Lowering your emissions through innovation in transport and energy infrastructure

Press Release

1st November 2021: Immediate release

International call for a mature, flourishing & equitable EV charging ecosystem

A global partnership of independent, not for profit, transport consultancies has collaborated on policies and recommendations for national and local authorities to grow a mature, flourishing, and equitable electric vehicle charging ecosystem.

By bringing together inputs from different countries, the insights aim to provide Governments across the globe with recommendations to develop their own EV infrastructure policies and programmes which will underpin the necessary switch to zero emission vehicles.

A range of policy interventions are needed to ensure equitable access to charging, regardless of land tenure, driver disability or socio-economic status, as EVs become a mainstream option for personal and commercial vehicles and charger installations accelerate. Policies should be coordinated to improve charger reliability and enhance interoperability, tackle electricity network constraints and support poor business cases to ensure that mature ecosystems flourish.

Effective charging ecosystems will match users with charging locations and charging types, therefore, infrastructure policies must differentiate between, and separately address, those who will charge privately and drivers who are reliant on public charging.

The recommendations encourage accelerated plans for, and deployment of, dedicated public charging hubs and public travel corridors to host Fast, Rapid and Ultra-Rapid chargers, as demand from vehicles which cannot be charged privately will increase significantly. This is especially for priority user groups identified by global stakeholders, notably from ‘fleets & staff’, ‘high mileage local’ and ‘long haul’ drivers.

The report, “Policies for a mature, flourishing & equitable EV charging ecosystem”, produced by the Global Sustainable Mobility Partnership (GSMP) for the ZEV Alliance, was launched today at an event in Glasgow ahead of the COP26 Transport Day on November 10th. It includes contributions from GSMP members in America, UK, Netherlands, South Africa, and India, citing examples from across the International ZEV Alliance membership.

Rachel Muncrief, Deputy Director of International Council on Clean Transportation, said:

“For the ZEV Alliance governments, and for everyone else working to accelerate the ZEV transition, charging infrastructure is a persistent challenge.

“This report from the GSMP provides insight into the top questions that governments are facing as they are strengthening their ZEV commitments and creating comprehensive, equitable charging strategies.

“With the information and analysis in this report, charging can be a driver of the ZEV transition rather than a barrier.”

Jeff Allen, Executive Director of Forth, based in Oregon, USA, said:

"This report outlines principles and strategies that governments around the world can use to guide their investments in charging to accelerate the transition to electric mobility.

“One important finding is that centring equity and designing programs around drivers with the most barriers to going electric will generally result in better outcomes for all drivers."

Robert Evans, CEO of Cenex, based in England, UK, said:

“The accelerated electrification of road transport is recognised as critical to achieving Net Zero targets and a mature, flourishing, and equitable charging ecosystem is key to that.

“This report offers international perspectives on the policies and best-practice options for electric vehicle charging. It addresses the more challenging areas for electric vehicle charging, including the commercial vehicle opportunity.

“It has been a privilege to work with our partners in GSMP to conduct this study work for the International ZEV Alliance members and International Council on Clean Transportation.

“We are pleased to be able to launch the report on this first day of COP26 and hope this report proves valuable insights for international policy makers in the years ahead.”

The ZEV Alliance is a group of 18 national, state, and provincial governments committed to a collaborative approach to expand the zero emission vehicles (ZEVs) market and enhance governmental cooperation on relevant policies.

Locally, ZEVs are generally cheaper to operate, quieter at slow speeds and more pleasant to drive; nationally, their uptake will improve air quality, especially in congested zones, as well as creating new economic opportunities in a growing sector; and internationally, the mass

rollout of ZEVs should help to slow the pace of global climate change and reduce oil dependency.

Building a Charging Ecosystem

Mature and flourishing charging systems are more likely to exist with specific government focus, most likely through a dedicated Transport or Energy ministry brief. This will locate responsibility for the production and maintenance of an infrastructure strategy, as well as provide a central point from which activity in the different levels of federal, regional and local government can be coordinated.

Improving the Business Case for Public Charging

The business case for chargers is essential to get right if the much-needed private investment is to be obtained. Where public intervention is desired, a range of models can be used to distribute the financial, reputational and operational delivery risks. Public authorities wishing to involve themselves actively should seek contractual terms which balance risks and opportunities with their chosen contractor.

Providing Equitable Access to Charging

Delivering equitable access to EV charging is important to ensure the social and environmental benefits of electric mobility are available to all. Without public intervention, chargers will tend to be deployed in more affluent areas where EV ownership is higher. Whilst making equity the focus of EV charging policy is likely to be more challenging in the short-run, it will yield better opportunities and outcomes in the long-term.

Emerging Solutions for Commercial Vehicles

Battery electric truck (BET) uptake is expected to increase in the coming decade, with lighter vehicles leading the way. While the economic case for electrification is strengthening and product choice is growing, stronger policy interventions are needed to accelerate the uptake of heavier BETs.

From an infrastructure perspective, lighter BETs are expected to use the same private and public infrastructure as private vehicles. For heavier BETs, private commercial locations are expected to prefer charging locations where space and the electricity network connection allows. Where this is not possible, a new network of public charging locations will need to be developed taking developments on wireless and catenary charging into account.

- Ends –

Notes to Editor

Read the report: Policies for a mature, flourishing & equitable EV charging ecosystem

For additional comment contact: Chris.Rimmer@Cenex.co.uk

About GSMP

The Global Sustainable Mobility Partnership is a network of independent, not-for-profit organisations with extensive, practical and real-world experience in implementing low and zero emission mobility.

It comprises Forth (USA), Cenex (UK), Cenex Nederland, uYilo (South Africa) and TERI (India).