



ALLIANCE OF INDUSTRIAL TRUCK ORGANIZATIONS



Presidents' Forum

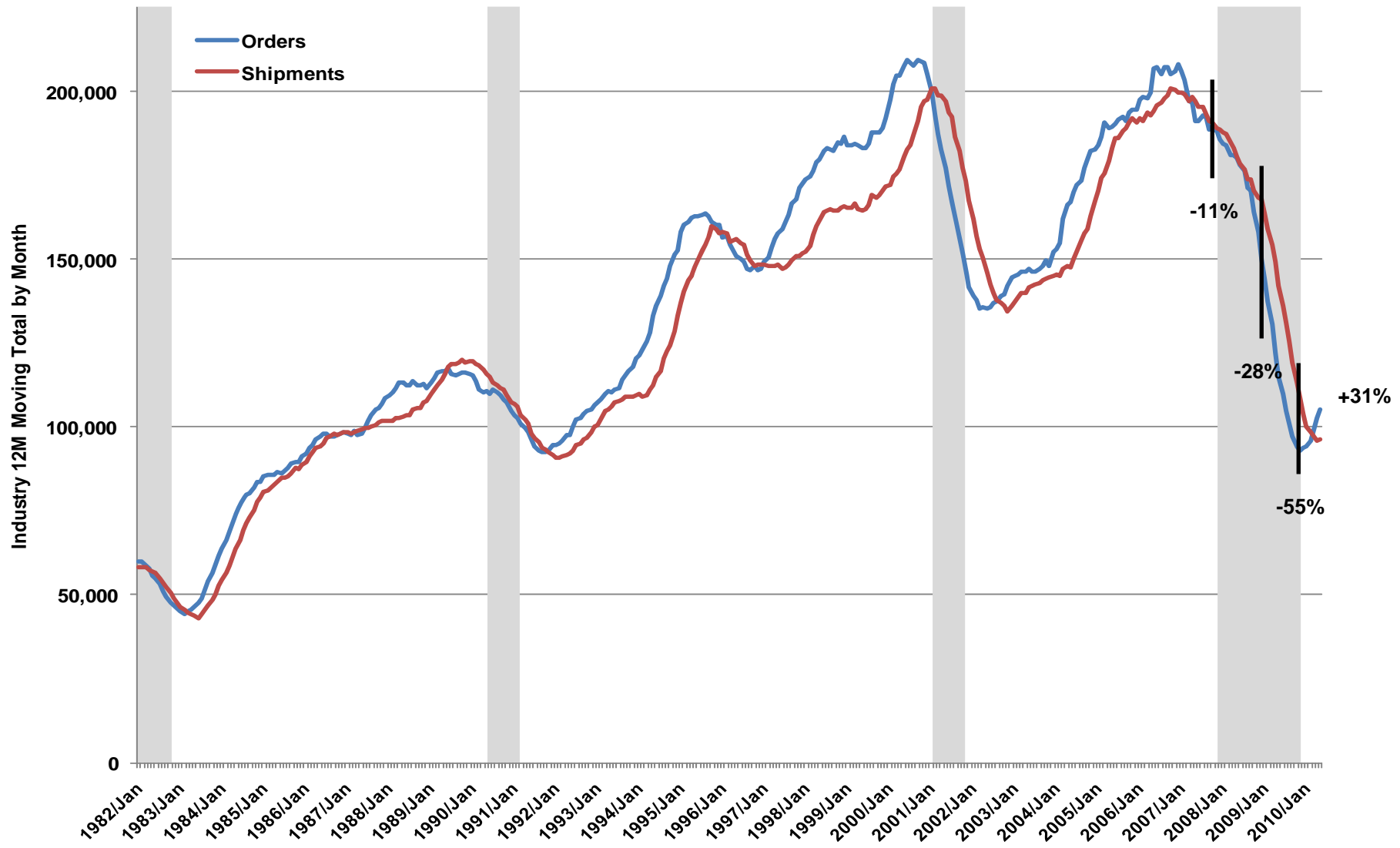
Jeff Rufener (MCFA), ITA

30 October 2010
Istanbul, Turkey



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Association

Retail Orders and Shipments

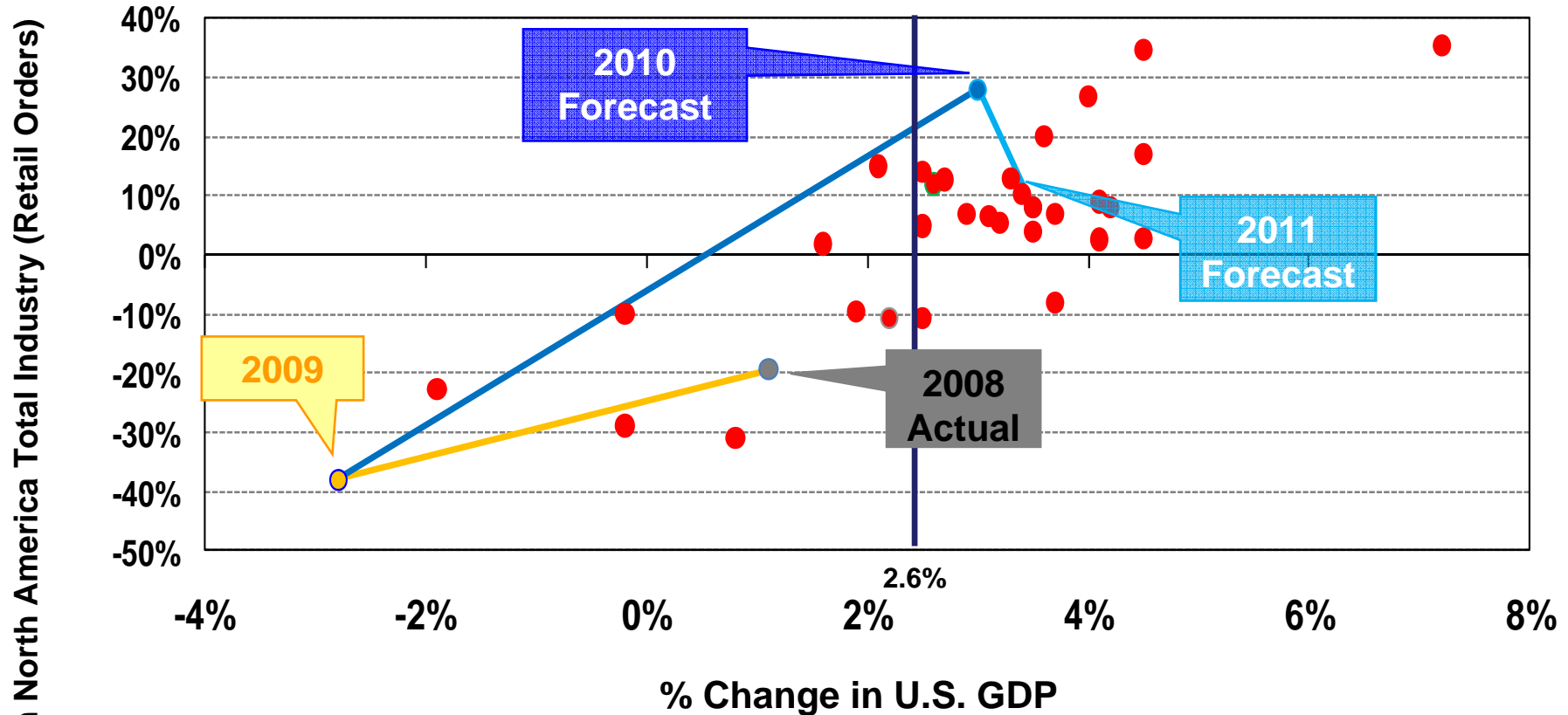




