

GRANT THORNTON INTERNATIONAL BUSINESS REPORT 2012

Greener fleets: companies consider alternative-fuel vehicles



Companies around the globe are increasingly looking at business vehicles that run on alternative fuels. "Greener fleets: companies consider alternative-fuel vehicles", from the Grant Thornton International Business Report 2012, finds many factors driving demand for alternative-fuel vehicles, but also obstacles that prevent companies from adopting greener approaches.

Rising oil prices and increasing awareness of the environmental impact of traditional fuels make alternative-fuel vehicles attractive to owners of commercial/business fleets. Government incentives and regulations are also pushing executives to explore alternative fuels. Indeed, many countries and states/provinces already offer significant incentives for buying or converting to alternative-fuel vehicles; in some regions regulations will eventually force the use of alternative fuels.

Alternative fuels include compressed natural gas (CNG), liquefied petroleum gas (LPG and, most commonly, liquid propane), ethanol (liquid alcohol fuel typically made from corn), methanol (liquid alcohol fuel produced from natural gas), biodiesel (vegetable oils combined with ethanol or methanol), flex fuels (gasoline combined with ethanol or methanol), hydrogen fuel cells, electric batteries and hybrid electrics (combination of gasoline and electric power). Alternative-fuel preferences vary dramatically around the globe. In resource-rich regions, such as Turkey and Iran, LPG is a popular power for fleets. In other countries, electrics and hybrids are the preferred choice of businesses and the focus of automotive original equipment manufacturers.

The trend toward alternative fuels is visible in global sales of hybrid electric vehicles (HEVs) and battery electric vehicles (BEVs), projected to reach 5.4 million vehicles by 2021 (more than 6% of the automotive market), up from 810,000 vehicles in 2010 (approximately 2% of market share), according to May Arthapan, director, J.D. Power Asia Pacific Automotive Forecasting. Asia is currently the largest market for hybrids/electrics (56%), followed by North America (32%) and Europe (13%). Europe and China shares of hybrids/electrics are projected to increase substantially by 2021¹.

This International Business Report (IBR) examines global data on corporate attitudes about alternative-fuel vehicles – interest, motivation, and inhibitors for bringing these types of vehicles into business fleets – and offers perspectives from Grant Thornton partners around the globe.

Interest in alternative-fuel business vehicles

Around a quarter of global companies (24%) have introduced or are considering vehicles that run on alternative fuels for their businesses, according to IBR findings. Companies in the ASEAN region (31%) were most likely to use or consider alternative-fuel vehicles. Other world regions with more than 25% of companies using or considering alternative fuels for business vehicles are Asia Pacific, G7, Nordic, and North America. Mark Phillips, national industry leader, Grant Thornton Australia, says there is business demand for alternative fuels in the country. "Australia is a unique market due to huge natural LPG reserves, so there is a heavy focus on LPG – both in new vehicles and retrofitting. LPG is estimated to emit 60% less greenhouse gas than petrol." But, he says, there is less demand for LPG in Queensland, Western Australia, and Northern Territory due to lack of infrastructure. There were 655,000 LPG vehicles in Australia in 2010, compared to world leaders Turkey (2.39 million), Poland (2.33 million) and South Korea (2.3 million)².

 ¹ May Arthapan, 'Future of Green Vehicles', J.D. Power and Associates, 2011.
² Statistical Review of Global LP Gas, World LP Gas Association and Datamonitor, September 2011.

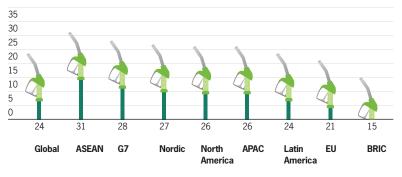


Travel distances in Australia also inhibit the growth of an electric-vehicle market, but hybrids are expected to become more widespread over the next five years; the technology has been on the ground in Australia for years, principally via Toyota, with other manufacturers playing catch-up. Use of clean diesel is also growing.

