

The Roles of Hydrogen and Fuel Cell Electric Vehicles in Transportation and a Decarbonized Economy

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TECHNICAL ISSUES

WHAT ARE FUEL CELL VEHICLES

- **How do they work?**

WHAT ROLE DOES HYDROGEN PLAY IN EVS?

WHAT INFRASTRUCTURE IS NEEDED?

- **Hydrogen fueling stations – other?**

WHAT TECHNOLOGY ADVANCES ARE NEEDED?

WHAT TYPE OF VEHICLES CAN USE FUEL CELLS?

HOW DO FUEL CELLS MESH WITH OTHER CLEAN FUELS?

POLICY ISSUES

WHAT CAN STATES DO?

WHAT STATE POLICIES HAVE WORKED?

WHERE CAN FEDERAL GOVERNMENT HELP?

WHAT FEDERAL POLICIES HAVE HURT?

- **rollback of auto efficiency standards, biofuel standards and clean power plan**
- **large subsidies for fossil fuels**

PANELISTS

SUZANNE LOOSEN, SAN FRANCISCO DEPT. OF ENVIRONMENT

- **Zero Emission Vehicles Coordinator**

JAMES KAST, TOYOTA MOTOR NORTH AMERICA (TMNA)

- **Fuel Cell Business Analyst – Advanced Business Strategy**

DAVE EDWARDS, AIR LIQUIDE

- **Director, and Advocate for Hydrogen Energy, Air Liquide**

MICHAEL PENEV, NATIONAL RENEWABLE ENERGY LAB

- **Senior Transportation Analyst**