

UNIVERSITY of **HOUSTON**

C. T. BAUER COLLEGE of BUSINESS
Gutierrez Energy Management Institute

Breakout Group Outline

Postulated Rapid EV Penetration Scenario

Global Scenario

- Global passenger car fleet grows from 1 billion in 2015 to 2 billion in 2040
- **Global EV car sales grow from 1% of total sales in 2015 to 35% in 2030 to 100% in 2040**
 - EV sales over period 2015-2040 average 40% of total sales
 - EV sales equal 210 million per year in 2040
- **As a result, EV's are 55% of the global passenger car fleet in 2040**

US/Houston

- Assume trends in term of percentages are similar

Base Case – 55% of sales and 33% of fleet by 2040

Break-out Groups - 1

What types of issues need to be considered when thinking about the move to clean transportation in Houston?

- Cost-competitiveness of EVs and other forms of clean transportation
- Availability of renewable power and charging infrastructure
- Pace of development of autonomous vehicle technology
- Impact on traffic flows and patterns and road construction needs
- Consumer acceptance of autonomous vehicles, shared transportation, and transportation-as-a service
- Impact of reduced demand for taxis and traditional mass transit

What would be some initiatives to encourage the move to clean transportation in Houston?

- Local vehicle incentives (purchase subsidies, favorable lane and parking access, free charging, reduced costs for licenses and tolls).
- Airport and Port vehicle access programs
- Business engagement plan
- Community engagement plan
- Steps to overcome potential opposition
- Timeline of implementation

Break-out Groups - 2

Who are the stakeholders that need to be involved to accelerate clean transportation in Houston?

- Government entities (local, county, state, federal)
- Community groups
- Business groups
- Auto manufacturers
- Renewable power and electricity infrastructure providers

Break-out Groups - Process

Discuss the three questions

1. Review group knowledge/points of view on topics
2. Consider entirety of the challenge
3. Don't be limited by the sub-bullets listed

For each question, identify

1. The most important items (and why you think they are critical)
2. The biggest insights from the discussions (things people in the group hadn't previously thought about)
3. Areas your group would like to know more about