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16. Abstract <p>This report discusses the application of Corporate Average Fuel Economy (CAFE) credits that are currently available to vehicle manufacturers in the U.S., and the implications of on-board carbon capture and sequestration (“on-board CCS”) on future passenger-vehicle CAFE ratings. The first part of the report describes the underlying fuel economy tests and available options for vehicle manufacturers to earn credits for exceeding the fleet fuel economy standard or for vehicle technologies that reduce greenhouse gas emissions.</p> <p>The benefits of on-board CCS, discussed in the second part of the report, appear likely to be captured during the standard 2-cycle test administered for CAFE compliance purposes. A simple calculation to correct the final fuel economy value used for CAFE compliance is needed (to reflect the resultant benefits of reduced CO₂ emissions), although this specific correction is not yet reflected in the current regulations.</p> <p>The benefits in terms of reduced emissions and overall credits appear to be substantially larger with on-board CCS than with the other optional credits available in the CAFE credit program for gasoline-powered vehicles. For example, the on-board CCS benefits at 20% capture would be several times the maximum credits available in the next highest credit category.</p>					
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