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 CO_2 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 CO_2 emission benefit and potential NOx, 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.