DECEMBER 2022 HEV TCP NEWSLETTER





56th HEV TCP EXCO MEETING

The fifty-sixth meeting of the Executive Committee for the HEV-TCP was held in Dundee, Scotland, UK, on October 27-28, 2022, with in-person and remote participants in a hybrid format.

Leading up to the ExCo meetings, attendees were given a tour of the city of Dundee by Fraser Crichton and Dundee City Council's Fleet Team. Spots on the electric bus-powered tour included: the Princes Street charging hub with solar and battery storage systems, electric bin lorries at Council headquarters, the Clepington Road solar-powered charging hub development site and water filtration scheme, and the popup chargers opposite the V&A Museum.

Following the tour, all participants joined a knowledge-sharing workshop, where speakers from Dundee City Council, SWARCO Smart Charging, and Bluewater Group spoke about the city's journey towards electric mobility and many key technological advancements in place in Dundee, Scotland, and the UK more broadly. Updates on national and/or regional industry developments were also given by the Netherlands, Germany, the Republic of Korea, and the EU. Discussion led to identifying the key challenges facing the HEV industry, with participants engaging in conversations about the pace of technology change, EV adoption rates, and common gaps in e-mobility infrastructure networks.

The next day, the ExCo meeting began with the Chair welcoming new country delegates from France (Mr Hamza el Jebbari) and from the Netherlands (Ms Els Rutten).

Task 41 (Heavy Electric Vehicles) completed its work. A written final report has been posted on the HEV-TCP website, and the Task was officially closed by the ExCo. For all the other ongoing Tasks, updates were presented and discussed.



Two new tasks, 49 and 50, have been approved. Task 49, "Electric Vehicle Fire Safety", was proposed by Belgium and will be led by VITO and Task 50, "Light Electric Vehicles", was proposed by Germany and will be led by the DLR. Both tasks will start in January 2023 and run for three years. Interested countries should contact the Operating Agents (Task Managers), Carlo Mol for Task 49 and Dr Stephan Schmid for Task 50.

The Executive Committee elected Ms Carol Burelle (Canada) as Chair and elected Ms Joscelyn Terrell (UK), Mr Ock Taeck Lim (South Korea), and Mr Walter Mauritsch (Austria) as Vice Chairs for two-year terms.

Jacob Teter (IEA) gave an update on recent IEA activities. He also provided an update on the activities of the Electric Vehicles Initiative (EVI) of the Clean Energy Ministerial (CEM).

The next ExCo 57 meeting (Spring 2023) is tentatively planned to be hosted by Belgium and the European Commission in Brussels during the week of the 17th of April, 2023.







TASK 49 "EV FIRE SAFETY": CALL FOR PARTICIPATION

During the IEA HEV-TCP ExCo meeting in Dundee on 27-28 October 2022, a new task was approved on the topic of "EV Fire Safety".

Task 49 will stimulate knowledge exchange on This new Task will run for 3 years, starting in January 2023. Task 49, "EV Fire Safety", was EV fire safety aspects by sharing experiences initiated by Belgium during the ExCo meeting between country experts, increasing insights into following The Netherlands, UK, and South Korea EV fire safety risks and sharing best practices in preventing or mitigating EV fire incidents (from the expressing their interest in joining. Other member countries can determine their participation in this technological and regulatory perspective). new Task on "EV Fire Safety" over the coming The target groups for this task range from months.

Task 49 on "EV Fire Safety" has been initiated because, although we see a growing interest in electric mobility from policymakers, companies and end users, there is still some lack of trust in the safety aspects of electric vehicles. Task 49 wants to collect and share objective information on different EV fire safety-related aspects to increase overall trust in electric vehicles. Task 49 will collect statistics on EV fire incidents since risk assessments based on limited statistics could lead to a negative perception of EV fire safety risks, hampering EV rollout and charging infrastructure, for example, in underground parking.

building and parking owners to OEMs (vehicles and charging infrastructure), fire rescue workers, transport and tow companies, insurance companies, policymakers, regulation bodies, EV drivers, and the general public.

Task 49 will organize five online workshops on "EV Fire Safety" topics to share and discuss collected information and best practices. Before defining the specific workshop topics, Task 49 will set up a database of experts/stakeholders from participating countries, which will help map the existing initiatives, working groups, and available information on "EV Fire Safety" within each country. The exact workshop topics will be decided upon consultation with all participating countries and will focus on the topics of highest interest and/ or on which there is the biggest benefit of sharing experiences between countries. Potential workshop topics include, among others:

- EV fire incident statistics
- impact of electric vehicles on parking fire safety regulations
- insurances
- fire rescue workers' procedures
- removal and after-treatment of damaged electric vehicles

In case you are interested in getting more information, please get in touch with the Task 49 Task Manager: Carlo Mol carlo.mol@vito.be



TASK 50 *"LIGHT* ELECTRIC **VEHICLES**": **CALL FOR** PARTICIPATION



Small and lightweight electric vehicles for sustainable mobility.

