

**HYBRID CONVERSION SYSTEM PUBLIC WORK GROUP MEETING
ATTACHMENT 1: INNOVATIVE TECHNOLOGY REGULATION (ITR) POTENTIAL DRAFT REGULATORY STRUCTURE**

POTENTIAL HYBRID CONVERSION SYSTEMS FOR MEDIUM- AND HEAVY-DUTY VEHICLES

ITR would define specific criteria for ARB-approval of hybrid truck and bus conversions.

- A hybrid conversion system manufacturer would comply with progressively more stringent certification, OBD, and warranty requirements as allowable sales volumes increase between Tier 1 → Tier 2 → Tier 3/Final certification.
- Allowable volumes and sunset dates, shown in Table 1 below, are dependent upon all-electric range, or AER.
- Hybrid conversion systems with <35 miles AER *first* certified after January 1, 2022 would proceed directly to the most rigorous Tier 3/Final certification requirements.
- Hybrid conversion systems with 35+ miles AER *first* certified after January 1, 2025 would proceed directly to the most rigorous Tier 3/Final certification requirements.
- A conversion system demonstrating a 20+ percent CO₂ benefit would get an Executive Order indicating the system has potential to achieve said benefit when newly installed. This identified benefit could be used for marketing purposes only.
- Only a 2007 MY or newer Class 2b/3 vehicle or 2010 MY or newer heavy-duty vehicle could be converted.

Table 1: Possible ITR Structure and Sunset Dates for Hybrid Conversion System Certification Flexibility

Calendar Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025+
Conversion System Achieving <35 Miles AER	Tier 1 (10 units/manufacturer) --> Tier 2 (500 units/manufacturer) --> Tier 3/Final						Tier 3 Only			
Conversion System Achieving 35+ Miles AER	Tier 1 (25 units/manufacturer) --> Tier 2 (1,000 units/manufacturer) --> Tier 3/Final									

Hybrid Technology Emission Testing: The Proposed ITR would include heavy-duty hybrid technology emission test protocols for evaluating CO₂ emission benefit and potential NO_x, CO or HC emission increases. Staff is working with stakeholders to ensure a minimum required consistency among in-use PEMS tests utilizing metrics such as average speed and kinetic intensity.