

# Contributions to Keep the Atmosphere Balanced: How a Magnetic Minimizer of Emissions from Mobile Sources Should Be Designed

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**Abstract** - This paper is the first of an integrated set of documents intended to contribute to reduce air pollution controlling CO<sub>2</sub> emissions and consequently helping to keep **Carbon Cycle Balance**. It is a selfless, committed and responsible contribution with technical information and experiences of 11 years of work with magnetic minimizers of emissions from mobile sources, which could facilitate synergistic work, by integrating facts whose importance could be going unnoticed, rather than favoring the environmental controversy. The main goal of this first paper is to disseminate a system of procedures to design a magnetic efficient and balanced minimizer of gases emissions from mobile sources. Such a minimizer must allow to satisfy the commitments made by most countries in the world to strengthen their global response to the threat of climate change, especially the Paris Agreement signed in April of 2016 by 195 countries engaged in an internationally coordinated effort to tackle climate change, by controlling global warming. The system of Procedures is the result of several years of experimental work and is supported by comparisons of **Single Day Tests** results on cars, without a minimizer and then after installing it, obtained in Colombia's ADC, in 2008 with a magnetic minimizer with hydraulic pre-treatment and in 2018 with a magnetic minimizer without pre-treatment, using standard gasoline. When increases of CO<sub>2</sub> emissions, for 3 tested cars in 2008 were compared with the correspondent 0.7% increase of the car, tested in 2018, this was found lower, in factors of 3.1, 5 and 2.1. With the minimizer without pre-treatment installed in this car, emissions reductions of 68.4% in CO and 12.5% in HC, meeting the standards, were found. This fact opens the option of designing a magnetic efficient and balanced minimizer; reducing CO and HC emissions controlling CO<sub>2</sub> emissions, helping transport sector decarbonization and meeting international commitments.

**Keywords:** Environmental Controversy, Paris Agreement, ADC, Magnetic Efficient Balanced Minimizer.