia, RJ, inside JLR, an investment of R\$ 2.5 million and capacity to produce up to 9 thousand components a year. Nissan, Mitsubishi and Toyota are in the customers list.

CROSS MOBI

Fiat Mobi receives, as optional, the Cross Pack offer, which can be applied to any version: sticker on the hood, bicolor paint with black roof, side stripes and dark wheel caps. For R\$ 950.



CHINA IN EUROPE, BY TRUCK

BYD has launched two electric trucks and a van in Europe: the first act into the commercial vehicles segment for the company in that market. The light truck offer has the eT6 and the Green Tug Q1M, specific for use in airports and ports, while the van is the eT3 model. BYD affirms it intends to increase the range of commercial electric vehicles on sale in Europe "in the coming years".

YARISVENTURER

Toyota has launched an adventurous version of Yaris, the X-Way. Only different aesthetic features, having maintained characteristics such as high ground clearance compared to other versions: black alloy wheels, roof rack, bumper and fender application and side trim. Only with the 1.5L 16V flex Dual VVT-i engine and CVT transmission. At R\$ 79 thousand.





PEUGEOT

Christian Peugeot is the new president of OICA, Organisation Internationale Constructeurs d'Automobiles. Besides that position, is also the president of CCFA, the French Anfavea. and succeeds Matthias Wissmann, president of the VDA, German.



IOSCHPE

Dan loschpe was reelected president of Sindipecas and Abipeças' council for the term from March 2019 to March 2022. The election took place on February 13 and he ran for it in a single-slate.



IN OLINDA

Olinda, PE, received 89 Marcopolo Torino buses equipped with Mercedes-Benz and Volkswagen chassis, in configurations of 34 and 32 seated passengers. The vehicles will be operated by the companies Cidade Alta and Rodotur, which are members of the Conorte Consórcio, formed in the first stage of Grande Recife bid system, in 2013. Rodotur has 100% of its fleet equipped with Marcopolo buses since 2012.

25 THOUSAND BONGO

Kia Motors Uruguay, a company of Grupo Gandini, celebrates the productive milestone of 25 thousand units of the light truck Bongo K2500, since August 2010, when the plant was inaugurated, in January 2018. Installed production capacity is six thousand units/year, but today it runs at 3,5 thousand a year in one shift. 95% of production there has the Brazilian market as destination.



14,2%

was the decrease in the level of corporate default in Brazil in 2018, according to a study by the credit assessment firm Boa Vista: it considers returned checks, protested titles and registrations in SCPC.

"If we lower taxes, everyone pays."

Paulo Guedes, Brazil's Minister of Economy, during a meeting with members of Fiep, Federation of Industries in the State of Parana, in February.

1,35

is the current relation bicycle per inhabitant in the Netherlands: there are 23 million bicycles for 17 million inhabitants.

"Thank God there is traffic jam. Trafic jam is a sign of progress."

Paulo Maluf, mayor of Sao Paulo at that time, in February 1996.

15,5%

was the increase in the number of vehicle registrations in the State of Sao Paulo in 2018 according to data by Detran-SP: 886.7 thousand vehicles, added from motorcycles to trucks. In 2017, they accounted for 767.7 thousand.

63%

of the 100 largest companies in Fortune's list have clear and public energy consumption goals, shows a global survey by Schneider Electric in partnership with GreenBiz Research.

25%

is the increase in demand for car rentals during the carnival in Brazil compared to months in low season, according to analysis by Abla, Brazilian Association of Car Rental Companies.

85%

more power is offered by the current Formula E cars' battery. That's the equivalent to

5 000

full charged smartphones