Phillips says the Australian industries most likely to use alternative fuels for transportation are freight and distribution (trucking companies using LPG and compressed natural gas) and taxis (more than 95% of Australia's taxi fleets use LPG).

"Alternative fuel to run automobiles is being considered as an alternative to fossil fuel, though only in certain vehicle categories," says Sridhar Venkatachari, partner, corporate finance services, Grant Thornton India. "Currently the alternative fuels of CNG, LPG, and electric are in use by passenger buses, cars, light commercial vehicles, autos, and bikes. These are either retrofitted or new vehicles. This is still a minuscule market in comparison to the majority of the vehicles running on either petrol or diesel."

FIGURE 1: ONE IN FOUR BUSINESSES AT LEAST CONSIDERING ALTERNATIVE FUEL VEHICLES PERCENTAGE OF BUSINESSES



SOURCE: GRANT THORNTON IBR 2012

Indian industries with the most interest in alternative fuels are public transportation (buses and three-wheel autos) and passenger vehicles (small cars). The hospitality (hotels) and entertainment industries (sports, film industry, etc.) also use battery-operated vehicles (three- or fourwheelers), but this sector does not constitute significant volume. "Use of alternative fuels is most apparent in the national capital region, especially New Delhi, and Mumbai in the west of India. [They] have greater demand for CNG vehicles since these areas are well served by gas stations spread across the city," adds Sridhar Venkatachari. "In certain cities, autos have mandatorily been converted to LPG. Others are expected to follow." "Lack of adequate infrastructure in India for supplying alternative fuels, like electric-charging points and gas stations (especially outside the city limits), is a major factor preventing wider adoption."

SRIDHAR VENKATACHARI GRANT THORNTON INDIA

Different alternative fuels appeal to businesses in the United States. "Hybrids, electrics, ethanol, and biofuel vehicles hold potential for business-fleet growth," says John Pencak, director of transaction services, Grant Thornton United States, "fueled in part by fuel economy and emissions requirements, as well as government programmes promoting the development and production of alternative-fuel vehicles and fuel-efficient technologies." He cites the Advanced Technology Vehicles (ATV) Manufacturing Incentive Program, which in 2009 provided up to US\$25bn in direct loans to eligible ATV and ATV components manufacturers. Companies can be eligible for direct loans for up to 30% of the cost of re-equipping, expanding, or establishing manufacturing facilities in the United States used to produce qualified ATVs or ATV components³. "Increased domestic production of alternative-fuel vehicles will increase awareness of these types of vehicles," he adds, "and should spur businesses to consider such vehicles when opportunities arise for them to expand or replace their business fleets."

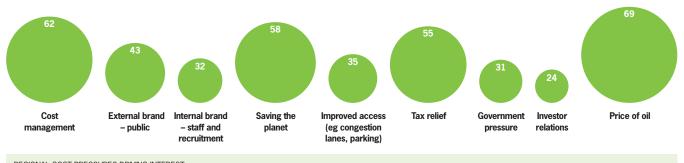
The majority of electric vehicle (EV) investments from 2008 to 2011 (€22bn) occurred in the United States and the EU, according to the Impacts of Electric Vehicles – Summary Report. Subsidy programmes have been most prominent for EV dispersion, with the United States leading the world. Most EU countries and other countries have introduced CO₂-based car taxes favouring EVs⁴.

The automotive market in the UK has remained relatively resilient through the recession, but continues to rely heavily on business and fleet transactions, typically accounting for around half of total vehicle registrations, but which rose to 58% in 2011, says Daniel Taylor, partner and head of automotive, Grant Thornton UK. "Given the high cost of alternative-fuel vehicles, incentives will be a key driver of more widespread adoption, particularly given the strides in petrol and diesel efficiency – the market for alternative-fuel vehicles rose only slightly to 1.3% in 2011 despite several electric vehicle debuts."

