MEMORANDUM OF UNDERSTANDING

between

ARGONNE NATIONAL LABORATORY

and

MINISTRY OF ENVIRONMENT IN KOREA

FOR COOPERATION ON ENERGY AND EMISSION ANALYSIS OF VEHICLE TECHNOLOGIES AND FUELS

Argonne National Laboratory and Ministry of Environment in Korea collectively herein the "Participants",

SHARING an interest in collaborating on the analysis of energy and emission effects of vehicle technologies and fuels,

HAVE REACHED THE FOLLOWING UNDERSTANDING:

I. OBJECTIVE

The Participants intend to promote collaborative efforts related to the analysis of energy and emission effects of vehicle technologies and fuels.

II. FORMS OF COOPERATION

Planned cooperation may include, but is not limited to:

- 1. Exchange of published scientific and technical information, publications, and reports;
- 2. Meetings organized to discuss specific technical topics and cooperative activities, including conferences, seminars, and workshops;
- 3. Exchange of scientists, engineers, and other specialists for participation in meetings and training sessions. Each Participant is to abide by the health, safety, and environmental requirements of the host Participant when on an exchange assignment at the host Participant's facility.

III. POINTS OF CONTACT

Each Participant should designate one or more Lead Coordinators to serve as its principal representative(s) for all activities conducted under this Memorandum of Understanding (MOU),

including identifying areas of cooperation, coordinating cooperation between the Participants, and identifying available resources (including funding) for potential collaborative activities under this MOU. The initial Lead Coordinators are:

For Ministry of Environment of Korea

11, Doum 6 ro, Sejong, Korea 30103Attention: Daeyoung Ju, Director General, Policy Planning BureauTelephone number: (82) 10-8862-3630E-mail: djuca2@korea.kr

For Argonne National Laboratory

9700 South. Cass Avenue, Lemont, IL, 60439. USA Attention: Michael Wang, Center Director, Systems Assessment Center Telephone number: (630) 252-2819 E-mail: mqwang@anl.gov

IV. GENERAL CONSIDERATIONS

1. This MOU does not create any legally binding obligations between the Participants.

2. The conduct of cooperative activities contemplated by this MOU is subject to the availability of funding, personnel, and other resources.

3. Each Participant should conduct the cooperation under this MOU in accordance with applicable laws and regulations to which it is subject, and international agreements to which its Government is party.

4. Each Participant is to be responsible for the costs it incurs in participating in cooperative activities contemplated under this MOU.

V. COMMENCEMENT, MODIFICATION AND DISCONTINUATION

1. Cooperative activities under this MOU may commence upon signature by the Participants and continue for a 5-year period unless discontinued in accordance with paragraph 2 of this Section.

2. The Participants may discontinue this MOU at any time in writing by mutual consent. A Participant that wishes to discontinue its participation in this MOU should endeavor to provide at least ninety (90) days written notice to the other Participant.

3. This MOU may be modified or extended for additional periods by mutual written consent of the Participants.

Signed in duplicate.

For Argonne National Laboratory

Am L An

Title Associate Laboratory Director

Place Lemont, IL 60439

Date November 23, 2020

For Ministry of Environment in Korea

Jong Won, Chai Director General Title Sejong City 10. Sep. 2020 Place Date