Light vehicles have been receiving more atten for some time now, but we are still a long way from realizing their substantial potential in ter of saving energy and greenhouse gas emission as well as reducing material and land use. Des their great potential, light vehicles are still a niche topic. The preceding Task 32 addressed this issue by working on greater awareness a bringing together expert knowledge. This was accomplished through the publication of a bo LEVs, downloaded 38,000 times.

Meanwhile, the pressure to make our mobility more sustainable is high, and changes are urg Multiple crises, such as climate change and the energy crisis, require us to economize energy reduce greenhouse gas emissions, save costs and manage the available energy. This could change the general conditions for LEVs. Again this background, the work from Task 32 will b extended with a new task, including new topic the context of global developments.

ntion	Objectives	
/	 Characterization of market conditions in the 	
rms	international context: societal trends, industry,	
ons	policies, different stakeholders	
spite	 Options for adaption of vehicles and 	
	surroundings towards better suitability, e.g.	
d	Vehicle safety through technologies, regulation	
nd	and infrastructure	
s also	 Potential energy efficiency gains due to LEV 	
ok on	compared to cars (M1, fleet level) on the road	
	and up-/downstream (manufacturing etc.)	
/	Scope	
gent. he [,] to s	Any electrified vehicles are included, besides two- wheelers, with a focus on L5e to L7e, and up to small cars (e.g. electric Kei cars, smart ED, i-MiEV).	
	Envisaged workshops	
nst e cs in	 Social/behavioural characteristics and international perspectives Vehicle concepts and technologies, and costs 	
	 Standards and regulations (homologation, usage) 	

• Life cycle analysis (LCA)

Target audience

- · Manufacturers, researchers, city planners, policymakers and other stakeholders
- Experience exchange between Global South and Global North

We cordially invite you to become a member of Task 50!

Germany initiated this fee-based Task and the task manager is Mascha Brost, German Aerospace Center. France and South Korea joined as Task members.

In case you are interested in getting more information, please get in touch with the Task 50 Task Manager: Mascha Brost

Mascha.Brost@DLR.de



TASK 46 UPDATE

5



The IEA HEV TCP Task 46 (2022 – 2024) focuses on environmental effects based on Life Cycle Assessment (LCA) of electricity **based propulsion systems – battery** electric, hydrogen fuel cell and e-fuels - in comparison to fossil fuels.

In addition to identifying the most relevant methodological issues, necessary inventory data and impact categories, new approaches for assessing "climate/CO2-neutrality" and "circularity" from an LCA perspective are discussed and developed.

Currently, 8 countries are participating in Task 46 -Austria, Canada, DE, China, NO, South Korea, United Kingdom, and USA – represented by LCA experts and institutions. The Task is executed closely with Task 64, "E-fuels and End-use Perspective" of the TCP on Alternative Motor Fuels (AMF).

The aim of the experts' workshop Environmental Effects of Trucks – Towards Climate Neutrality and Circularity" in October 2022 was to analyze, assess and discuss the environmental effects of trucks with different propulsion systems based on LCA.

The results on the key issues in LCA of trucks are:

Key parameters determining LCA

- The lifetime of battery and truck
- Functional units used: per t-km, per km and per

- total lifetime
- Battery production
- Size of truck and specification
- Energy demand for different driving cycles with different loads
- Battery capacity and range
- Type of electricity: additional renewable electricity needed
- Recycling/reuse of batteries
- Charging strategies

Generalized current LCA results:

- Electric trucks have lower impacts if renewable electricity is used than H2-fuel cell, ICE with e-fuels and ICE (with diesel and CNG) trucks due to the high overall energy efficiency
- Catenary battery electric vehicles (BEV-ERS) might have the lowest impacts
- Relative advantages in the LCA of the BEV decrease with increasing vehicle (and battery) size
- Urban delivery with e-trucks creates significant environmental benefits

• Currently, the main focus is on GHG emissions and primary energy demand

Further needs

- Improved datasets on key raw materials: virgin/ primary and recycled/secondary
- How further improvements to upstream processes/raw materials production might contribute to LCA
- Improvements to the assessment of novel lowcarbon fuels/production pathways, especially e-fuels
- Methodological considerations for contributions by LCA to assessing climate neutrality and circularity

These results are now used for the LCA case study on trucks that is currently performed by Task 46.

The management of this Task and the Austrian participation are financed by the Austrian Climate & Energy Fund and the FFG.



SPAIN UPDATE

As of the 25th of October 2022, The Industry Department has published the allocation of pub aid for the first call of the PERTE VEC (Strategic Project for Economic Recovery and Transforma program for Electric and Connected Vehicles). Ministry of Industry, Commerce and Tourism ha published the distribution of the €877.2 million in public aid—corresponding with 10 projects receiving funding.

