North America automobile sector bottom of 'world sustainability league'

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North American car manufacturers have come bottom of the league in the largest ever international study of the global automobile sector's sustainability performance.

The study, entitled Sustainable Value in Automobile Manufacturing, looks at the sustainability performance of 17 leading car manufacturers worldwide between 1999 and 2007. It has been published by researchers from Queen's University Management School in Belfast, in partnership with researchers from the Euromed Management School Marseille, and the Institute for Futures Studies and Technology Assessment (IZT) in Berlin.

The report details how Asian car manufacturers are outperforming their North American, and many of their European competitors, in using their environmental and social resources more efficiently.

It provides a full account of the societal impacts of car production, including issues such as the volume of greenhouse gas emissions from production facilities and the number of work accidents recorded by a company. It also looked at how efficiently car manufacturers used key natural resources compared with their industry peers and how much profit or loss was generated with these resources.

The study calculates the ratio of sustainable value to sales so that different companies can be directly compared irrespective of their size. Sustainable value includes not just the use of economic capital but also environmental and social resources. It is the first value-based method for assessing corporate sustainability performance.

In the report Asian car manufacturers including Toyota, Hyundai, Nissan, Honda, and to a lesser extent, Suzuki have all out-performed their North American competitors. In stark contrast to the Asian manufacturers, both North American carmakers Ford and General Motors (GM) lie well into negative territory, with GM showing the most striking downside trend.

There is a mixed picture among European manufacturers. While BMW tops the ranking of all 17 manufacturers in most of the years assessed, other European carmakers PSA (Peugeot, Citroën), Renault, Volkswagen and DaimlerChrysler/Daimler AG only occasionally keep pace with the industry leaders. FIAT Auto consistently falls behind throughout the entire review period.

The study also shows the improvement potential that a car giant like General Motors has in how it could improve its long-term performance. The company achieved a sustainable value of minus €9.87 billion, in comparison with BMW which achieved a Sustainable Value of up to €2.8 billion from 1999 to 2007.

Ralf Barkemeyer from Queen's University Management School explained: "The study shows that in 2005 GM had by far the worst negative Sustainable Value within the industry which is mainly the result of a dramatic profits slump in 2005. But GM's value contributions from carbon dioxide, nitrogen oxide and sodium oxide emissions as well as waste generation are very negative during the period 1999 to 2007. Its sodium oxide value contributions show the worst level of resource efficiency in the entire study.

"The example of several of the other car manufacturers shows that there is a multi billion euro potential for a company like GM to improve both its environmental and social and its financial performance simultaneously.

Professor Frank Figge from Queen's University Management School, one of the authors of the study, added: "Economic crisis, energy crisis, climate crisis and recent global developments have affected the automobile industry like few other sectors. Never before has it been as important for car manufacturers to employ their economic, environmental and social resources wisely - and efficiently.

"However, while issues such as fleet consumption and CO_2 emissions have been firmly put on the public agenda, the equally considerable environmental impact of the production phase of car manufacturing has as yet been largely ignored. The survey attempts to close this gap."

But accessing sustainability data for the whole sector remains a problem. Ralf Barkemeyer added: "While Tata could be assessed for the first time in 2007 - and narrowly beats the benchmark in this year - other car manufacturers such as Porsche, KIA or the Chinese manufacturers still do not provide sufficient data. Likewise, Daihatsu could not be included in the assessment in the year 2007 due to its insufficient sustainability reporting".

Professor Figge added: "The bottom line is that this study reveals big differences in sustainability performance in automobile manufacturing. This shows that the production process itself bears considerable room for improvement in terms of sustainability performance. We hope car manufacturers and governments worldwide will take note of this important study."

More information: Both study and extensive information on the Sustainable Value approach are available at www.sustainablevalue.com

Source: Queen's University Belfast