

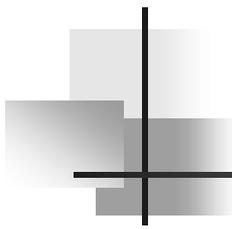
# Vehicle GHG – Workshop

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Steve Douglas

Auto Alliance

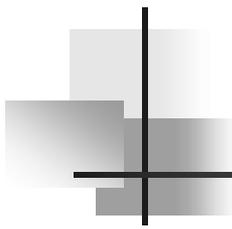
18-May-2010



# Overall

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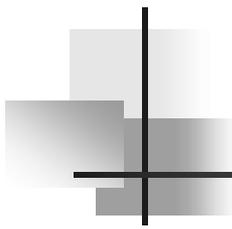
- Reducing mass reduces CO<sub>2</sub>
- Lotus & other reports good first step
- Support the recommendations of Lotus
- Propose additional areas of study



# Lotus Recommendations

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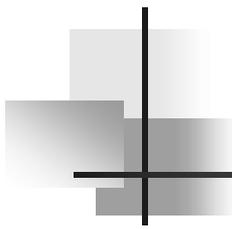
- BIW – designed and analyzed for
  - Body stiffness
  - Modal characteristics
  - Impact Performance
  - Mass and cost (tooling & piece)
- Closures – designed and analyzed for
  - Front, rear, side impact performance
  - Mass and cost (tooling & piece)



# Lotus Recommendations

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- Chassis/Suspension – Designed and analyzed for
  - Suspension geometry
  - Suspension loading
  - Mass and cost (tooling & piece)
- Interior – Designed and analyzed for
  - Occupant packaging
  - Head impact performance
  - Mass and cost (tooling & piece)



# Additional Study

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- Baseline vehicle
- Materials issues
- Functionality of light-weight components
- Weight of additional safety requirements
- Engineering, research, development, manufacturing, and tooling costs
- Lead-time provision
- Scalability of recommendations