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Rota 2030 – Mobility & Vehicle Efficiency



The Provisional Measure nº 843/2018 signed on 5 July 2018 institutes the program Rota 2030 – Mobility & Logistics, the new Brazilian automotive industrial policy for the next 15 years, bringing higher predictability and legal security for investments. The new program replaces Inovar Auto, which expired in December 2017.

Rota 2030 was expected to be announced before the end of Inovar Auto as a regular replacement program, but political and economic turmoil delayed the negotiations and postponed the announcement.

The new program still needs approval from Congress as the deadline is 16 November 2018—120 days after the Provisional Measure signature. The process will conflict with the presidential election, creating a huge uncertainty in the industry.

Our initial thoughts

Rota 2030 aims to improve the technological content of vehicles commercialized in the Brazilian market and encourage investments in research and development (R&D) with fiscal incentives. The program is based on three main objectives: fuel efficiency, safety, and R&D investments.

Rota 2030 establishes mandatory requirements for vehicle commercialization in Brazil:

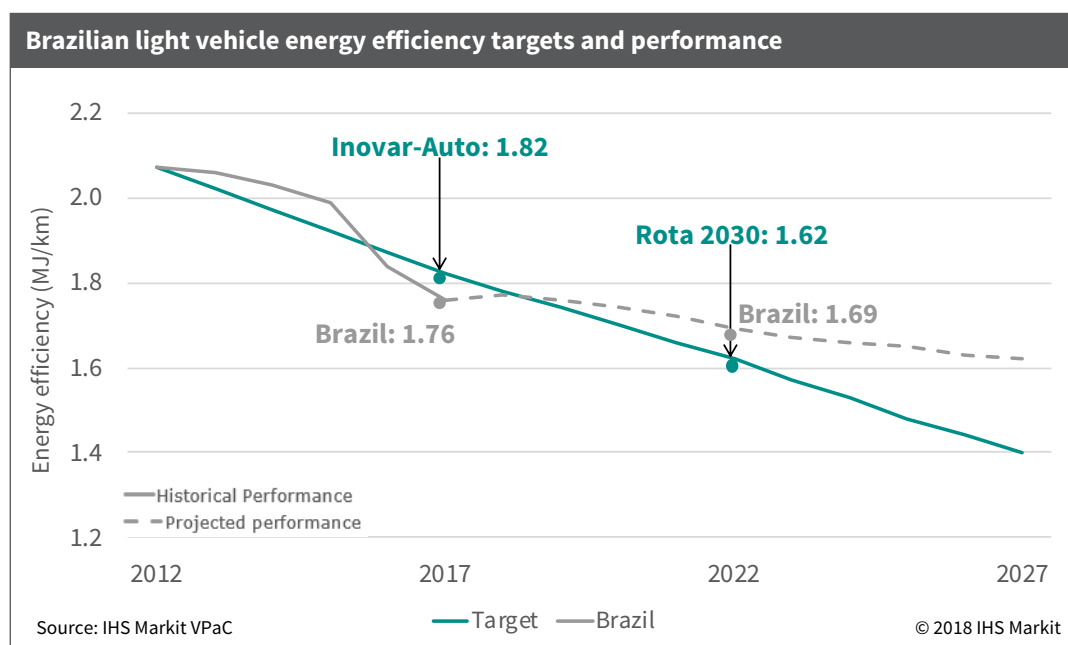
- Adhesion to Vehicle Labeling Program (PBEV)
- Commitment to achieve minimum level of energy efficiency
- Commitment to achieve minimum level of structural performance and driver assistance technologies

Beginning in 2022, all vehicles locally produced or imported that surpasses the minimum target of energy efficiency can benefit from an up to 2% reduction on the tax for industrialized products (IPI). In addition, another reduction of 1% can be achieved by anticipating the structural performance requirements and the adoption of driver assistance technologies. It is important to highlight that total IPI reduction cannot surpass 2 percentage points.

New path for energy efficiency

The Brazilian energy efficiency program started in 2013 with the Inovar Auto program. The mandatory level targeted an improvement of 12% on energy efficiency. At the end of 2017, Brazilian sales surpassed the mandatory level of 1.82 megajoule per kilometer (MJ/km) and reached 1.76 MJ/km, an improvement of 15% over the 2012 base.

Rota 2030 aims to improve vehicle efficiency, safety and R&D investments in the next 15 years

