

J-2.1 Hydrogen Production,

J-2.2

J-3.1

J-3.2

J-3.3

K-1.1

K-1.2

K-2.1

K-3.1

L-1

L-2

L-3

L-4

L-5

L-6

M-1.1

M-2.1

M-2.2

M-3.1

M-3.2

N. Policy

N-1.1

N-1.2

N-1.3

N-2.1

N-2.2

N-3.1

0-1

O. Others

L. Energy

K. Environment

Emissions

K-2.2 Life Cycle Analysis

(EMC)

Primary Energy

Consumption

Energy Recovery

Energy Security

Taxation

M-3.3 Fleet, Leasing

Public Policy

Regulations

O-2 International Networking

Maintenance

Mandate

N-1.4 Incentive

Promotion

Recycle, Solar Energy

M. Demonstration & Market Issues

M-1.2 Marketing, Market Analysis

Introduction, Demonstration

Subsidy, Purchase Subsidy

Education, Public Education

Training, Job Creation

Sustainable Mobility

Education, Public Education

Codes, Standards, Legislation,

Life Cycle Analysis

Hydrogen Storage

Inductive charger

Conductive Charger

Co-generation Systems

Charging Station, Charger

Zero Emission Vehicle (ZEV)

Electromagnetic Compatibility

Environmental Impact

Energy Efficiency, Energy

A. Vehicles & Transportation Systems

- A-1.1 Battery Electric Vehicles
- A-1.2 Hybrid Electric Vehicles
- A-1.3 Fuel Cell Vehicles
- A-2.1 Passenger Cars
- A-2.2 Light Vehicles
- A-2.3 Two- and Three-Wheelers
- A-2.4 Heavy Duty Vehicles
- A-2.5 Buses
- A-2.6 Bicycles
- A-2.7 Bikes
- A-2.8 Motorcycle

A-3.1 Public Transport

- A-3.2 Railway Vehicles, Railway System
- A-3.3 Transportation Systems (ITS, etc.)
- A-3.4 Boats, Waterborne Transportation
- A-3.5 Welfare and Senior Vehicles
- A-3.6 Off-Road and Industrial Vehicles
- A-3.7 Military Application

B. Rechargeable Energy Storage Systems (RESS)

- B-1.1 On-board Energy Storage System
- B-1.2 Peak Power Systems
- B-2.1 Depth of Discharge (DOD)
- B-2.2 State of Charge (SOC)
- B-2.3 Cycle Life
- B-2.4 Ragone Plot
- B-2.5 Energy Density, Wh/kg
- B-2.6 Power Density, W/kg

B-3.1 Battery Management System (BMS)

- B-3.2 Battery Model
- B-3.3 Cell Uniformity
- B-3.4 Cell Voltage
- B-3.5 Charge, Charging
- B-3.6 Fast charge
- B-3.7 Charge Equalization
- B-3.8 Thermal Management

B-4.1 Battery, Secondary Battery

- B-4.2 Flooded Battery
- B-4.3 Lead-acid Battery
- B-4.4 Valve Regulated Lead-acid (VRLA) Battery
- B-4.5 Li-Ion Battery, Lithium Ion Battery
- B-4.6 Lithium Metal, Lithium Polymer
- B-4.7 Nickel Metal Hydride (Ni-MH)
- B-5.1 Battery Pack
- B-5.2 Electrolyte
- B-5.3 Electrodes
- B-6.1 Capacitors
- B-6.2 Double-layer Capacitors
- B-6.3 Ultra Capacitor, Super Capacitor
- B-6.4 Flywheels

C. Drive Systems/ Propulsion Systems

- C-1.1 Electric Drive
- C-1.2 Power Electronics
- C-1.3 Controller, Control System
- C-1.4 Inverter
- C-1.5 Soft Switching
- C-1.6 Converter

C-1.7 DC-DC

- C-2.1 Motor
- C-2.2 Synchronous Motor
- C-2.3 Permanent Magnet Motor
- C-2.4 Switching Reluctance Motor
- C-2.5 Induction Motor
- C-2.6 DC Motor
- C-2.7 Wheel Motor, Hub Motor
- C-3.1 Control, Measure
- C-3.2 Power Assist System (PAS)

D. Propulsion Systems

- D-1 Power train
- D-2 Transmission
- D-3 CVT
- D-4 Planetary gear
- D-5 Regenerative (ReGen) Brake

E. Auxiliary Systems (Components /

- Subsystems)
- E-1 Components
- E-2 DC-DC
- E-3 Cooler, Air conditioner
- E-4 Electric Power Steering
- E-5 Heat exchanger
- E-6 Instrumentation

F. HEV / Hybrid System

- F-1.1 Series HEVs
- F-1.2 Parallel HEVs
- F-1.3 Plug-in Hybrid
- F-1.4 Grid-connected HEVs
- F-2.1 Hybrid Strategy
- F-3.1 Torque Splitter

G. FCV & Fuel Cell System

- G-1.1 Hydrogen Storage
- G-1.2 Hydrogen
- G-1.3 Hydrogen Production
- G-1.4 Liquid Hydrogen

H. Tests& Measurements

H-2 Vehicle Performance

I-1 Modeling, Simulation

Infrastructure

I-2 Finite Element Calculation

J. Infrastructure (Including Off Board

J-1.1 Energy Supply, Energy Supply

Communication Protocol

H-1 Data Acquisition

Range

I. Simulations

Chargers)

J-1.2

H-3

- G-2.1 PEM/PEFC
- G-2.2 SOFC
- G-2.3 FC Stack
- G-3.1 Methanol, Methanol Conversion
- G-3.2 Reforming, On-board Reforming