The litigation over both standards and preemption, with uncertain outcomes, created difficulty for purposes of Ford's future product planning. To avoid a "bifurcated" regulatory scenario in which California and the 15 other states that adopted California's GHG standards enforce one set of rules, while a different set of rules applies in the rest of the country, Ford reached an agreement with California on a set of terms for an alternative framework in which Ford committed to meet a designated set of standards on a national basis in lieu of the California regulatory program. This framework enabled Ford to continue its product planning on a nationwide basis, while being consistent with Ford's environmental goals. Ford finalized its agreement with California in 2020, and other states that adopted the California standards indicated they would respect the agreement.

In 2021, EPA again re-evaluated the stringency of light-duty fuel economy and GHG standards through the 2026 model year, and considered whether to restore the stringency to the previous ONP levels, or greater. EPA finalized this evaluation in December 2021, establishing GHG standards applicable to model years 2023-2026 with stringency that exceeded ONP levels. In 2022, NHTSA finalized more stringent fuel economy standards for model years 2024-2026, which are substantially aligned with EPA's GHG standards. The federal government also acted in December 2021 to repeal its rule blocking California's authority to set and enforce its own vehicle GHG standards, as well as the authority of other states that adopted California's standards, and EPA took similar action in early 2022 under the Clean Air Act. In late 2022, EPA began consideration of sweeping changes to light-duty GHG regulations for model years 2027 and beyond. These regulations are expected to extend through at least the 2030 model year, and to drive significant ZEV sales mix, along with rapid improvement of ICE vehicle performance, by virtue of greatly increased stringency. These new rules are expected to impose increased challenges and costs on the development of light-duty vehicles. If any federal or state agency imposes and enforces fuel economy and GHG standards that are misaligned with market conditions, Ford would likely be forced to take various actions that could have substantial adverse effects on its sales volumes and results of operations. Such actions likely would include restricting offerings of selected engines and popular options; increasing market support programs for Ford's most fuel-efficient vehicles; and ultimately curtailing the production and sale of certain vehicles, such as high-performance cars, utilities, and/or full-size light trucks in order to maintain compliance.

U.S. Requirements - Heavy-Duty Vehicles. EPA and NHTSA have jointly promulgated GHG and fuel economy standards for heavy-duty vehicles (generally, vehicles over 8,500 pounds gross vehicle weight rating) through the 2027 model year, and EPA is preparing a major update to these standards for the 2027 model year and beyond. In Ford's case, the standards primarily affect heavy-duty pickup trucks and vans, plus vocational vehicles such as shuttle buses and delivery trucks. As the heavy-duty standards increase in stringency, it may become more difficult to comply while continuing to offer a full lineup of heavy-duty trucks.

European Requirements. The European Union regulates passenger car and light commercial vehicle CO_2 emissions using sliding scales with different CO_2 targets for each manufacturer based on the respective average vehicle weight for its fleet of vehicles first registered in a calendar year, with separate targets for passenger cars and light commercial vehicles. A penalty system applies to manufacturers failing to meet the individual CO_2 targets. Pooling agreements between manufacturers to utilize credits are possible under certain conditions, and we have entered into such pooling agreements in order to comply with fuel economy regulations without paying a penalty and to enable other manufacturers to benefit from our positive CO_2 performance. For "multi-stage vehicles" (e.g., Ford's Transit chassis cabs), the base manufacturer (e.g., Ford) is fully responsible for the CO_2 performance of the final up-fitted vehicles. The initial target levels get significantly more stringent every five years (2025, 2030, and 2035, after which all new vehicles must be zero emission), requiring significant investments in propulsion technologies and extensive fleet management forcing low CO_2 emissions. The United Kingdom and Switzerland have introduced similar rules, and the United Kingdom is considering adopting ZEV mandates.

The EU Commission is investigating the introduction of Real Driving CO_2 and Life Cycle Assessment elements, and heavy-duty vehicles are addressed in separate regulations with analogous requirements and challenges. As discussed above, the EU Commission has announced a "Green Deal" that is likely to trigger more stringent requirements for CO_2 emissions (including stricter CO_2 fleet regulations) and other regulated emissions and include recycling and substance restrictions. While the EU Commission targets net climate neutrality by 2050 and a more ambitious 2030 interim target (a 55% instead of 40% CO_2 reduction compared to 1990), several countries, such as Germany, have adopted stricter interim targets and earlier net climate neutrality targets.

Ford also faces the risk of advance premium payments for both passenger cars and light commercial vehicles in all European markets due to, for example, unexpected market fluctuations and shorter lead times impacting average fleet performance.