³Advanced Technology Vehicle Manufacturing Incentive, US Dept. of Energy. ⁴Huib van Essen, Bettina Kampman, 'Impacts of Electric Vehicles – Summary Report', Delft, commissioned by the European Commission, April 2011.

FIGURE 2: GLOBAL COST PRESSURES DRIVING INTEREST

PERCENTAGE OF BUSINESSES CITING FACTOR AS IMPORTANT



REGIONAL COST PRESSURES DRIVING INTEREST

PERCENTAGE OF BUSINESSES CITING FACTOR AS IMPORTANT

	Cost management	External brand – public	Internal brand – staff and recruitment	Saving the planet	Improved access (eg congestion lanes, parking)	Tax relief	Government pressure	Investor relations	Price of oil
APAC	75	43	35	75	45	66	38	29	78
ASEAN	81	46	49	82	72	77	59	54	88
BRIC	81	64	69	81	74	71	55	59	77
EU	53	40	29	57	31	52	24	21	64
G7	59	40	24	51	26	52	27	15	68
Latin America	76	55	51	77	65	69	35	46	73
Nordic	52	58	47	68	36	52	29	28	60
North America	52	44	25	35	21	42	26	16	62

SOURCE: GRANT THORNTON IBR 2012

Drivers for alternative-fuel vehicles

Companies are most interested in the financial benefits of alternative-fuel powered business vehicles. Among IBR participants, three of the top four drivers of demand for alternative-fuel vehicles are the 'price of oil' (69% of companies rated 4 or 5 where 5 equals 'very important'); 'cost management' (62%); and 'tax relief' (55%). More than half of participants (58%) also identified 'saving the planet' as driving demand for alternative-fuel vehicles.

Regions with the highest and lowest percentages of companies reporting the top four factors were:

- Cost management: companies in ASEAN and BRIC regions (81% in both regions) were most likely to cite this factor as a driver for alternative fuels; companies in North America and Nordic regions (53%) were least likely
- **Price of oil:** companies in ASEAN (88%) were most likely to cite this as a driver; companies in the EU (64%) were least likely

- Saving the planet: companies in ASEAN (88%) were most likely to cite this as a driver; companies G7 (51%) were least likely
- **Tax relief:** companies in ASEAN (77%) were most likely to cite this as a driver; companies in the EU and G7 (both 52%) were least likely.

Government actions are also driving adoption of alternative-fuel vehicles. In the United States, incentives and regulations are already evolving, notes Pencak, citing alternative-fuel credits proposed for 2013 as well as tougher fuel standards for business fleets.

On the incentive side, US President Barack Obama has proposed expansion of a plug-in electric-vehicle credit to include other alternative fuels (while raising the cap to \$10,000), and adding a credit for alternative-fuel-heavy vehicles (capped at \$25,000 for vehicles up to 26,000 pounds, and \$40,000 for vehicles more than 26,000 pounds)⁵.

⁵ 'Tax Legislative Update', Grant Thornton, Feb. 14, 2012.

On the regulatory front, in November 2011 the US Environmental Protection Agency and the US Department of Transportation's National Highway Traffic Safety Administration jointly proposed a rule for federal greenhouse gas emissions and Corporate Average Fuel Economy (CAFE) standards for model year (MY) 2017 through MY 2025 light-duty vehicles. The proposed CAFE standards would require an average fleetwide fuel economy for passenger cars and light-duty trucks of 35.3 miles per gallon (mpg) in MY 2017, increasing to 49.6 mpg by MY 20256.

In India, corporate social responsibility initiatives and emissions regulations are increasingly important factors in conversions to alternative-fuel vehicles, notes Sridhar Venkatachari. The country has moved to close emissions and fuel-economy gaps compared to other regions of the world, such as North America and Europe. The Bharat Stage emissions standards were introduced in 2000, based on European norms, and subsequent stages of the standards (stage IV debuted in 2010) have become progressively more restrictive.

