Draft meeting minutes
12th Session of the Subgroup 4 (Usage Phase)
of the IWG on Automotive Life Cycle Assessment
(IWG on A-LCA)

Meeting documents available at:
https://wiki.unece.org/display/trans/SG4+-+11th+meeting

Agenda

Time		Agenda Item	Lead	Working Paper	Purpose or Target
10:30 ~ 10:35	1	Welcome and introduction	Chair	NA	Introduction
10:35 ~ 10:40	2	Adoption of the agenda	Chair	A-LCA-SG4-12-01	Agreement
10:40 ~ 10:45	3	Adoption of the last meeting minutes	Chair	A-LCA-SG4-11-04	Agreement
11:00 ~ 11:05	4	Comments on Unit Conversion	Japan	A-LCA-SG4-12-03	Presentation
10:45 ~ 11:00	5	FCS Hydrogen leakages in Use-phase	UPV CMT	A-LCA-SG4-12-02	Presentation
11:05 ~ 11:15	6	Any other business & Closing	Chair	A-LCA-SG4-12-04	Closing

---

Meeting

Agenda Item 1: Welcome and introduction

The chair welcomed the participants to the 12th SG4 meeting and provided some overview of the main topics for today's meeting. In addition, the chair presented the agenda.

Agenda item 2: Adoption of the agenda

The agenda was approved by the participants.

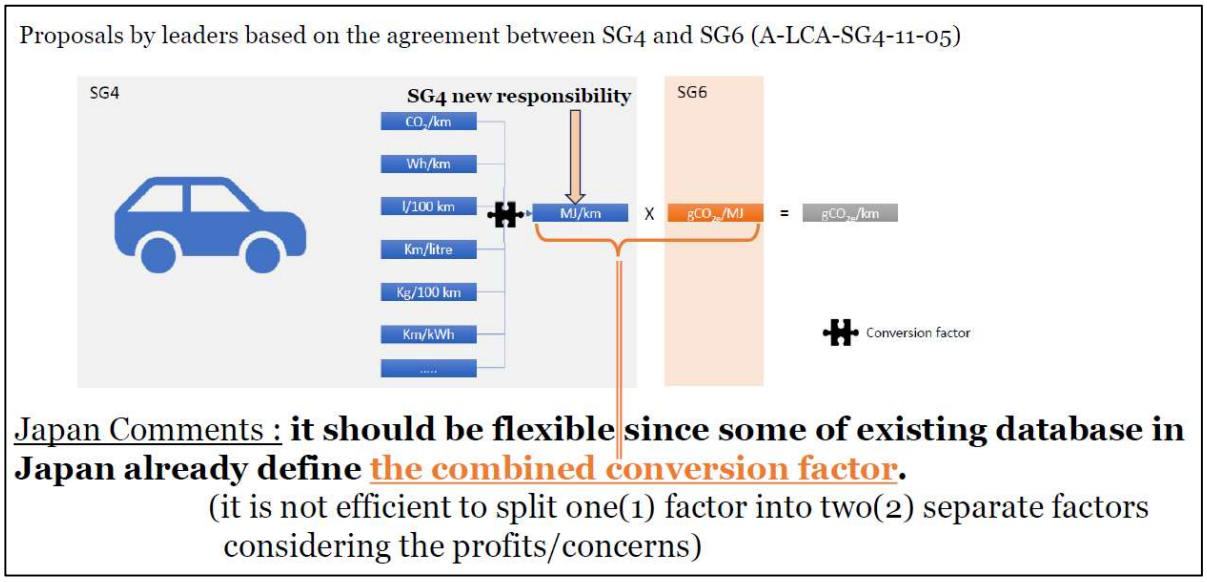
Agenda item 3: Adoption of the last meeting minutes

The last meeting minutes were approved and adopted by the participants.

Agenda item 4: Comments on Unit Conversion

JAPAN: Ichikawa N. presented a slide to comment the "Unit Conversion to MJ" that was introduced by OICA during the 11th meeting. In Japan some databases already adopt

conversion factors combining the input that should come separately from SG4 (MJ/Km) and from SG6 (gCO_{2eq}/MJ) as depicted in the picture below. As a matter of fact, depending on the fuel or energy carrier involved in the specific LCA, conversion of Kg or Litres of fuel to MJ has to be calculated.



- JRC explained their views on the conversion flow, mentioning that two indicators are foreseen. First one for TtW, it accounts for the energy per km or the fuel consumption / CO2 emissions per km; the second one for WtT, it expresses the additive equivalent CO_2 related to the energy content of the energy carrier. An applied example will be provided during the next SG4 meeting.