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Industry Change and GDP

GDP growth of $\geq 2.6\%$ drives market expansion



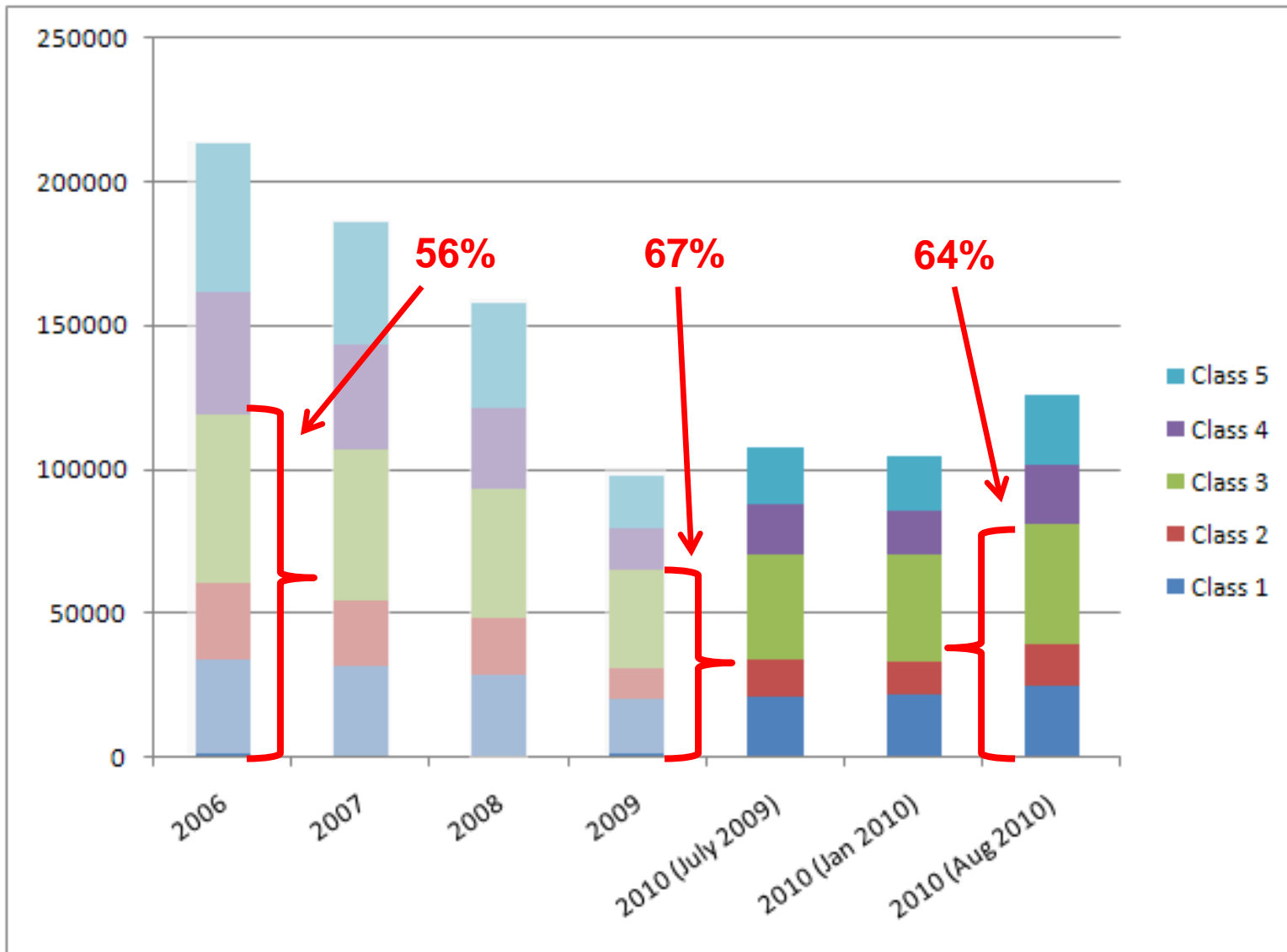
	2008	2009	2010*	2011*
Total Industry RO Volume	149,861	93,606	120,000	130,000
% Change in NA Industry	-19%	-38%	28%	8%
GDP Growth (% Change)	1.1%	-2.7%	3.0%**	3.5%**