Sridhar Venkatachari says indirect tax benefits also encourage Indian businesses to convert, including:

- for electric vehicles, VAT reduction from about • 12-14% to 5% or less in some regions
- reduced excise duties on components of electric vehicles and hybrids to 6% (from about 12%)
- other state-specific subsidies, such as exception from/reduction of road taxes, for electric vehicles.

"As far as the direct-tax benefits, there have been deductions for in-house R&D facilities and an enhanced rate of depreciation (20%) for new plant and machinery (P&M) pertaining to electric vehicles," he adds. "However, similar subsidies do not exist for CNG/LPG-run vehicles."

In Hong Kong, most licensed taxis and a majority of registered light buses are fueled by LPG7. Since 2010/11, capital expenditures incurred by a taxpayer on the acquisition of an 'environment-friendly vehicle' are fully deductible for profit-tax purposes in the year of acquisition.

The deduction applies to:

- any vehicle qualified for remission of first ٠ registration tax under the Environmental Protection Department Tax Incentives Scheme for Environment-friendly Commercial Vehicles or the Tax Incentives Scheme for Environmentfriendly Petrol Private Cars
- any motor vehicle that is capable of drawing ٠ energy from both consumable fuel and batteries, capacitors, flywheels, generators, or other electrical-energy or power-storage device for use as stored energy or power for mechanical propulsion
- any motor vehicle that is solely propelled by electric power and does not emit any exhaust gas.

The Hong Kong deduction is not applicable to any motor vehicle in which any person holds rights as a lessee under a lease, or capital expenditure incurred under a hire-purchase agreement.

Although the "Energy-saving and new energy automotive industry development plan (2012-2020)" - approved by the Executive Meetings of the State Council of the PRC in April 2012 - sets ambitious new goals for China's production of electric and plug-in hybrid electric vehicles at 500,000 by 2015 and 5 million by 20208. The plan calls for subsidies for private owners of alternativefuel vehicles, along with policy changes to support manufacturers there have been fewer incentives for alternative-fuel vehicles in mainland China.

"More likely to influence the development and adoption of alternative-fuel vehicles is a tax deduction applicable to R&D and high-tech," says Daniel Lin, partner, Grant Thornton, China (Hong Kong), citing the following incentives:

- possibility for a foreign invested enterprise (FIE) to deduct 150% of their R&D expenses
- taxpayers eligible for 100% reduction on Corporate Income Tax (CIT) on qualified technology transfer income up to RMB 5mn, and 50% on the excess amount
- new and high-tech companies eligible for reduced CIT rate and CIT exemption.

⁶ US EPA and US DOT Propose Emissions and Fuel Economy Standards for MY 2017-2025 Vehicles, US Department of Energy, Nov. 16, 2011

 ⁷ Energy, Land, Transport, Alternative-Fuel Vehicles, Electrical and Mechanical Services Department, HKSARG, 2011.
⁸ Blueprint for new-energy auto industry approved, china.org.cn, Apr. 19, 2012.

"From a corporate aspect of the automotive industry," adds Lin, "the above tax incentives and exemptions may reflect the Chinese government's effort to encourage technological developments and green growth, which was promised by China's 12th five-year plan announced last year. Clearly, the government now intends to do more to encourage the R&D of alternative-fuel vehicles." Lin says that restructuring of the automotive industry could be effective in encouraging the development of environmentally friendly vehicles, as will clarifying criteria for qualified new and high-technology projects.

"Encouraging auto manufacturers (the corporate perspective) also should be accompanied by widening awareness within the consumer population (the consumer perspective)," says Lin. He believes that additional incentives to consumers will boost demand for alternative-fuel vehicles, as would a reduction in consumption taxes on green autos that meet standards for low emissions and energy efficiency. In comparison, Lin points to the Tax Incentives Scheme in Hong Kong, which encourages the purchase of environmentally friendly vehicles.

