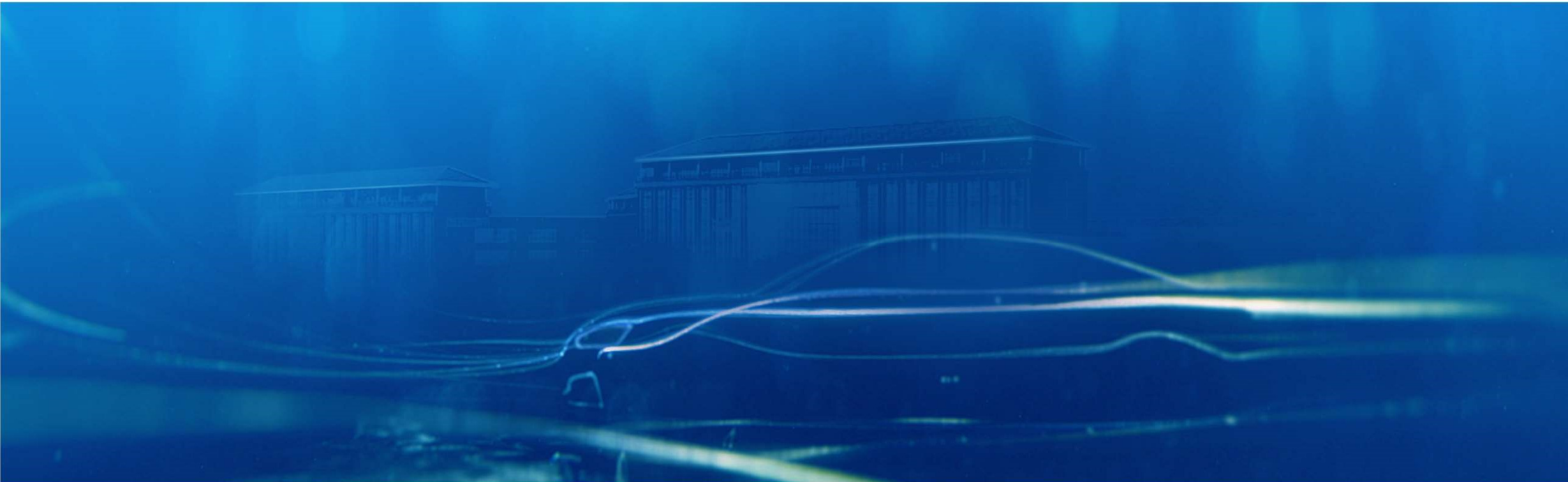


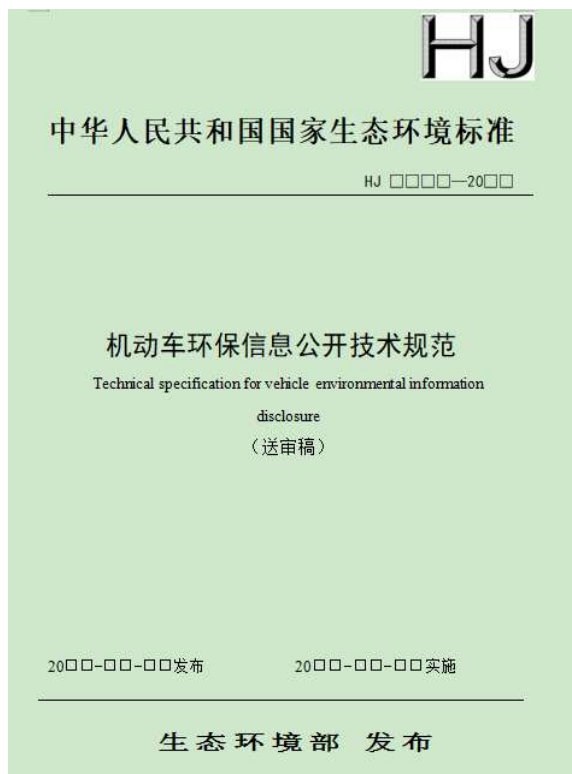


# SG4-Experience & Methods for Accessing Emissions during Usage Phase



Vehicle Emission Control Center, Chinese Research Academy of Environmental Sciences(VECC, CRAES)  
Center of Green Auto and Low-carbon Mobility(GALM)

- VECC & GALM are developing next-stage emission control standards for pollutants and GHGs in light/heavy-duty vehicles. The released technical specification for vehicle environmental information disclosure and emission remote supervision system laid the foundation for further research on vehicle life-cycle assessment.



Technical specification for vehicle environmental information disclosure



Technical specification for emission remote supervision system of On-board terminal

**The Air Pollution Prevention and Control Law** stipulates that manufacturers and importers of motor vehicles and non-road mobile machinery must disclose environmental information to the public, including emission inspection information and pollution control technology information. They are responsible for the authenticity, accuracy, timeliness, and completeness of the disclosed information.

