Flex-Fuel Vehicle Modeling in the *Annual Energy Outlook*

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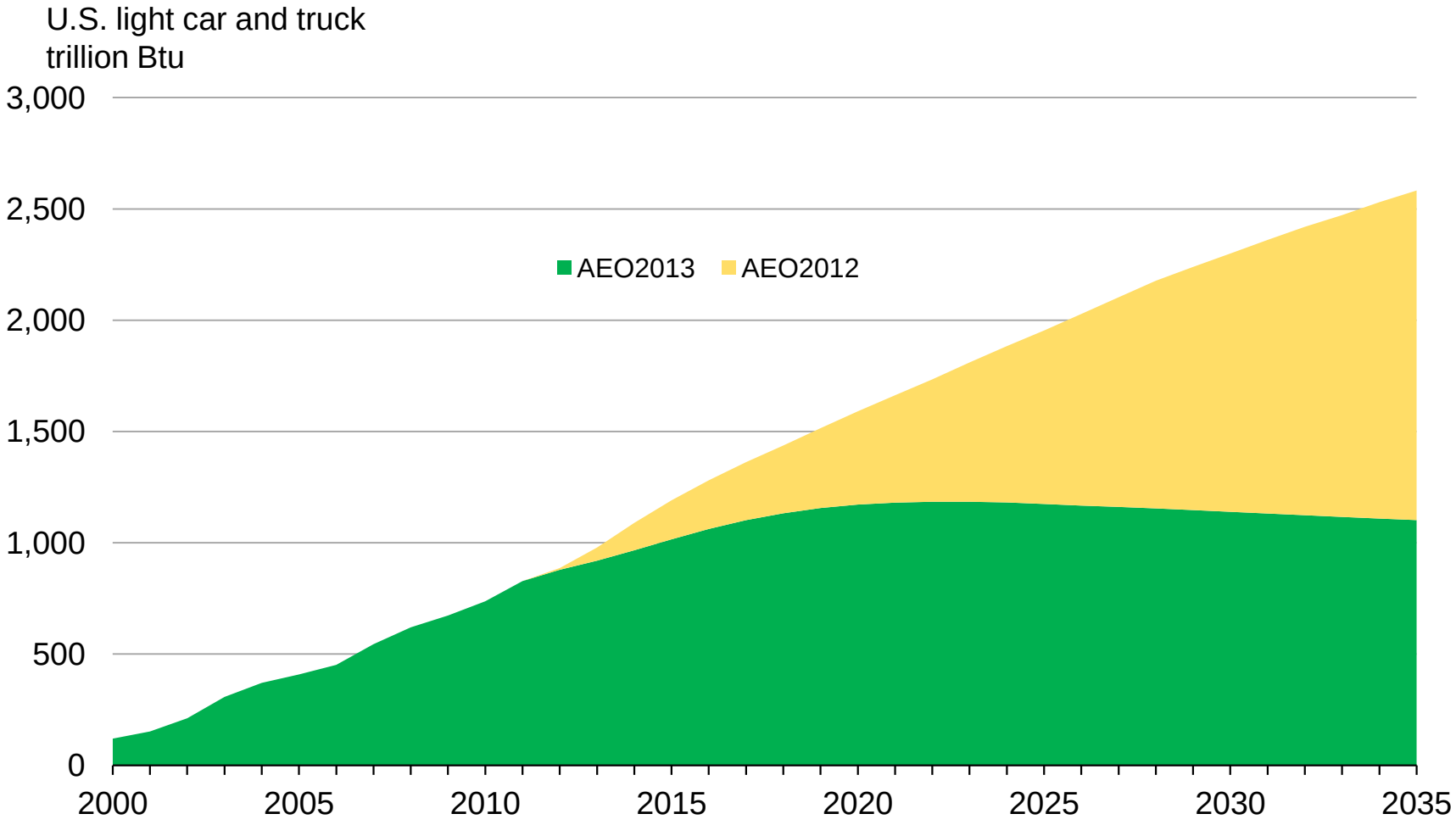
Light duty vehicle technology and alternative fuel market penetration

- Technologies affecting light-duty vehicle fuel economy are considered as either:
  - subsystem technologies (transmissions, materials, turbo charging)
  - advanced/alternative fuel vehicles (hybrids, EVs, FFVs)
- Manufacturers Technology Choice Component (MTCC)
  - 9 manufacturers, 16 vehicle types, 6 size classes
  - adopts vehicle subsystem technologies for all vehicle types (conventional gasoline, FFV, hybrid, diesel, etc.) based on value of fuel economy and/or performance improvement
- Consumer Vehicle Choice Component (CVCC)
  - Nested multinomial logit model, coefficients vary by size class
  - determines consumer acceptance (market share) by vehicle type (conventional gasoline, hybrid, diesel, etc.) and alternative fuel type

Total flex-fuel vehicle energy consumption



Source: EIA, Annual Energy Outlook 2013 Early Release Reference case, AEO 2012 Reference Case

For more information

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