To date, China municipalities have primarily promoted adoption of alternative-fuel vehicles by equipping government fleets with alternative-fuel vehicles. For example, Shenzhen, home to automaker BYD, plans to deploy 2,000 alternativefuel vehicles – 1,000 all-electric buses, 500 pure electric taxicabs, and 500 government-employed green cars – in 2012, adding to the more than 3,000 alternative-fuel vehicles registered in Shenzhen, the most of any city in China⁹.

In 2009, four China national government bodies initiated the Ten Cities, One Thousand Vehicles pilot project to promote fuel-efficient and alternative-fuel vehicles, with a goal of deploying 1,000 hybrid and/or electric vehicles for public services in each of 10 pilot cities annually between 2009 and 2012. By mid-2010, approximately 5,000 alternative-fuel vehicles were in use, and the market share of 'new energy vehicles' – which include hybrid-electric, electric, and fuel-cell vehicles – is expected to reach 10% by 2012. Worldwatch estimates that if the government continues to prioritise development of alternative-fuel vehicles for 2011–2020, domestic production of hybrid and electric vehicles could reach 16.6 million (15% of total vehicle production in China)¹⁰.

"Businesses in Australia are considering alternative-fuel vehicles principally for the cost savings," says Phillips, "but they also hope to brand their businesses as 'environmentally friendly' while leveraging government incentives." The Fuel Tax Credit is an incentive to move toward lowemissions fuels, furthering expansion of LPGpowered vehicles and significantly impacting the freight and distribution industry. Companies are entitled to fuel tax credits for duty-paid gaseous fuels used in eligible business activities; gaseous fuels are LPG, CNG, and liquefied natural gas. Another incentive, though less available to companies than individuals, is the LPG Vehicle Scheme, which provides grants (Australian \$1,250) for the LPG conversion of a registered motor vehicle, or the purchase of a new vehicle fitted with LPG prior to first registration. From July 1, 2011, to June 30, 2014, the LPG Vehicle Scheme will be capped at 25,000 eligible claims paid in a year, with grants awarded for only one vehicle every three years¹¹.



"Alternative-fuel vehicles hold potential for business-fleet-growth, driven by fuel-economy and emissions requirements, as well as government programmes promoting the development and the production of alternativefuel vehicles and fuel-efficient technologies."

JOHN PENCAK GRANT THORNTON US



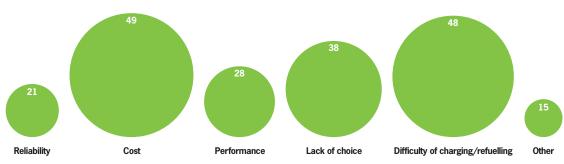
⁹ 'Shenzen to Add 2,000 Alternative Fuel Vehicles This Year', ChinaAutoWeb, March 17, 2012.

 ¹⁰ Haibing Ma and Jiajing Bi, "China, Set to Add 220,000 Million Vehicles, Aims to Green Transportation Sector," Revolt, Worldwatch Institute, April 1 2011

¹¹ LPG Vehicle Scheme (LPGVS), AusIndustry.

FIGURE 3: WHY BUSINESSES ARE NOT ADOPTING ALTERNATIVE FUEL VEHICLES PERCENTAGE OF BUSINESSES

PERCENTAGE OF BUSINESSES



WHY BUSINESSES ARE NOT ADOPTING ALTERNATIVE FUEL VEHICLES PERCENTAGE OF BUSINESSES

	Reliability	Cost	Performance	Lack of choice	Difficulty of charging/refuelling	Other
APAC	16	42	20	25	37	14
ASEAN	32	38	29	27	35	12
BRIC	15	28	20	23	33	15
EU	21	50	28	37	46	16
G7	22	56	31	41	54	14
Latin America	23	40	20	40	43	19
Nordic	28	40	28	49	57	18
North America	28	58	40	53	68	15

SOURCE: GRANT THORNTON IBR 2012

Not ready for alternative fuels

Many companies have not yet considered alternative fuels for their business fleets. The top two reasons are the costs required to convert their current fleets (49%) and the difficulties associated with charging/refueling vehicles (48%). Companies in the ASEAN, APAC, and BRIC regions were least likely to cite cost or charging/fueling as factors preventing a switch. Companies in North America were most likely to cite cost (58%) and difficulty of charging/refueling (68%) as reasons preventing a switch.

