

From: McKearnan, Sarah [Sarah.McKearnan@vermont.gov]
Sent: Wednesday, December 23, 2015 9:30 AM
To: Gray, Laura
CC: Markowitz, Deb
Subject: FW: ZEV event on December 8 - follow up
Attachments: ZEV high-level event COP21_ Chair summary_10Dec2015Final.pdf

Laura, here is the final summary of the ZEV panel that GPS joined, just in case you don't have it.

From: Pierpaolo CAZZOLA, IEA [mailto:Pierpaolo.CAZZOLA@iea.org]
Sent: Thursday, December 10, 2015 4:12 AM
To: 'Nicole.NF.Fallenbeck@bmwgroup.com'; 'SCHULZ Philippe'; 'Troisi, Daniele'; 'Beziat, Jean-Christophe (Renault)'; 'Marissa Galizia'; 'Erin Mellon'; 'Colleen Quinn'; 'nacy.cheng@byd.com'; 'leona.zhang@byd.com'; 'brian.luo1@byd.com'; 'Senan McGrath'; 'Noll, Daniel (FELLOW)'; 'petersd@dot.gov.za'; 'Kadri Nassiep'; 'Carel Snyman'; 'Sveinung.Kvalo@kld.dep.no'; 'Jo.Randen@kld.dep.no'; 'Tom-Oddgeir.Johnsen@kld.dep.no'; 'Anne.Gislerud@kld.dep.no'; 'Gard.Lindseth@kld.dep.no'; 'Martin Palm'; 'Gagnon, Frederic'; 'marilou.gosselin@mddelcc.gouv.qc.ca'; 'Etienne.Chabot@mddelcc.gouv.qc.ca'; 'david.rangdrol@mddelcc.gouv.qc.ca'; 'Jamie Callahan'; 'Tony.clark@gov.se'; 'per-anders.widell@gov.se'; McKearnan, Sarah
Cc: 'Wenzel, Mark@EPA'; 'Debashish Bhattacharjee'; 'Andre Dzikus'; 'Rob Jong'; 'Elburg, H. van (Henk) - DGMI'; 'Wilbers, Peter (WVL)'; 'Drew Kodjak'; 'Mario.Fruianu@minienm.nl'; 'gparik@c40.org'; 'heather.allen@slocatpartnership.org'; 'kurquhart@c40.org'; 'Oliver Lah'; 'bert.witkamp@avere.org'; 'argopal@lbl.gov'; 'Mario.Fruianu@minienm.nl'; 'Huizenga Cornie'
Subject: RE: ZEV event on December 8 - follow up

Dear colleagues,

Please find attached the Chair's summary of the ZEV event of December 8, incorporating all comments that I received yesterday.

This is the version we will upload on our web site.

Best,

Pierpaolo

From: CAZZOLA Pierpaolo, IEA/SPT/ETP/EDT
Sent: Wednesday, December 09, 2015 10:18
To: 'Nicole.NF.Fallenbeck@bmwgroup.com'; 'SCHULZ Philippe'; 'Troisi, Daniele'; 'Beziat, Jean-Christophe (Renault)'; 'Marissa Galizia'; 'Erin Mellon'; 'Colleen Quinn'; 'nacy.cheng@byd.com'; 'leona.zhang@byd.com'; 'brian.luo1@byd.com'; 'Senan McGrath'; 'Noll, Daniel (FELLOW)'; 'petersd@dot.gov.za'; 'Kadri Nassiep'; 'Carel Snyman'; 'Sveinung.Kvalo@kld.dep.no'; 'Jo.Randen@kld.dep.no'; 'Tom-Oddgeir.Johnsen@kld.dep.no'; 'Anne.Gislerud@kld.dep.no'; 'Gard.Lindseth@kld.dep.no'; 'Martin Palm'; 'Gagnon, Frederic'; 'marilou.gosselin@mddelcc.gouv.qc.ca'; 'Etienne.Chabot@mddelcc.gouv.qc.ca'; 'david.rangdrol@mddelcc.gouv.qc.ca'; 'Jamie Callahan'; 'Tony.clark@gov.se'; 'per-anders.widell@gov.se'; 'McKearnan, Sarah (Sarah.McKearnan@vermont.gov)'
Cc: 'Wenzel, Mark@EPA'; 'Debashish Bhattacharjee'; 'Andre Dzikus'; 'Rob Jong'; 'Elburg, H. van (Henk) - DGMI'; 'Wilbers, Peter (WVL)'; 'Drew Kodjak'; 'Mario.Fruianu@minienm.nl'; 'gparik@c40.org'; 'heather.allen@slocatpartnership.org'; 'kurquhart@c40.org'; 'Oliver Lah'; 'bert.witkamp@avere.org';

'argopal@lbl.gov'; 'Mario.Fruianu@minienm.nl'; Huizenga Cornie

Subject: ZEV event on December 8 - follow up

Dear colleagues,

Thank you all for what we think was a successful event yesterday.