IIJ 1350—2024



**Vehicle information:** vehicle model, trademark, emission stage, manufacturer, etc.

**Engine information:** engine model, make, manufacturer's name, etc.

**Testing information:** testing standards, testing organisations, testing conclusions, etc.

**Pollution control technology:** information for manufacturers of ECUs, DPFs, SCRs and other equipment

**Manufacturer/importer:** Manufacturer's name, address, legal person, etc.

**Emission Information:** GHG emission, pollutants emission, refrigerants information.

Sample of motor vehicle environmental information list (back)

- ❑ GB17691-2018: From 1 July 2021, heavy-duty vehicles meeting the requirements of the 6b emission standard shall be networked with remote emission monitoring data;
- ❑ A total of 2,798,400 vehicles are networked on the national platform for remote monitoring of heavy-duty vehicle emissions (data updated).

## Static data (4 items)

- ❑ Vehicle Information
- ❑ Engine Information
- ❑ Chip Information
- ❑ Terminal Information

## Whole Vehicle Data(4 items)

- ❑ Data Collection Time
- ❑ Atmospheric pressure
- ❑ Vehicle Speed
- ❑ Accumulated mileage

## Engine data (13 items)

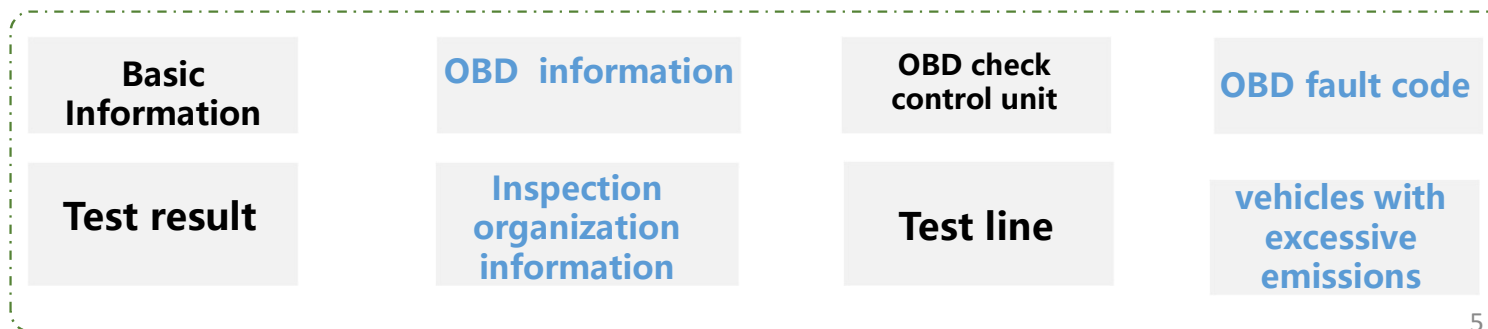
- ❑ SCR Inlet Temperature
- ❑ SCR outlet temperature
- ❑ NOx sensor output value upstream of SCR
- ❑ SCR downstream NOx sensor output value
- ❑ Net Engine Output
- ❑ TorqueFriction torque
- ❑ Engine speed
- ❑ Engine Fuel Flow
- ❑ Reactant Residual Volume
- ❑ Intake air volume
- ❑ DPF differential pressure
- ❑ Engine coolant temperature
- ❑ Fuel tank level

## OBD Information(7 items)

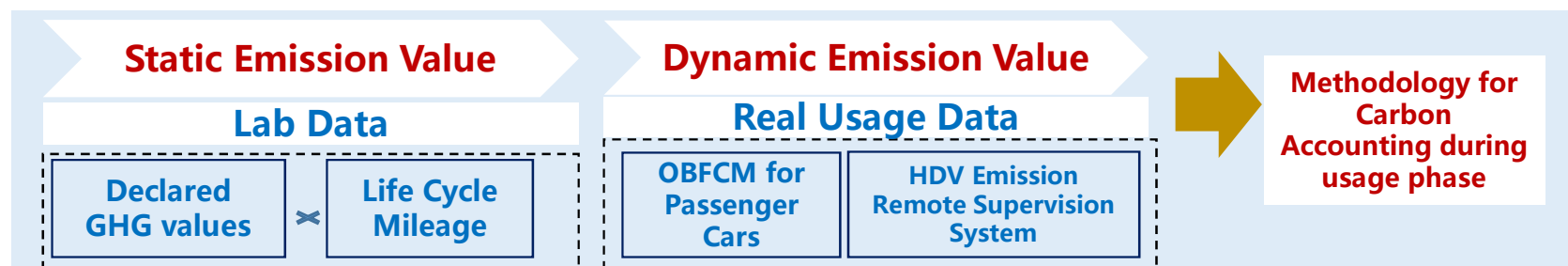
- ❑ OBD DiagnosticProtocol
- ❑ MIL Status
- ❑ Diagnostic Support status
- ❑ Diagnostic Ready Status
- ❑ IUPR Value
- ❑ Total Fault Codes
- ❑ Fault Code Message List

- **The Air Pollution Prevention and Control Law:** Motor vehicles must undergo emission inspections by authorized emission inspection agencies according to relevant national or local regulations. Only vehicles that pass the inspection are allowed to be driven on the roads. Public security traffic management departments are not allowed to issue safety inspection approval marks to vehicles that have not passed the inspection.