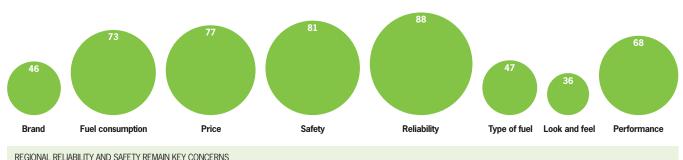
The North American findings mirror general perceptions within the United States. A 2011 study by J.D. Power and Associates found that growth of alternative powertrain vehicles sales in the United States will be limited by consumer concerns about costs as well as functionality, despite a rapid increase in the number of alternative powertrain vehicle models projected for the next several years¹². "In many other regions, infrastructure also presents a chicken-and-egg dilemma for wider adoption of alternative-fuel fleets. In Australia, the lack of infrastructure in Queensland, Western Australia, and Northern Territory keeps many companies reliant upon traditional fuels," says Phillips. "In addition, some existing fleets are difficult to retrofit, especially given a general lack of knowledge and awareness about alternative fuels among Australia businesses."

India faces similar challenges. "Lack of adequate infrastructure in India for supplying alternative fuels, like electric-charging points and gas stations (especially outside the city limits), is a major factor preventing wider adoption," says Sridhar Venkatachari. "Apart from this quality, availability of spares, lack of standardisation (especially electric vehicles), and poor resale value are also concerning to a prospective user or customer."

¹² 2011 US Green Automotive StudySM, J.D. Power & Associates, April 2011.

FIGURE 4: GLOBAL RELIABILITY AND SAFETY REMAIN KEY CONCERNS

PERCENTAGE OF BUSINESSES CITING FACTOR AS IMPORTANT



PERCENTAGE OF BUSINESSES CITING FACTOR AS IMPORTANT

	Brand	Fuel consumption	Price	Safety	Reliability	Type of fuel	Look and feel	Performance
APAC	52	75	77	87	85	50	46	77
ASEAN	62	84	81	89	91	71	52	84
BRIC	62	73	69	86	88	55	57	81
EU	38	74	80	78	87	49	31	54
G7	41	73	79	80	89	43	30	65
Latin America	62	81	79	84	87	61	40	80
Nordic	36	68	68	76	85	38	39	49
North America	41	67	71	79	92	35	26	69

SOURCE: GRANT THORNTON IBR 2012

Infrastructure constraints also worry EU transport ministers, who in March 2012 agreed on a €31.7bn plan to remove cross-border bottlenecks, upgrade infrastructure, and streamline cross-border transport operations of the Trans-European Network for Transport (TEN T). The new TEN T guidelines highlight the need for infrastructure – "... the rollout of adequate refueling infrastructure is necessary in order to substantially accelerate market uptake of clean vehicles in the EU.¹³"

It is important to note, however, that businesses consider multiple factors in making fleet-vehicle purchases. According to the IBR, the top three vehicle-selection criteria are reliability (88% of companies rated 4 or 5 where 5 equals 'very important'), safety (81%), and price (77%). 73% report that fuel consumption is an important factor in selection, yet less than half of IBR respondents (47%) report that the type of fuel is an important factor. Companies in ASEAN and Latin America regions are most likely to cite fuel consumption as an important factor (84% and 81%, respectively); companies in North America (67%) were least likely to cite fuel consumption as an important factor. Similarly, companies in ASEAN were most likely to cite type of fuel as an important factor (71%); companies in North America (35%) were least likely to cite fuel consumption as an important factor.