* Forecast / ITA Guesstimate
 ** Source: Caterpillar economic forecast



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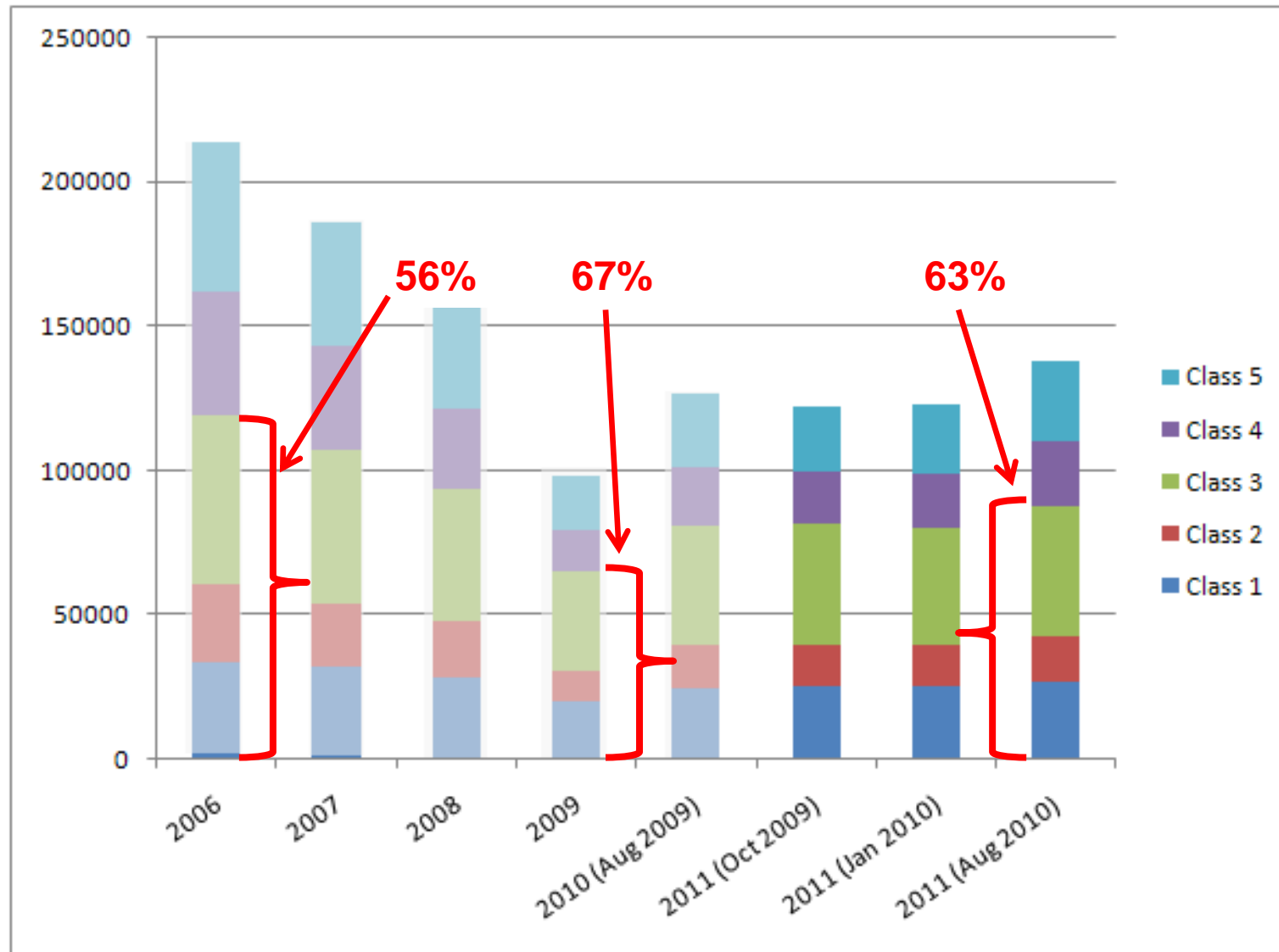
ITA Retail Orders and Forecast





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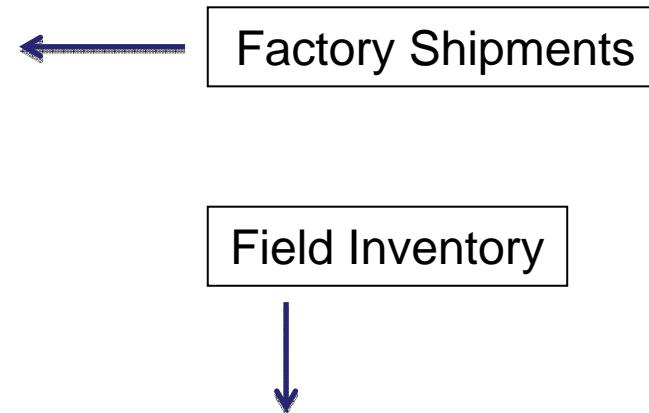
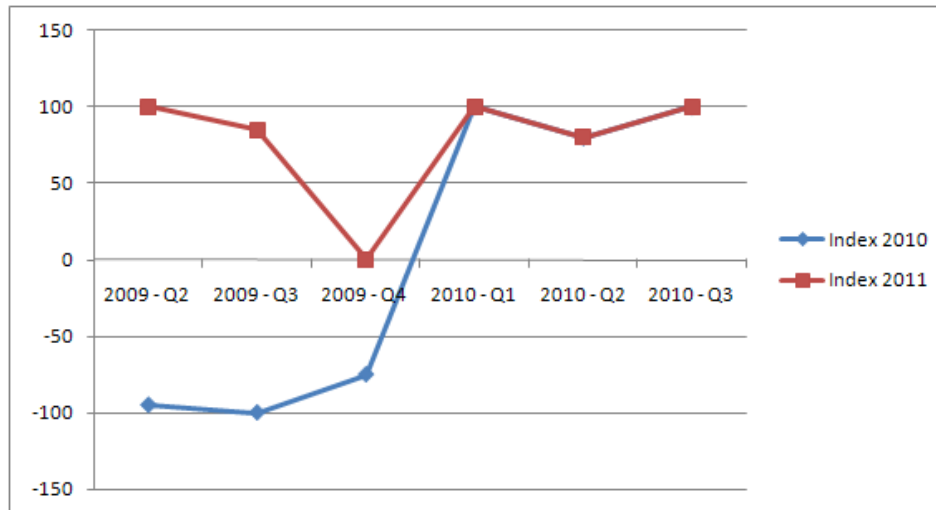
ITA Retail Orders and Forecast



