Mobility and Energy Future Service: Top 5 key questions for mobility in 2020

What is in store for mobility in 2020? The future of mobility promises to be one that is more electric, shared, and autonomous. IHS Markit’s Mobility and Energy Future service closely tracks the pace of change of the automotive ecosystem toward such a future. As part of this effort, we have identified five key questions facing the mobility sector this year and beyond. Two key variables looking ahead are (1) the importance of policy; and (2) the cost and complexity of introducing and scaling innovations – and need for companies to make difficult choices on how best to allocate limited amounts of capital. We highlight five key questions facing the mobility sector in 2020 and beyond.

1. **Will electric vehicle (EV) sales growth reaccelerate in 2020?**
   Government policy will continue to be the most important driver of EV sales in 2020. Policies include:
   - **Mainland China**: New energy vehicle (NEV) production mandate and central government subsidies
   - **Europe**: Stricter CO2 emission limits and extended subsidies in several key auto markets
   - **United States**: A federal tax credit of up to $7,500 for EV purchases from many – but not all – automakers, and subsidies from a number of states

2. **How will concerns about climate change and pollution alter mobility via the car?**
   - **Climate change**: Transportation accounts for about 25% of global energy GHG emissions today
   - **Transportation**: LVs (cars) are the single-biggest component of energy use in the transportation sector
   - **Pollution**: Policy in high-profile cities could influence a broader adoption of restrictions on car use
   - **Car use**: Use of cars, particularly oil-powered cars, faces potentially more regulations that restrict or ban use

3. **Will mobility as a service (MaaS) be regulated into submission?**
   After some years of operation, MaaS in many cities is contributing to local air pollution, while demand for journeys is further adding to traffic congestion. Among other measures, cities are likely to introduce more MaaS surcharges and use proceeds to help alleviate some adverse effects of the rapid growth of MaaS, as well as “give back” to the city to enhance residents’ quality of life.

---

**GHG emissions from energy use**

![Graph showing GHG emissions from energy use](source: IHS Markit)
4 Is autonomous vehicle (AV) deployment moving further away?

Barriers to AV adoption

- Technology and cost
  - Validating safety of AV driving software
  - High AV system costs

- Policy
  - Existence of inhibiting “legacy” motor vehicle travel regulations
  - Lack of widely accepted safety standards for AVs

- Public acceptance
  - Perception of AVs as unsafe
  - Lack of perceived benefits of AVs

Source: IHS Markit

5 Will micromobility thrive or flop in 2020?

Cities will hold the key to success for 2020 and beyond. Further regulation from cities (such as limiting the number of operators) could slow micromobility growth. However, overall, cities have chosen to regulate, not ban, micromobility—making it an option for urban mobility.

Note: Lime includes both e-scooter and e-bike trips.

E-scooter versus ride-hailing adoption

- Lime (micromobility)
- Bird (micromobility)
- Lyft (ride-hailing)

Source: IHS Markit

The full report of Key Questions for Mobility in 2020 is part of the Mobility and Energy Future Service. This service examines key areas of change for the global transportation ecosystem and the implications for the automotive, energy, technology and chemical industries. Continue to gain valuable insight into the mobility sector, visit ihsmarkit.com/MEF or email OMDCSales@ihsmarkit.com