See document(s): A-LCA-SG4-12-03

Agenda Item 5: FCS Hydrogen leakages in Use-phase

Chair - JRC: Introduced to the SG4 members a guest from UPV, Professor dr. Marcos López Juárez who gave a presentation about fuel cell testing and Hydrogen emission measurements.

López Juárez M. – UPV: presented a comprehensive methodology that involves simulation and experimental activities to evaluate H2 emissions from LD and HD vehicles. Two main approaches are presented; a classic “mass balance” method and a more advanced “cathode outlet species measurement” method that involves a high-frequency concentration analyser. Since there is not currently a standardized method to quantify H2 emissions in FCS, approach 2 seems more accurate but needs refinement (MFR measurement at cathode outlet).

The presentation was well received by the audience and it is available on the dedicated wiki-page. More discussion will follow in the upcoming sessions.

See document(s): A-LCA-SG4-12-02

Agenda item 6: AOB & Closing

The chair invited the participants to share their additional topics/remarks.

- Korea (Hee-Jeong Yim) shared with the audience the reference document on energy conversion factors that was mentioned during last SG4 meeting. The "Energy Statistics Manual" is a publication from IEA. OECD and Eurostat.

The reference was taken away by the chairs and it is available on the dedicated wiki-page. More discussion will follow in the upcoming sessions.

The chair informed the participants that the next SG4 meeting (13th) will be held online during July's last week approximately.

The chair thanked all the participants for their participation and formally closed the meeting.

See document(s): A-LCA-SG4-12-04

ANNEXES

Participants list:

TS TRIPATHY Samarendra
Organizer

1 Accepted

 DI PIERRO Giuseppe (JRC-I...
Accepted

R romain@avere.org
Unknown

 FONTARAS Georgios (JRC-I...
Unknown

PA p.alburno@clepa.be
Unknown

J Johann.Bachler@avl.com
Unknown

S simone.bambagioni@punc...
Unknown

C christoph.baumgaertner@v...
Unknown

GB bedenian@hyundai-europe...
Unknown

GB g.bieker@theicct.org
Unknown

DB dirk.bosteels@aecc.eu
Unknown

A Alberto.Castagnini@ngva.eu
Unknown

XC xchaptal@fiev.fr
Unknown

W wj_choi@ewha.ac.kr
Unknown

J jwchung@katech.re.kr
Unknown

F francois.cuenot@un.org
Unknown

AD aleksandar_damyanov@euronc...
Unknown

JD joachim.demuynck@aecc.eu
Unknown

FE fertemkappler@sensata.com
Unknown

SF simone.falcioni@trbe.be
Unknown

S stephanie.flitsch@avl.com
Unknown

SP Sungwook Park
Unknown

N nicolle.giuliani@nio.io
Unknown

G gyeol.han@hyundai.com
Unknown

NH nikolas.hill@ricardo.com
Unknown

W werner.hofegger@avl.com
Unknown

D dietmar.hofer@magna.com
Unknown

I ichikawa@ntsel.go.jp
Unknown

JE emmanuel.jean@forvia.com
Unknown

Y yjkim92@kama.or.kr
Unknown

F filippo.lachina@gm.com
Unknown

LD duc-nam.luu@hutchinson.com
Unknown

M mezaki-r2bz@mlit.go.jp
Unknown

M mo.na@epa.gov
Unknown

C coolinji@kotsa.or.kr
Unknown

PL Pavani, Ludovic
Unknown

J juliette.quartararo@stellantis.co...
Unknown

R rauchmrt@schaeffler.com
Unknown

S seunghyun.1.ha@gm.com
Unknown

H hhsong@snu.ac.kr
Unknown

A alexander.spiegel@brose.com
Unknown

M marc.steeman@aisin-europe.com
Unknown

S Stefan.Still@avl.com
Unknown

S stetsuya@jari.or.jp
Unknown

ST takada@suzuki-europe.be
Unknown

T tsuyama@hhq.suzuki.co.jp
Unknown

AG a.vangelderen@etrma.org
Unknown

H hj.yim@el.re.kr
Unknown

M moosang.yu@gm.com
Unknown

Z zhangtongzhu@catarc.ac.cn
Unknown

Z zhaotianning@catarc.ac.cn
Unknown

A anna-karin.engstrom@aurobay....
Unknown

BF Banita Fidyova
Unknown

N nickichikawa@gmail.com
Unknown

SM Mamarikas, Sokratis (e:misia)
Unknown

GM Mellios, Giorgos (e:misia)
Unknown