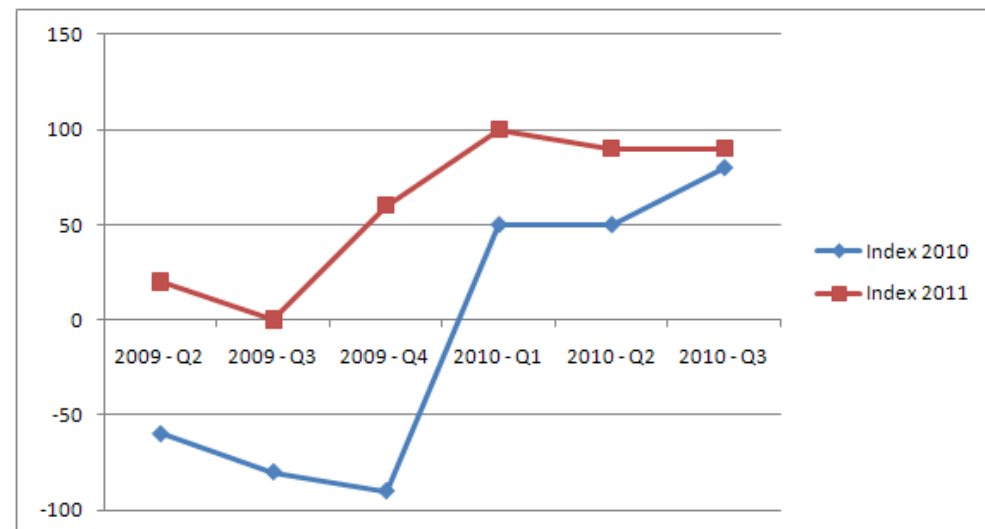


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Forecast of Member Expectations



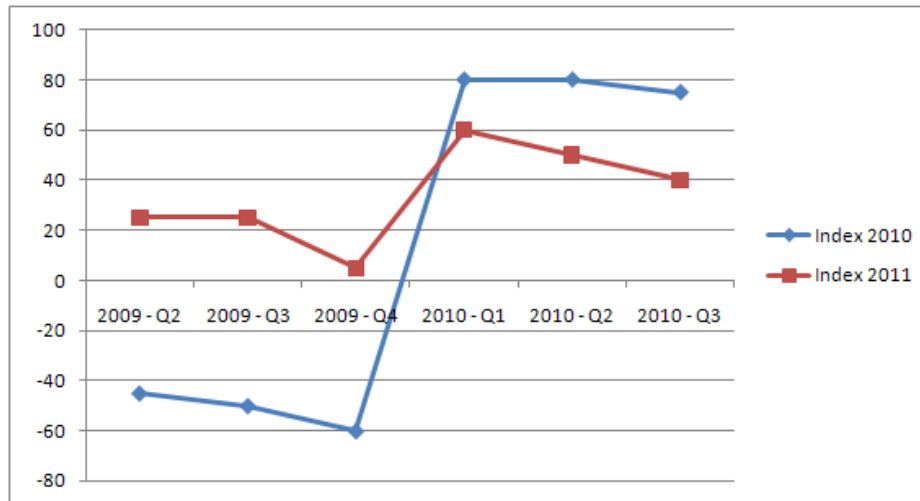
Index; Measure of Members' opinion
100 means 100% of members think the subject will increase.
-100 means 100% of members think the subject will decrease.
Surveyed both 2010 and 2011.





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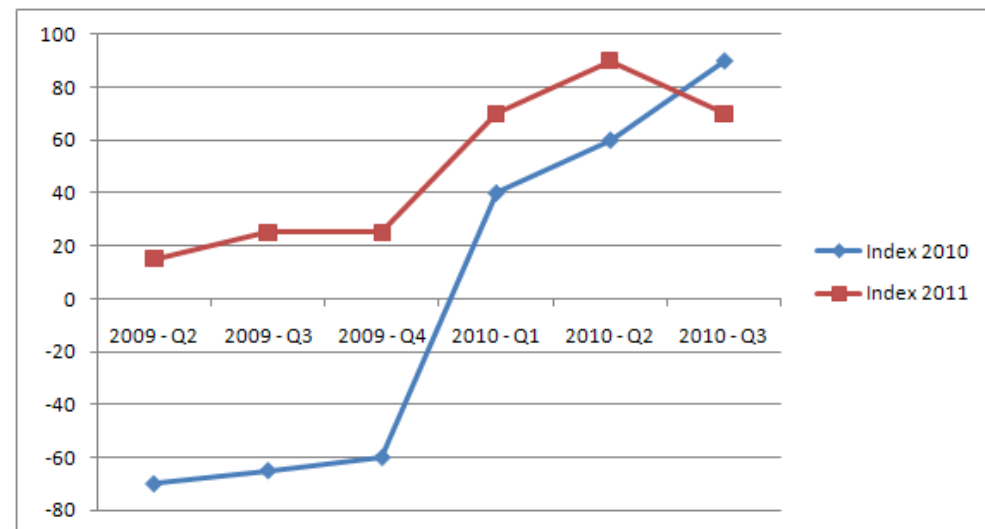
Forecast of Member Expectations