We prepared a “Chair’s summary” that we would like to upload to a dedicated web page on the IEA web site.

I am circulating a draft version (attached) in case you have comments. If so, please send them to me by COB today.

Dutch colleagues recorded the event. The footage will become available today and will be published on the Dutch ministerial website.

We will keep you posted in details on this.

I hope we will have other chances to cooperate in the future.

Best regards,

Pierpaolo Cazzola

IEA



Ministry of Infrastructure and the
Environment of the Netherlands



**High level Event on Zero Emission Vehicles,
UNFCCC COP21, Paris, 8 December 2015**

CHAIRS' SUMMARY

On 8 December 2015, at the Netherlands Pavilion at the UNFCCC COP21 meeting, high level representatives from government, the private sector, civil society and international organizations met to discuss the role that zero emission vehicles (ZEVs) play in mitigating climate change.

The meeting was chaired by Dr. Fatih Birol, the Executive Director of the International Energy Agency (IEA), Dr. Joan Clos, the Executive Director of the United Nations Human Settlements Programme (UN-Habitat), Mr. Dr. Kamel Ben Naceur, Director of Sustainable Energy Policy and Technologies of the IEA, and Dr. Ligia Noronha, Director of the Division of Technology, Industry and Economics of the United Nations Environment Programme (UNEP).

The meeting was opened by H.E. Ms. Dijkma, Minister for the Environment of the Netherlands.

The following summary presents the assessment of the meeting Chairs as the main issues discussed during the event.

The event was an occasion for private sector stakeholders (car manufacturers, utilities, and charging technology companies) and government representatives to discuss the readiness of ZEVs to reduce emissions now and in the future, as part of strategies in transport and clean energy.

It was also an opportunity to develop on the ambitious goals presented in the Paris Declaration on Electromobility and Climate Change and Call to Action, presented at COP 21 during the Lima Paris Action Agenda (LPAA) Transport Focus.

Opening

In her introduction, Ms. Dijkma, the Minister for the Environment of the Netherlands, noted that transport has seen technological shifts before, for example from wind power to steam, and offered ideas to make electrification of transport a winner, including building international coalitions, reducing the CO₂ intensity of electricity and hydrogen production, and establishing partnerships between governments and industry.

Private sector panel

The private sector panel, chaired by Dr. Kamel Ben Naceur (IEA), emphasized the readiness of the technology and encouraging prospects for improved performances of batteries and reduced costs. Auto manufacturers were represented by Thomas Becker (Vice President, Governmental and External Affairs and Sustainability, BMW), Stella Li (Senior Vice President, BYD) and Nadine Leclair (Senior Vice President, Renault-Nissan). They delivered the message that the auto industry is ready to take up the challenge, citing public transport vehicles



(buses and taxis), light and medium trucks, as well as consumer cars as markets where they focus their interest. The manufacturers stressed the need for coordinated action between industry and governments, with production capacity that needs to match the deployment of financial incentives, and underlined that a fragmented market is not effective for ZEV uptake. They were cautious about the possibility to deliver vehicles with costs below 7000 USD and stressed the need to offer products that meet consumer expectations.

Senan McGrath (Chief Technology Officer, Electricity Supply Board) touched upon the synergies between electric vehicles (EVs) and the electricity grid, stating that, if EV owners are given the right incentives to reduce peak time charging, investments on the power sector will be limited—in the case of developed regions such as the European Union and the United States—to the distribution level and will not require new generation capacity or transmission lines.

Speaking about recharging infrastructure and networking, Pasquale Romano (Chief Executive Officer, ChargePoint) suggested that a successful business model can leverage the willingness of business facilities to provide EV charging as an amenity, offering a full service package, including the installation and maintenance of the chargers and EV driver services including information on availability of charging infrastructure. Panelists from Manufacturers supported the idea of a full service package, suggesting that this aligns well with the feedback received by early EV adopters. Positive feedback was reported also for the capacity for EVs to adapt their charging profile to match the needs of the power system, increasing its flexibility.