Despite consumer and business concerns over rising gasoline prices in North America, drivers there still pay relatively little per litre. In February 2012, US gasoline prices were approximately US \$1 per litre, compared to over US \$2 per litre in most EU countries (eg \$2.30 per litre in Italy); \$2 per litre in Japan, \$1.54 per litre in Australia, and \$1.39 per litre in Canada¹⁴.

¹³ "TEN-T Regulation Gets Green Light by Member States," Trans-European

Network for Transport Executive Agency, March 23, 2012. ¹⁴ "Daily Chart: Pump Action," The Economist online, March 26, 2012.

Should demand for alternative-fuel vehicles in the United States increase, buyers have a range of models from which to choose from. In 2011 there were 120 alternative-fuel, light-duty models (including diesel), up from just 19 in 1991 and 70 in 2010, according to the Alternative Fuels & Advanced Vehicles Data Center of the US Department of Energy:

- E85 (ethanol fuel blend) 72 models
- hybrid 29 models
- diesel 16 models
- electric vehicles 2 models
- compressed natural gas/bi-fuel 1 model¹⁵.

But development of alternative-fuel models has been a bumpy road. General Motors temporarily halted production of the hybrid Volt in March 2012; GM sold 7,700 Volts in 2011 (barely half of its original target of 15,000), and hopes to sell 45,000 in the United States in 2012¹⁶. Yet even as Volt production decelerated, both Chrysler and GM disclosed plans to build pickups powered by natural gas; Chrysler will build 2,000 trucks powered by CNG and gasoline. According to the International Association for Natural Gas Vehicles, there are approximately 150,000 CNG-powered vehicles in the United States – far below the 2.7 million in Pakistan, 1.95 million in Iran, and 1.9 million in Argentina¹⁷.

"There are more than 60 automotive brands available in Australia," says Phillips, "but most imported brands are from markets that do not incorporate LPG and manufacturers unfamiliar with the nuances of LPG motors (Australian-built alternative-fuel vehicles are most likely to be either LPG, diesel, or fuel-saving technology)." Manufacturers within Australia are encouraged to produce alternative-fuel vehicles by the Federal Automotive Transformation Scheme (ATS), which provides assistance to car and car-parts manufacturers between 2011 and 2020 that invest in research and development of technologies which benefit the environment. This has supported auto manufacturers producing locally (eg GM, Toyota, and Ford) and resulted in more vehicles using

alternative fuels and/or more fuel-efficient cars, such as the GM Holden Cruze. Manufacturers can also qualify for a share of the US\$200 million Clean Technology Innovation Programme, which helps companies invest in technology that will lower emissions.

Mike Devereux, president and chairman of the Federal Chamber of Automotive Industries and managing director of GM Holden, told the Australian National Press Club, "Billions of dollars are being spent on R&D for new powertrain technologies, innovations in light-weighting, alternative fuels, and electrification. By the end of [2012], we think around 30 new 'environmentally friendly' models will be on sale in Australia, giving drivers a choice between all-electric, hybrid, LPG, diesel, or ethanol – the choice is theirs.¹⁸"

To sell those vehicles, automakers will need to accommodate corporate buyers' preferences. Grant Thornton's Phillips says business buyers are not willing to sacrifice size or power of vehicles, and they also base decisions on price, resale value, and vehicle brand.

Although fuel economy is a consideration in India, says Sridhar Venkatachari, businesses are similarly unwilling to sacrifice performance and reliability. Business buyers also weigh price, safety, and financing options. Retrofitting capabilities are available in India for conversions to hybrid, CNG, and LPG, and alternative-fuel models are available, including:

- electric small cars manufactured by Mahindra
- CNG-based passenger buses manufactured by Ashok Leyland and Tata
- CNG and LPG variants of small cars introduced by companies such as Maruti Suzuki, GM and Hyundai.