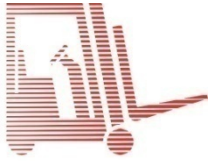


← Lead Times

Production Employees
↓

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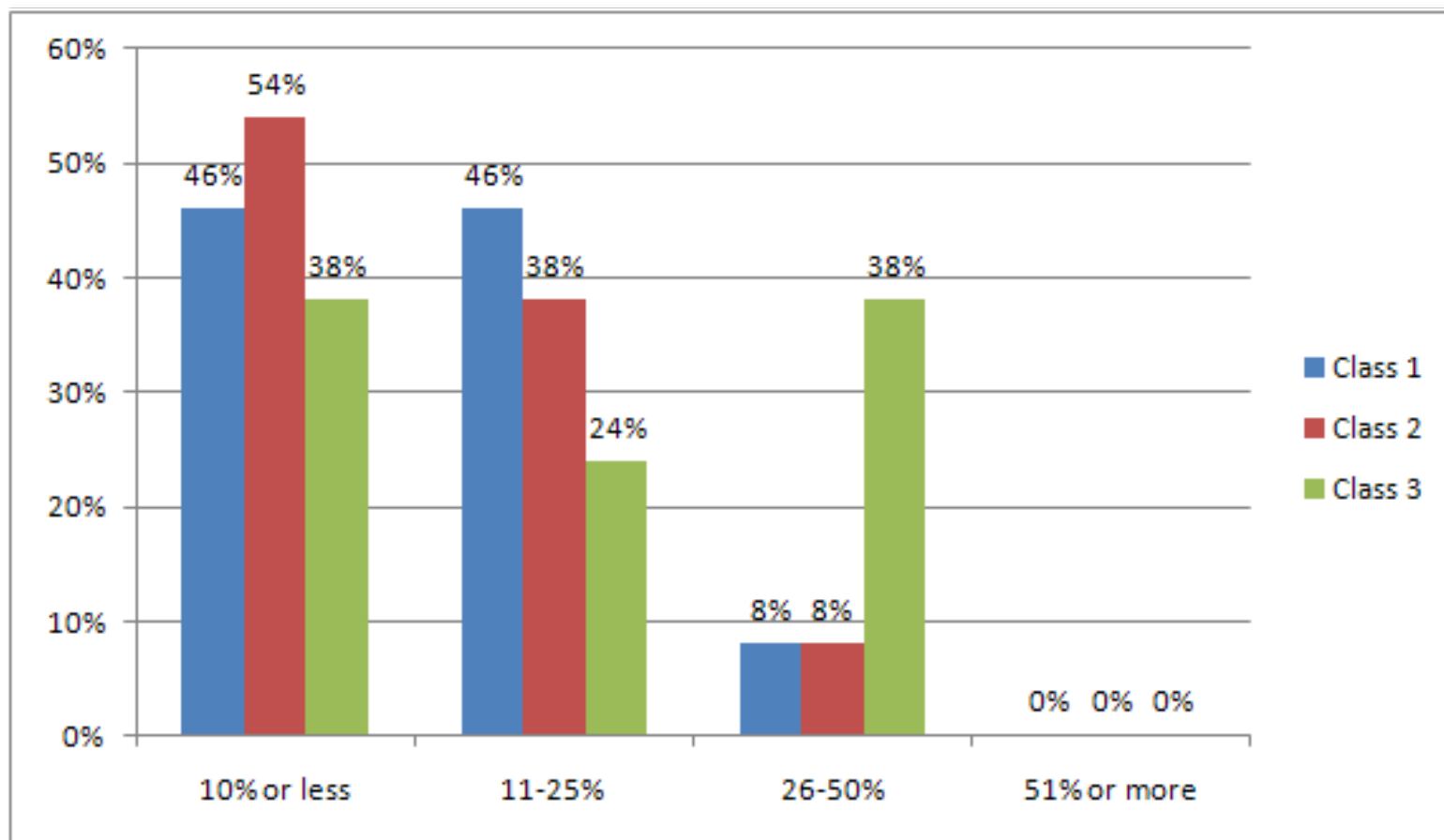
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Future Technology



Future Technology

In 2015, what percentage of class shipments will be powered by fuel cells?

