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Beijing V standard will boost Chinese micro-hybrid market

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by Salil Soman

Throughout this past winter, a toxic blanket of smog settled over Beijing. At one point, pollution measured 40 times the recommended safety levels, prompting public outrage. With more than 13 million cars sold in China last year, vehicles remain a major source of the dangerous pollution levels in big cities like Beijing. Although China has traditionally been resistant to passing stringent environmental regulations, January's 'airpocalypse' is proving to be the catalyst for change.

In an emergency measure in early February, the Beijing city council imposed a strict new emissions standard for gasoline-powered vehicles. The Beijing V standard is roughly equivalent to Europe's Euro 5, and sets the the goal of reducing vehicle pollution by 40%. Many political observers expected the rest of the country to follow suit, and indeed, only a few weeks later, the Chinese government made a similar announcement for the whole nation. Jointly issued by five government bodies, including the National Development and Reform Commission, stringent new fleet-wide fuel economy standards were passed, requiring passenger cars to reach 34mpg by 2015, and 47 mpg by 2020.

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While it is unfortunate that it has taken such dangerous, extreme circumstances to prompt this change, these expanded fuel economy standards are a step in the right direction for China – and for the world. As the world's largest car market, the effects of China's fuel economy policies can be expected to ripple across the globe, compelling foreign OEMs to match China's standards if they hope to break into the market. In addition to moving the goal post for foreign OEMs, the sweeping policy changes also create a

host of opportunities for US suppliers of hybrid and clean fleet technologies. Those focused on micro-hybrids in particular are now well poised to cash in on a significant market opportunity.

Micro-hybrid vehicles are gasoline or diesel-powered cars with automatic, battery-powered stop-start systems that shut off the engine while the vehicle is at rest and restart it instantly and automatically upon re-engaging the gas pedal. If widely adopted, the technology can substantially reduce fuel consumption and air pollution from idling vehicles. Stop-start systems are expected to play a significant role in helping China meet these new standards. However, China will need to focus more on cost-effective ways to reach 47 mpg by 2020, including using advanced micro-hybrids with extended electrification at the 12V low voltage level.

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Until recently, many in China were unfamiliar with the type of vehicle defined as micro-hybrid. Outside Europe, the technology has remained in the shadow of flashier EVs and more ubiquitous hybrid vehicles like the Toyota Prius. But micro-hybrids have been quietly gaining traction in China. While today there are only roughly 200,000 vehicles sold in China each year that carry automatic stop-start systems, there is enormous potential in this market: sales are predicted to increase to 2.4 million by 2015 and 3.6 million by 2017.

With these new strict emissions standards, a track record of lightning-fast technology adoption and a priority shift towards economical near-term fuel economy solutions, China’s micro-hybrid adoption could rapidly accelerate. The airpocalypse has been a much-needed wake-up call for the Chinese government on the significant pollution challenges facing the country, and all evidence suggests that micro-hybrids will play a significant part in the solution.

The opinions expressed here are those of the author and do not necessarily reflect the positions of Automotive World Ltd.

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