Data item



- Using publicly available data and experimental data from annual vehicle inspections as static values, and using On-Board Fuel Consumption Monitoring (OBFCM) for passenger cars and a remote monitoring platform for commercial vehicles as dynamic values, obtain carbon emission data for vehicle operations.



## Data support

Emission factor	Production activity	Information disclosure	Assembly line	On-line monitoring	Annual inspection data	Remote sensing monitoring	Road check
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中國環境科學研究院  
Chinese Research Academy of Environmental Sciences



綠色汽車與低碳交通聯合研究中心  
Center for Green Auto and Low-carbon mobility

## Back up information



□ 中國環科院是生態環境部直屬機構，致力於為國家經濟社會發展和環境決策提供戰略性、前瞻性和全局性的科技支撐

- ✓ **生態環境部環境標準研究所**
- ✓ 與國際清潔交通委員會等國際組織長期合作

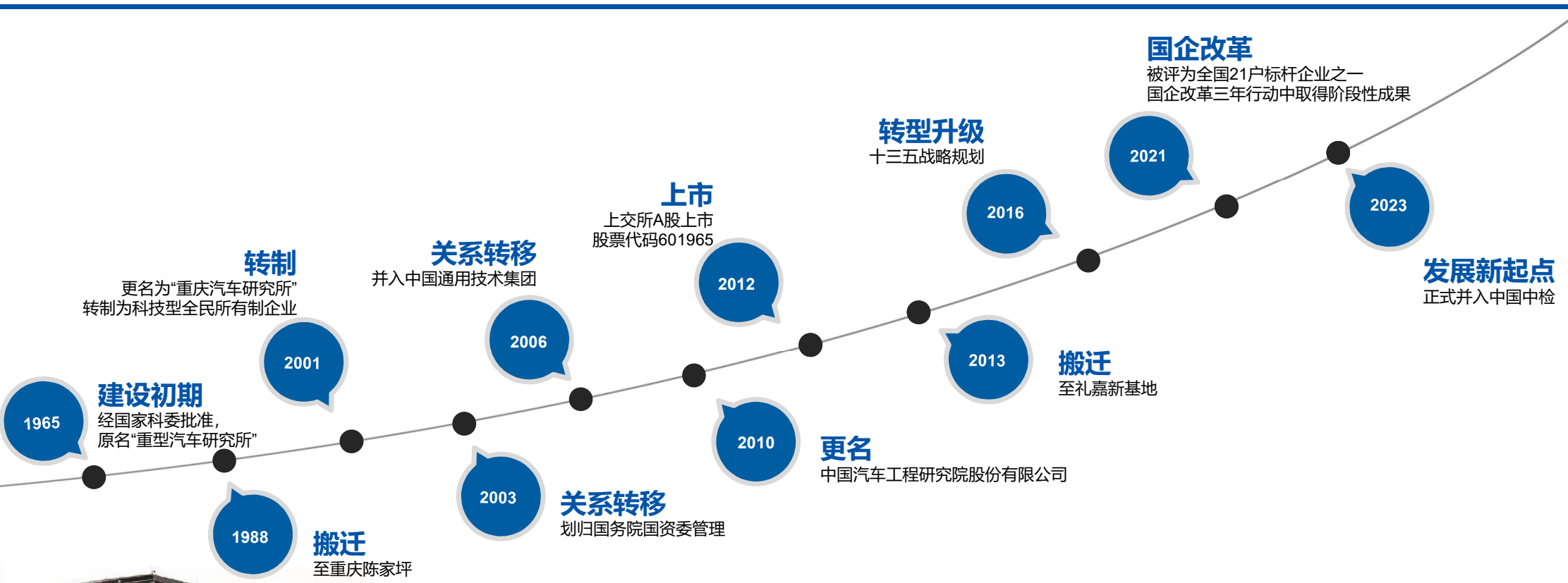
- ✓ **環境基準與風險評估國家重點實驗室**：化學品環境暴露、毒理與生態效應、基準理論方法學等
- ✓ **國家大氣污染防治攻關聯合中心**



- ✓ **VECC及國重實驗室**：移動源排放標準、新車環保信息公開和監督檢查、污染物與溫室氣體協同增效

- ✓ **目前**：國六重型車遠程監管、環保信息公開、在用车年檢、遙感等
- ✓ **未來**：國7標準將納入新能源耐久等相關要求





- 第一次技术引进: 1965~1966年, 法国贝利埃重型汽车技术引进;
- 第二次技术引进: 80年代初, 奥地利斯太尔重型汽车技术引进;
- 第三次技术引进: 80年代末, 日本五十铃轻型汽车技术引进;

**承担三次重大引进**



2023年7月15日，由中国环科院和中国汽研联合发起的“绿色汽车与低碳交通联合研究中心”在北京揭牌成立，生态环境部陆新明副司长、移动源处处长张昊龙、环科院许其功副院长致辞