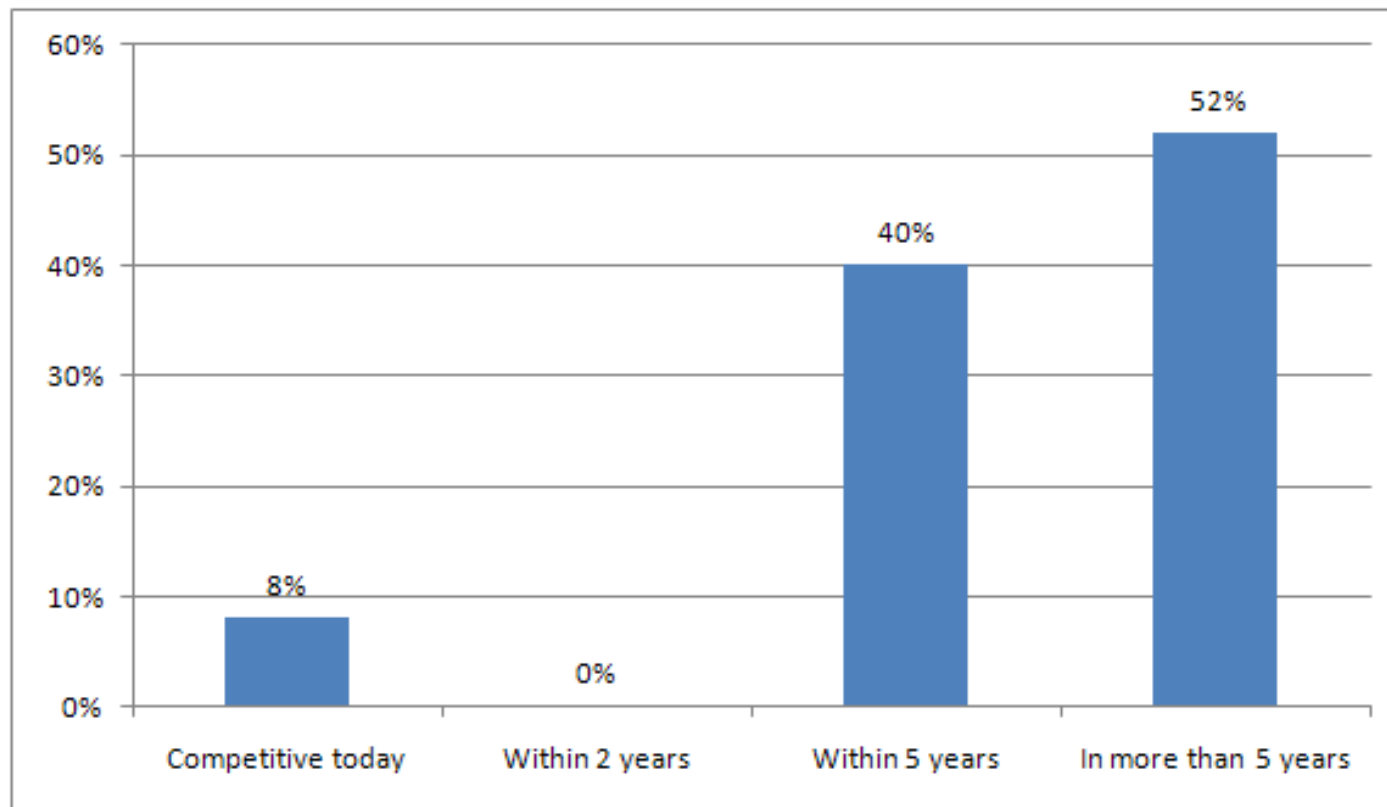




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Future Technologies

When do you believe a fuel cell system will show a positive lifecycle cost versus lead acid battery and charger systems?