The €877.2 million budget is almost €300 million more than those proposed in the provisional resolution and will mobilize investments worth 2,250 million euros in the sector. The allocation projects is as follows:

	COMPANY (BENEFICIARY)	TITLE OF THE PROJECT	TOTAL INCENTIVES (€)
ublic gic nation . The has n	SEAT, SA.	Future fast forward (F3)	397,377,534
	MERCEDES BENZ ESPAÑA, S.A.	Transformation of the value chain for a sustainable and competitive electric car manufacture	170,446,892
	HUIB TECH FACTORY, SL.	HUB-Dco2: decarbonization hub for adaptative, modular and multi-reference manufacturing of EVs	107,849,528
	OPEL ESPAÑA, SL.	TESIS (Transformation towards Electromobility Industrial Stellantis)	52,211,701
lion	RENAULT ESPAÑA, SL.	Industrial Ecosystem for innovation and manufacturing EV	40,063,095
h on for	SAPA OPERACIONES, S.L.	Solutions for automobile sector towards digital transition, in response to sustainable connectivity criteria	32,866,379
	FAURECIA INTERIOR SYSTEMS SALC ESPAÑA, S.L.	Adaptation of automotive sector to digital end ecological transition	28,243,286
	IRIZAR, S.COOP	Technological capacity and industrial development of the value chain for buses, associated with the decarbonization of the transport sector	24,186,554
	PEUGEOT CITROEN AUTOMÓVILES ESPAÑA, S.A.	Industrial development of the chain value for buses	15,196,219
	FAGOR ELECTRÓNICA S.COOP	ARIES (Recyclable, Intelligent, Electric and Sustainable Automation)	8,780,459
	TOTAL	INVECPRO (Industrial investigation for a new Generation of VEC professionals)	877,221,647

For more information: planderecuperacion.gob.es/noticias/industria-publica-la-asignacion-de-ayudas-publicas-de-los-proyectos-del-PERTE-VEC







Proyectos Singulares II

Second call for aid from the MOVES Singular Projects II Program (14/09/2022):

Through Order TED/800/2021, the regulatory basis for the Moves Singulares II incentive program for singular projects in electric mobility was approved within the framework of the PRTR (Recovery, Transformation and Resilience Plan). This program is managed by IDAE, As an investment component of the PRTR.

To ensure continuity with the first call, a second call for €264 million in aid has been approved and aimed at the selection and concession of projects related to experimental and innovative developments carried out in the national territory in relation to electric vehicles. Aid applications can be submitted from the 3rd of October to the 24th of November 2022 and projects must have a minimum investment of €100,000 to be considered.

Differently from the first call (which had a budget of €100 million), projects related to the installation of hydrogen generators will not be eligible, since

programs related to the production and use of green hydrogen have already been published within the framework of Component 9 of the PRTR.

For more information: <u>www.idae.es/ayudas-y-</u> financiacion/para-movilidad-y-vehiculos/programamoves-proyectos-singulares-ii/2a-convocatoria

UNITED KINGDOM **UPDATE - OFFICE FOR ZERO EMISSION VEHICLES**

Source: Motability



In March this year, the Office for Zero Emission Vehicles published Taking charge: the electric vehicle infrastructure strategy.

This set out the Government's vision and commitments to make electric vehicle charging cheaper and more convenient for all EV drivers pledged to develop chargepoint design standar to improve accessibility and improve signage to chargepoint locations.

We need everyone, including disabled drivers, to be able to use the public network with ease. Thi means supporting an electric vehicle charging infrastructure network that works for all drivers the UK and which has accessibility embedded i design.

Today one in five people in the UK report a disability, and it is estimated that by 2035 there will be 2.7 million UK drivers or passengers with a The Government will continue to work with

n and ds o is	disability, with half reliant on public charging. To this end, the Government and the national disability charity Motability co-sponsored the British Standards Institution to develop a new accessibility standard for electric vehicle charging. Published by the British Standards Institution on the 11th of October 2022, PAS (Publicly Available Standard) 1899 provides specifications on designing and installing accessible public electric vehicle chargepoints and sets a minimum level of accessibility across all public chargepoints. While compliance with PAS 1899 will be voluntary, the Government will continue strongly encourage	in 2 [,] w a a 2 [,] C T C C D <u>p</u> S
e in in its	the Government will continue strongly encourage all relevant parties to adopt its specifications. We will also encourage local authorities to incorporate accessibility into their procurement models and OZEV grant scheme applications.	5

ndustry and other parties to ensure effective mplementation of PAS 1899 and inform the 24-month review of the standard, which the BSI will lead. We will continue to monitor progress to ssess whether further intervention is needed on accessibility over time.

PAS 1899 can be downloaded here: PAS-1899 | BSI bsigroup.com)

The UK electric vehicle infrastructure strategy an be viewed here: www.gov.uk/government/ oublications/uk-electric-vehicle-infrastructurestrategy







ieahev.org