"Businesses in Australia are considering alternative-fuel vehicles principally for cost savings, but many also hope to brand their businesses as being environmentally friendly while leveraging government incentives."

MARK PHILLIPS GRANT THORNTON AUSTRA

¹⁵ AFV/HEV/Diesel Light Duty Model Offerings by Fuel Type, 1991-2011, Alternative Fuels & Advanced Vehicles Data Center, US Department of Energy.

¹⁶ Yuliya Chernova, "GM's Volt Stumble Imperils Obama's Electric-Car Goals," The Wall Street Journal, March 2, 2012.

¹¹ Paul A. Eisenstein, "GM, Chrysler Launch Natural Gas Pickup Options," The Detroit Bureau, March 6, 2012.

¹⁸ Mike Devereux, 'Make It in Australia: Why Car Manufacturing Matters', speech to the Australia National Press Club, Dec. 7, 2011.

Call to action

Greener fleets highlights perspectives and trends for incorporating alternative-fuel vehicles into commercial fleets worldwide. How will your organisation respond to both the opportunities (eg potential cost savings, environmental branding) and the challenges (eg conversion costs, resale value, financing) presented by alternative fuels?

- Analysis of fleet costs and the costs to convert: In considering alternative-fuel vehicle options, be sure to detail costs and potential savings associated with various alternative-fuel options, given the size, age, and type of fleet you currently maintain.
- Incentives and credits: After calculating alternative-fuel conversion numbers for your company, identify national and state/province incentives and credits that can be applied for various fuel-type conversions. Government dollars can dramatically alter the equation, but are evolving rapidly. Many businesses are not aware of government incentives available to their organisations.
- **Regulatory compliance:** Even if first-pass calculations indicated that conversion to alternative-fuel vehicles may be cost-prohibitive now, what might be the eventual costs for failure to convert? Could CAFE-like requirements force unplanned purchase decisions in the future?
- **Marketing and branding opportunities:** What impact will your company's use of alternative-fuel vehicles have on customers? Many companies can brand their organisations as environmentally friendly and socially conscious simply by making their commercial fleets greener. How much is that market goodwill and customer awareness worth?

Any company can benefit from a fresh set of eyes in managing new opportunities efficiently and cost-effectively. Difficult and expensive decisions regarding fleets of business vehicles are no different. As one of the world's leading professional services organisations – with more than 2,600 partners in over 100 countries providing assurance, tax and advisory services – Grant Thornton firms are ready to assist you.



The Grant Thornton International Business Report (IBR) is a quarterly survey of 3,000 senior executives in listed and privately held businesses all over the world. Launched in 1992 in nine European countries, the report now surveys 12,000 business leaders in 40 economies on an annual basis, providing insights on the economic and commercial issues affecting companies globally.

The data in this report are drawn from 6,000 interviews with business leaders conducted between November 2011 and February 2012.

THE REGIONS IDENTIFIED IN THIS IBR REPORT CONSIST OF THE FOLLOWING COUNTRIES:

GROUP/REGION	ECONOMIES INCLUDED IN IBR
Asia-Pacific (APAC)	Australia, Hong Kong, India, Japan, China (mainland), Malaysia, New Zealand, Philippines, Singapore, Taiwan, Thailand, Vietnam
Association of Southeast Asian Nations (ASEAN)	Malaysia, Philippines, Singapore, Thailand, Vietnam
BRIC	Brazil, Russia, India, China (mainland)
European Union (EU)	Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Poland, Spain, Sweden, United Kingdom
G7	Canada, France, Germany, Italy, Japan, United Kingdom, United States of America
Latin America	Argentina, Brazil, Chile, Mexico, Peru
Nordic	Denmark, Finland, Sweden
North America	Canada, United States of America
Other	Armenia, Botswana, Georgia, South Africa, Switzerland, Turkey, United Arab Emirates

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Chile	Russia			
Mainland China	Singapore			
Denmark	South Africa			
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