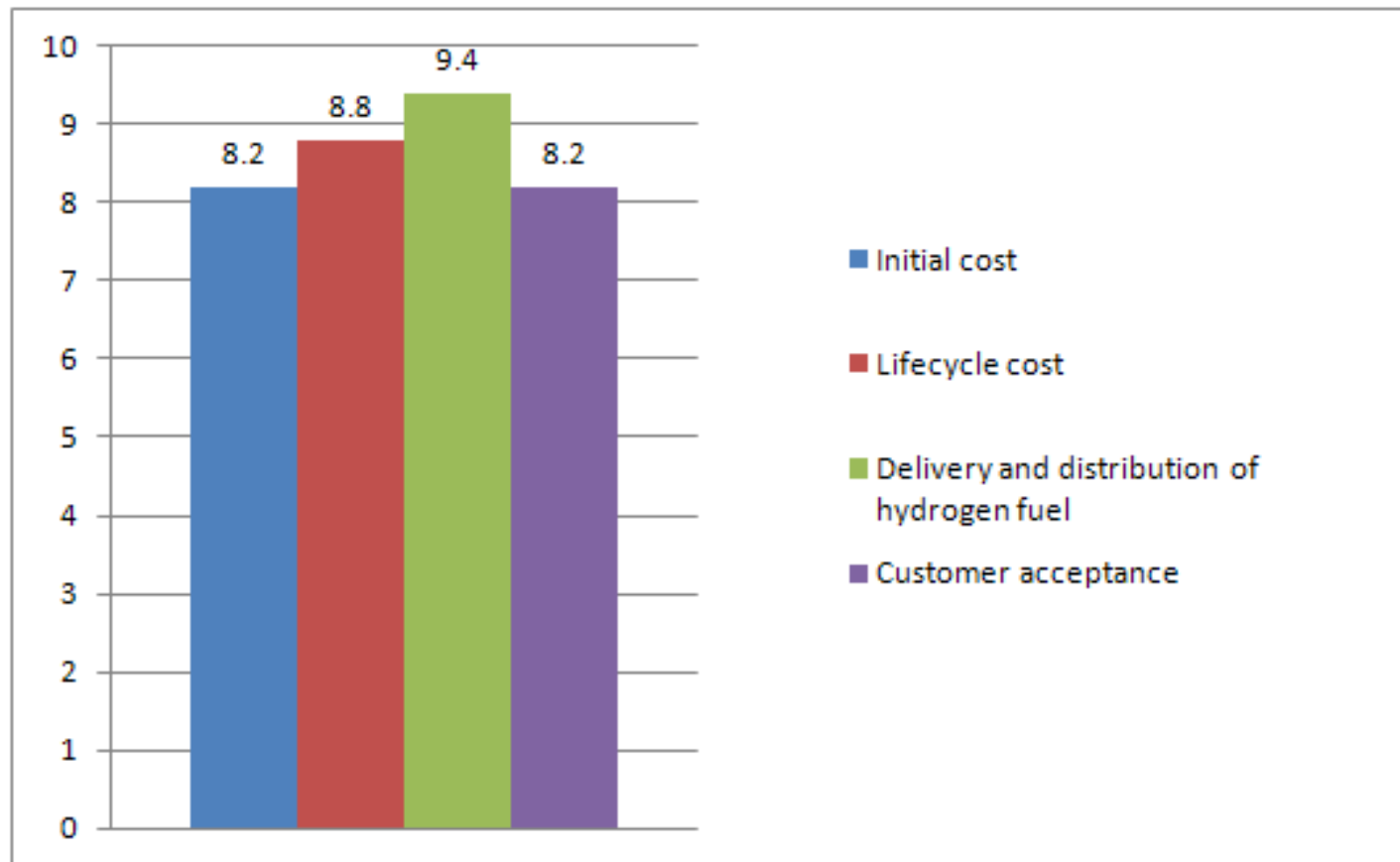




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Future Technology

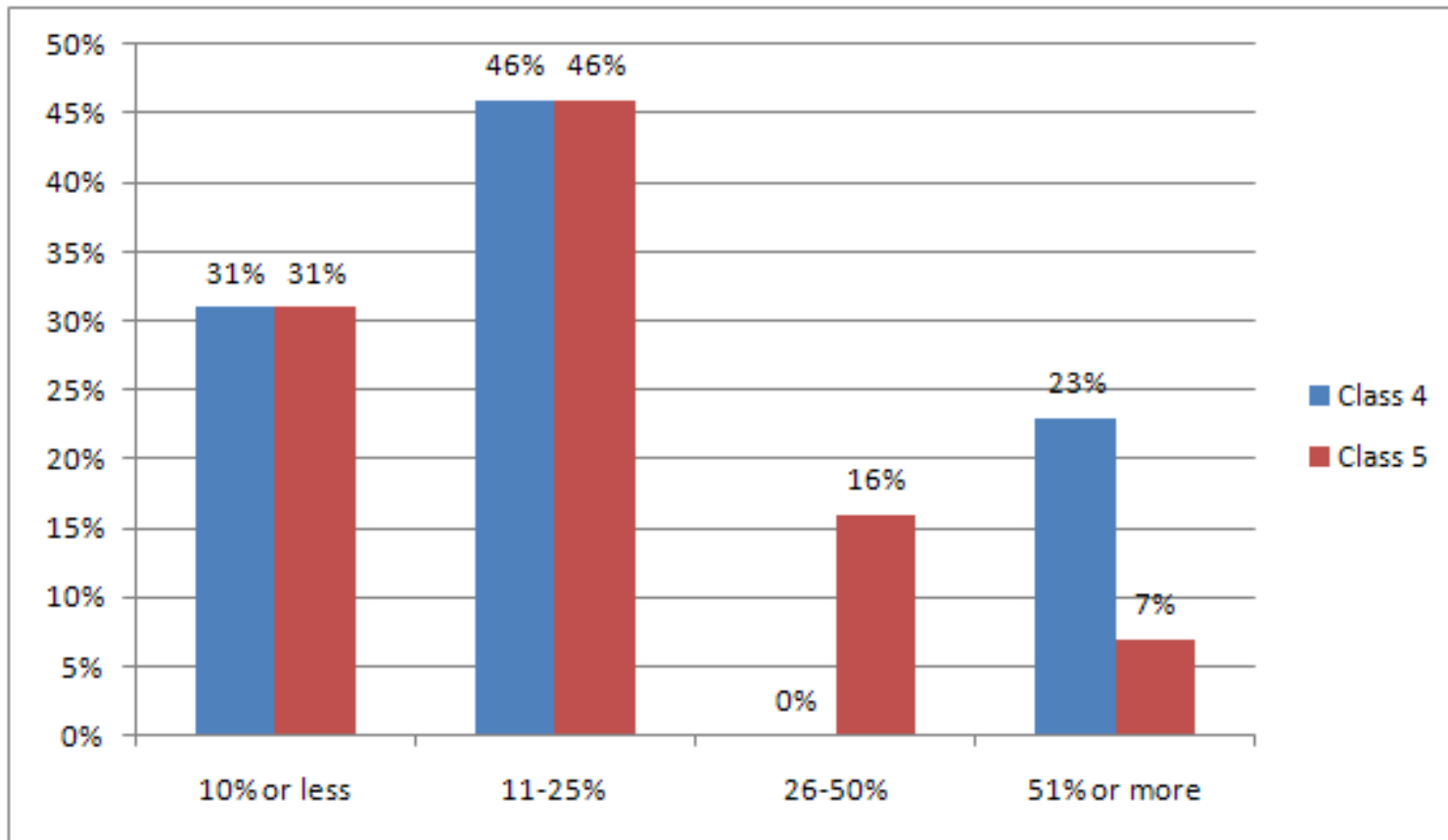
On a scale of 1 to 10, how important are the following factors regarding fuel cell technology?





Future Technology

By 2015, what percentage of trucks will utilize hybrid systems?