Policy statements

Dr. Ernest Moniz (United States Secretary Energy), Ibrahim Baylan (Minister of Energy, Sweden), Dipuo Peters (Minister of Transport, South Africa) and Jens Frølich Holte (Junior Minister of Climate and Environment, Norway) contributed to the policy statements session, chaired by Dr. Fatih Birol (IEA). The Ministers and Secretary stressed the importance of accelerating global clean energy innovation with the objective to make clean energy widely affordable, expecting that a consistent share of investments will be targeting ZEVs.

Ministers quoted ZEVs as one of the key solutions capable to address climate change in transport (primarily on light vehicles) and mentioned specific examples of policy developments, e.g., a bonus-malus vehicle taxation scheme about to be implemented in Sweden, and several supportive measures currently enforced in Norway. Building on the Norwegian experience, Ministers commended the establishment of a clear and stable policy framework, even if specific revisions are necessary once the EV market uptake develops. For developing countries, they stressed the need for international support and partnerships.

Ministers framed the contribution that ZEVs can give to improved urban air quality in the broader context of changes in urban design, citing the development of novel business models—including sharing components, and the additional ZEV benefit of reduced noise.

Ministers also recalled the joint support for international initiatives such as the Electric Vehicle Initiative of the Clean Energy Ministerial.



Public sector panel

The public sector , chaired by Dr. Joan Clos (UN-Habitat), featured interventions from the Governors of California (Edmund G. Brown Jr.) and Vermont (Peter Shumlin) and the Premier of Québec (Philippe Couillard). The panelists stressed the importance of ZEVs for the mitigation of greenhouse gas emissions in transport to reduce climate change risks and social costs. They illustrated the set of policies in place in their respective jurisdictions, touching upon subsidies, incentives for parking and access to regulated road space for conventional vehicles (e.g. high occupancy lanes), synergies with low carbon electricity generation, and achievements in terms of the development of recharging infrastructure (including in international undertakings by sub-national jurisdictions, such as the highway linking Vermont and Québec). They warned about the risks posed by falling oil and petroleum prices. They observed that the speed of technology developments is often underestimated, highlighted that rapid technology developments may be a barrier for the EV uptake amongst consumer (due to the perceived obsolescence risks), and acknowledged the fact that EV owners are enthusiastic customers, not willing to go back to back to internal combustion engines.

Having commended the leadership taken by their jurisdictions with respect to the adoption of ambitious standards, panelists concluded recalling the importance of coordinated action, mentioning the joint support for international initiatives such as the International ZEV Alliance.

Concluding remarks

In her concluding remarks, Dr. Ligia Noronha (UNEP), stated that the opportunity is now to make a paradigm shift from a fossil fuel intensive transport sector to a zero emissions transport sector. She noted that several countries and cities both in developed and developing countries have significant ambitions, she underlined that a global approach to electric mobility would maximize benefits. She called for the development of global public-private partnerships to support the introduction of ZEVs and announced that the UNEP is working on the launch of a program on electric mobility.



High-level event on Zero Emission Vehicles (ZEVs)

Date December 8th, 13:30 – 15:00

Venue Netherlands Pavilion at COP 21

Agenda

13:30 Welcome and introduction

5 minutes Sharon Dijksma, Ministry of the Environment, the Netherlands

13:35 Private sector panel: status, objectives and expectations for the deployment of ZEVs

30 minutes Moderator Dr. Kamel Ben Naceur, Director of Sustainable Energy Policy and Technologies, International Energy Agency (IEA)

- Panelists
- Dr. Thomas Becker, Vice President governmental & External affairs and sustainability, BMW
 - Nadine Leclair, Senior Vice President, Renault-Nissan
 - Stella Li, Senior Vice President, BYD
 - Senan McGrath, Chief Technology Officer, Electricity Supply Board (ESB) Ireland
 - Pasquale Romano, Chief Executive Officer, ChargePoint

14:05 Policy statements

- 25 minutes Moderator Dr. Fatih Birol, Executive Director, IEA
- Dr. Ernest Moniz, Secretary of Energy, United States
 - Ibrahim Baylan, Minister of Energy, Sweden
 - Dipuo Peters, Minister of Transport, South Africa
 - Jens Frølich Holte, Junior Minister of Climate and Environment, Norway

14:30 Public sector panel: ZEV status, vision, and commitments

- 25 minutes Moderator Dr. Joan Clos, Executive Director, UN-Habitat
- Panelists
- Edmund G. Brown Jr., Governor, California
 - Philippe Couillard, Premier, Québec
 - Peter Shumlin, Governor, Vermont

14:55 Concluding remarks

5 minutes Dr. Ligia Noronha, Director for the Division of Technology, Industry and Economics (DTIE), United Nations Environment Programme (UNEP)