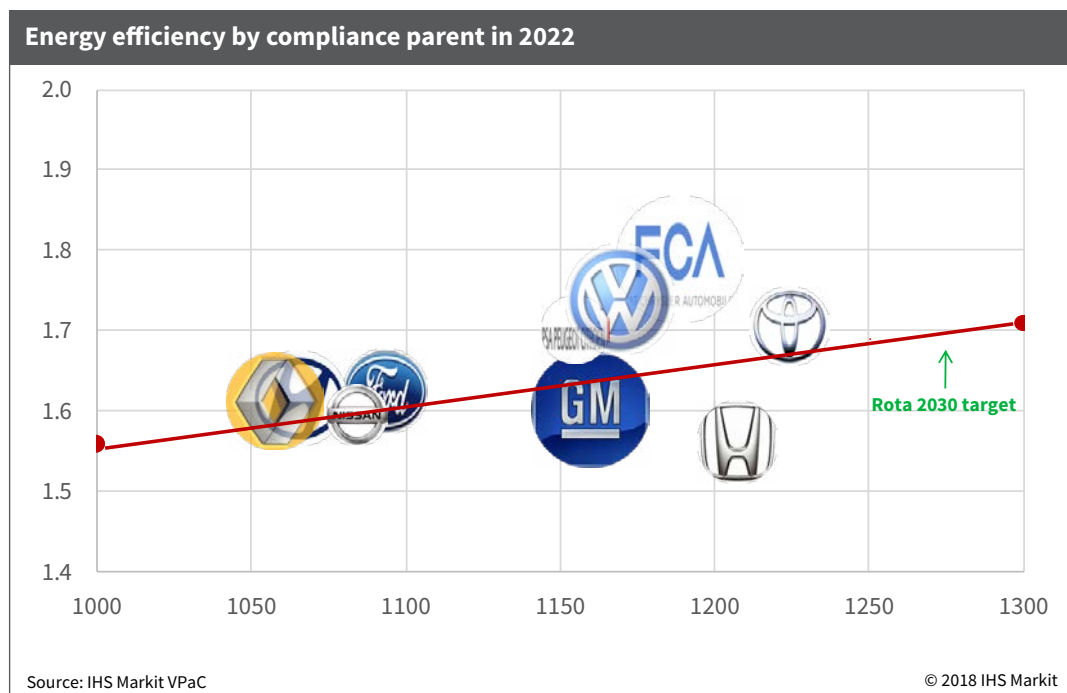


For Rota 2030, the energy efficiency program will have three phases with targets for 2022, 2027, and 2032. The government didn't publish the target details yet.

The industry is expecting the compliance energy efficiency target to be 1.62 MJ/km for 2022, an improvement of 11% over 2017.

IHS Markit expects the Brazilian market to be at 1.69 MJ/km in 2022 considering the OEMs' cycle plans and technologies in the pipeline. OEMs will need to make more investments than planned to comply with Rota 2030 by 2022.

In this scenario, we can identify brands better positioned than others considering its portfolio and powertrain technology road map, according to the chart below.



Inovar Auto brought great technological advancement to Brazilian vehicles. To comply with Rota 2030, IHS Markit expects more investments in stop-start systems, turbo charger with direct injection, and advanced transmissions.

Hybrid and pure electric vehicles were for the first time included in the regulation with IPI reduction. The new IPI tax rate for HEVs and EVs, which is up to 25%, will decrease to the 7–20% range based on the vehicle's energy efficiency and curb weight. The new IPI rates start in November 2018, according to the Decree 9.442/2018. Hybrid vehicles with flex-fuel technology will have an additional 2% IPI tax reduction.

It's a start for the HEV and EV market, but still far from what is necessary to boost this technology. IHS Markit expects a growing HEV and EV market when energy efficiency targets start to get stricter—probably near 2032—along with more aggressive tax incentives.

New considerations for safety

One thing Inovar Auto was missing were safety regulations. With greater focus on safety, Rota 2030 will increase the Brazilian industry's global competitiveness and more importantly, reduce accidents with drivers, passengers, and pedestrians.

As with energy efficiency, safety regulations are not defined yet, and it will be published after Rota 2030 is approved by Congress. The safety roadmap will be divided into structural performance and driver assistance systems. An extra IPI tax credit of 1% will be granted for brands that adopt technologies earlier than the schedule.

The driver assistance systems roadmap should start with less complex technologies like a seat belt reminder and daytime running lights along with the electronic stability control, which is already mandatory for 2022. In a second phase, IHS Markit foresees the introduction of systems such as a side mirror with a turn signal, parking sensor/camera, and emergency stop signal. More advanced systems like forward collision warning, lane departure warning, autonomous emergency braking, and lane keeping assistance will be part of the program in the midterm. Regulations for autonomous vehicles will be discussed to have it defined in the long term.

On structural performance, Rota 2030 intends to improve crash tests with a more rigorous homologation. New tests as side and rear impact, side pole, extended frontal impact, and pedestrian protections will be introduced in the medium-to-long term.

New approach for R&D

R&D has a different approach in Rota 2030 compared with Inovar Auto. In the first program, R&D investment was mandatory for qualified OEMs. For Rota 2030, R&D investment is optional and is also valid for suppliers, not only for OEMs.

Once applied, OEMs and suppliers have a commitment to invest 0.8% of 2018 operating revenues in the first year, and it will gradually increase to 1.2% in 2022. R&D investments can generate 10.2% of tax credits to be written off in corporate income tax (IRPJ) and social contribution on net income (CSLL). Another positive point for the industry is that credits can be accumulated during the program period—15 years—to be used when the company presents a positive balance to obtain these credits.

The government will also give extra incentives—reaching 12% of tax credits—for investments in areas considered strategic, being advanced manufacturing (4.0), connectivity, new powertrain technologies, nanotechnology, big data, data analytics, and artificial intelligence.

It's important to highlight that companies failing to comply with the assumed investment commitment may face fines up to 2% of annual revenues.

Our final thoughts

The government learned with Inovar Auto and improved the rules for Rota 2030. The most important aspect is the suppliers' approach to the program. Focusing on energy efficiency and safety, Rota 2030 will shorten the technological gap with developed markets. The program is on the right path to improve the Brazilian automotive industry's competitiveness in a feasible cadence of technology adoption and granted incentives.

Safety and structural performance requirements will shorten the technological gap with developed markets



FERNANDO TRUJILLO

Principal Consultant, Automotive Advisory Services

E Fernando.Trujillo@ihsmarkit.com

For more information www.ihsmarkit.com

CUSTOMER CARE AMERICAS

T +1 800 447 2273

+1 303 858 6187 (Outside US/Canada)

**CUSTOMER CARE EUROPE,
MIDDLE EAST, AFRICA**

T +44 1344 328 300

CUSTOMER CARE ASIA PACIFIC

T +604 291 3600

E CustomerCare@ihsmarkit.com

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