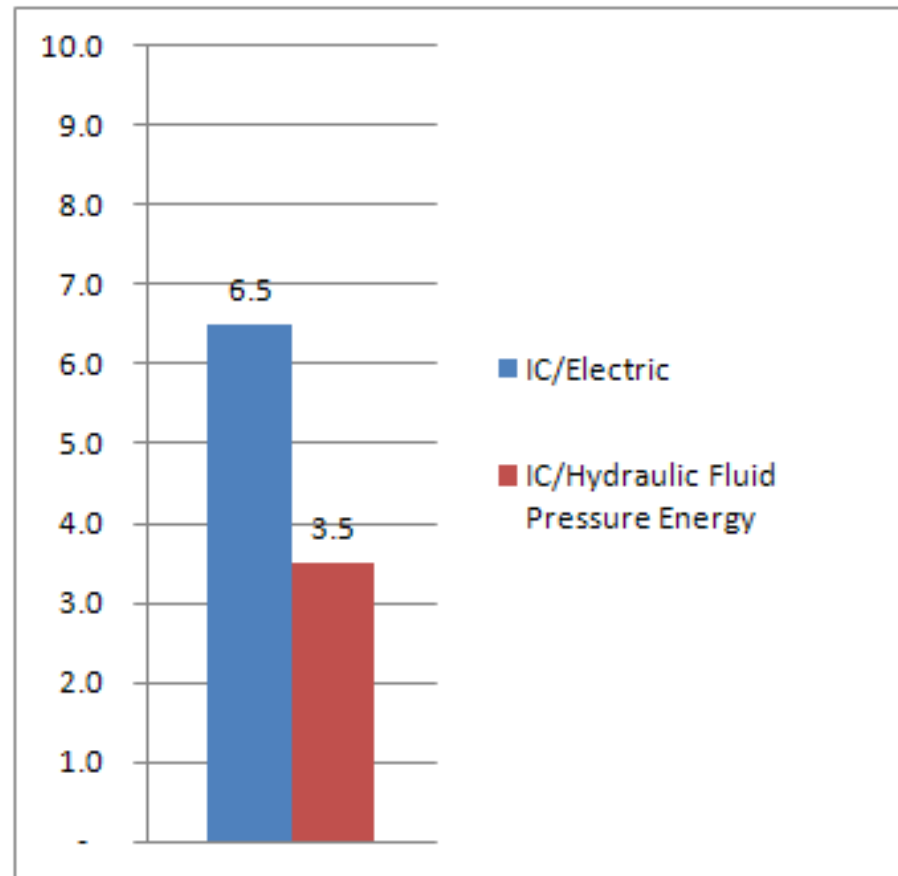




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Future Technology

On a scale of 1 to 10, what is the likelihood of the following types of hybrid-powered forklifts being available for sale by 2015?

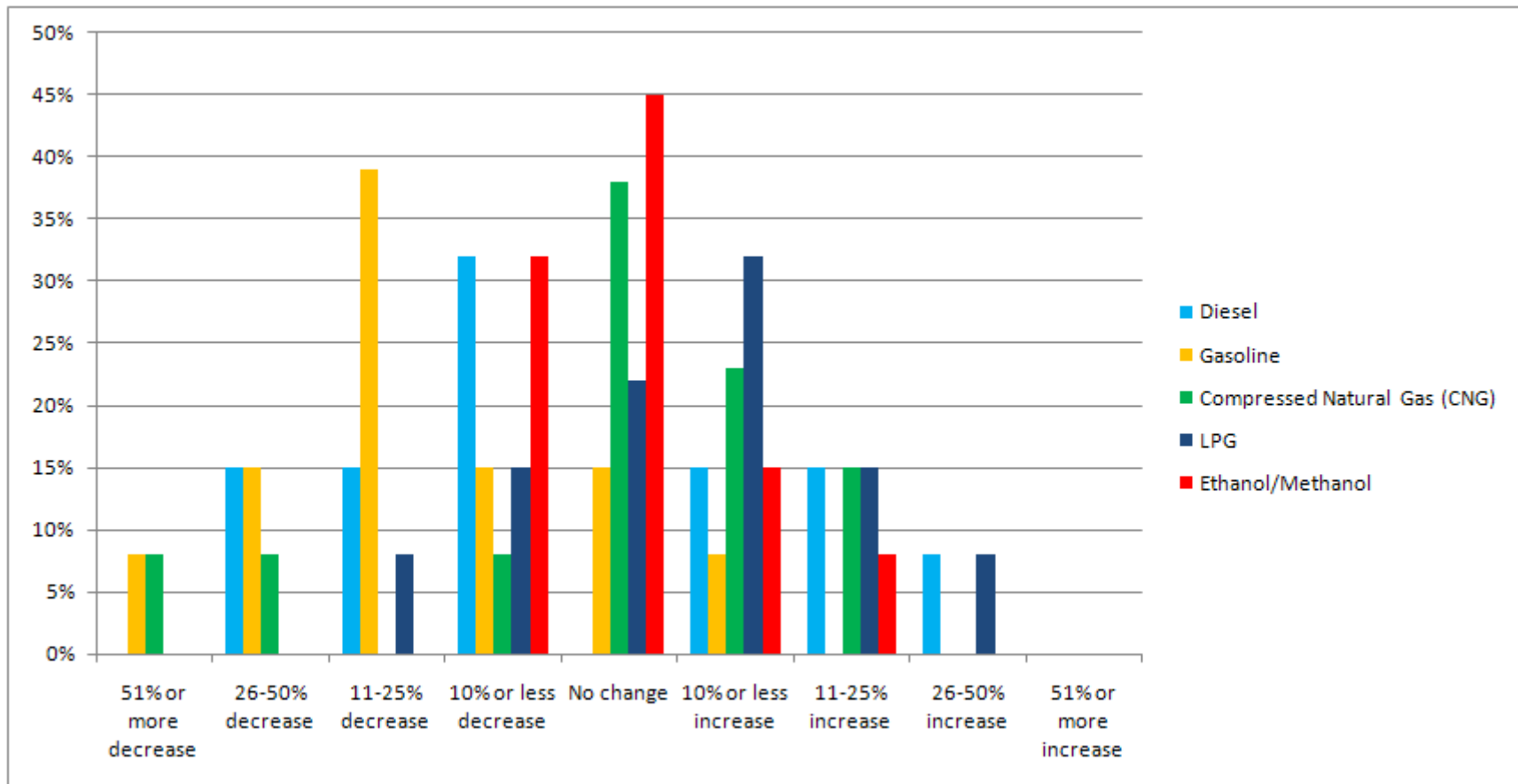




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Future Technology

How will market demand for specific types of IC-powered forklifts change by 2015?





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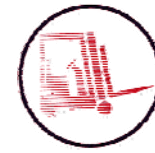
Forklifts of 2025

- Electric trucks 90% of sales. Few utilize conventional batteries.
- Fuel cells the primary power source. Ethanol and other liquid bio-fuels predominate.
- Lead-acid batteries obsolete. Replaced by lithium-ion and newer technologies.
- For IC trucks, hybrids replace conventional engine-powered trucks.
- Commercially-available LP fuel (as we know it today) will not be usable.
- Ethanol/liquid gasoline prevalent for spark-ignited trucks. CNG may be back.



Forklifts of 2025

- Diesel engines will become virtually obsolete in lower lift capacities. Only bio-diesel remains.
- Electric ball screw actuators replace hydraulic systems. Electric trucks hydraulics-free.
- Warehouses self-contained/centrally controlled by computers. Fully automated and guided forklifts are 50% industry sales.
- Human-operated trucks eliminate risk for the operators. Protected in a cocoon-like environment.
- Operator stations reversible to always face direction of travel.
- Operator controls finger/thumb operated like video game controllers.



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