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bp Australia response to the National Electric Vehicle Strategy: Consultation Paper

bp welcomes the Government's commitment to prepare a National Electric Vehicle Strategy and the opportunity to engage in the development of the strategy.

bp's purpose is to reimagine energy for people and our planet. Our ambition is to become a net-zero company by 2050 or sooner; and to help the world get there, too.

As a major source of greenhouse gas emissions, decarbonizing transport is a focus of our global strategy where we plan to provide electric vehicle charging and other refueling solutions for our customers, increase our production and distribution of low carbon fuels like biofuels and hydrogen for use across the economy including for transport, and advocate for policies that make reducing transport emissions more attractive to investors and customers than they are today.

The Australian Government's consultation on a National Electric Vehicle Strategy will be critical to support long term market and investment certainty.

We also welcome the Government's commitments under \$500 million *Driving the Nation Fund*, and the plans to co-invest in EV chargers, hydrogen and biofuels refueling infrastructure.

About bp Australia

bp has been operating in Australia for more than 100 years helping to keep Australia moving now and into the future. bp Australia is a leading premium fuel retailer with

around 1,400 branded retail fuel sites across the country, of which approximately 350 are company-owned, and more than 1,000 are owned and operated by our independent business partners.

bp is working to provide its customers with a range of options to reduce the emissions from their vehicles. Through our global brand – **bp pulse** – we’ve begun installing **electric vehicle fast chargers** at our service stations across Australia. This is an exciting step forward to accelerate the future of low-carbon transport.

bp is also aiming to be a leader in **hydrogen refueling**, having commenced the building of a public H2 refueler at the Port of Brisbane.

bp is also progressing electric vehicles in our own operations. For example, we’ve commenced using an **electric refueler for aviation refueling** operations at Brisbane Airport.

In Western Australia, we’re planning to redevelop and leveraging our **Kwinana site to be an Energy Hub**, producing hydrogen and renewable diesel and sustainable aviation fuel (SAF).

To this end, bp Australia supports the Government’s policy intent and ambitions under the **National Electric Vehicle Strategy: Consultation Paper**.

1. Decarbonising Australian transport

Following the newly legislated target of 43% by 2030 and NetZero by 2050 which has sent strong market signals, the next step for the Australian Government is provide regulatory pathways across each sector.

Comprising 18% of Australia’s emissions, transportation is a key sector of the economy to decarbonise.

- bp Australia supports and recommends the Government develop ambitious policy settings based on the following principles:
 - Be **market-based** to deliver the most efficient outcomes.
 - **GHG abatement** is the central driver.
 - Use **technology agnostic approaches** across a range of low emissions options including electrification, hydrogen-ICE vehicles, and plug-in hybrids.
 - **Balances an approach** to encourage new technologies to turn over the vehicle fleet, alongside approaches and technologies to **decarbonise the existing vehicle fleet**.
 - Is **equitable**, ensuring no one is left behind in the energy transition.
- Develop **regulatory pathways with industry** on the interim measures for transitioning to 2030 including:

- **Fuel efficiency standards** – vehicle emissions standards to compel car manufacturers to import more clean car choices to Australia and give choice to customers.
- **GHG based targets** on vehicle classes, technology and products deployed over specific time periods.
- Identifying regulations and standards to streamline or develop and implement.
- Better coordinate policy with jurisdictions and industry on EV uptake, refueling infrastructure (including H2 for heavy transport) and network investment and tariff reform. This includes establishing an **industry/government board** to coordinate and review progress, provide global market updates, address barriers and supply chain issues, and provide assurance that measures are reducing emissions.
- Where possible, adopt international standards and accreditation (or make it easier to bring into Australia) - aim to complement where possible across light and heavy vehicle fleets (see **section 3**).
- Support the critical role that decarbonised (drop-in) fuels will play (see **section 4**).

2. Greenhouse gas emissions standards

bp supports the use of fuel efficiency standards (or a greenhouse gas emissions standard) to provide incentives for vehicle suppliers to reduce the average greenhouse gas emissions per kilometer of the vehicles they supply in Australia.

bp encourages the Government to consider a model that provides flexibility for suppliers to improve the overall emissions outcomes of the mix of vehicles being sold, where sales of lower emissions vehicles would offset those of higher emissions vehicles. Overall emissions targets within such a model would need to strengthen over time.

While Australia can leverage the experience of other markets that have implemented similar standards, such settings will need to be determined within a local context - with targets having regard to the practicalities of ramping up supply and balancing the impact on the price of vehicles for Australian consumers.

While technologies for heavy vehicles are not as readily available as for passenger and light vehicles, bp encourages the government to work with industry on incentive-based policy to encourage the increased supply of low carbon heavy vehicles into Australia. If a greenhouse gas emissions standard is introduced, it should be separate to that deployed for passenger and light vehicles.

3. Charging infrastructure

With charging infrastructure – technology, location, and different rates of charging - will always remain a mixed landscape. As drivers look for ‘different speeds for different needs’, it is likely that acceleration of the EV transition will be tightly correlated with the roll-out of fast charging.

For motorists with access to off-street parking at home, a home charger will be the most convenient option for most of their charging. But to those without access to charging source will not necessarily be willing or able to charge primarily on slower on-street charge points.

While on-street charging has its place, it has severe limitations – from low charging speeds and public safety concerns (trailing cables) – leading to the inevitable consequence of parking and charging-challenges merging.

The ability to scale fast charging infrastructure will be important. In the UK, where bp operates one of the largest EV charging networks, we observe a strong trend away from slow on-street charging, and in China (one of our more mature markets) there are already questions about whether low-speed street charging points remain viable.

Customers want faster chargers at convenient locations. The trend in several markets across multiple operators appears to be for high-speed charging ‘hubs’, with increasing numbers of chargers per site. We expect this trend to continue.

Rapid and ultra-fast chargers appear to be delivering much of the public charging in the UK. On the bp pulse network, rapid and ultra-fast chargers make up some 30% of charge points but account for around 80% of the energy supplied, an important consideration when assessing the economics of EV charging investment and whole-of-life maintenance.

Convenient ultra-fast charging will be vital for giving people the confidence to switch to EVs, even if they rarely need it. There are too many ‘what if’ scenarios where access to slower charge points alone would not be a good enough for customers – for example, fleet drivers in need of a charge to optimise their working day, or a holiday maker not wanting an unnecessary delay to a journey.

While private motorists were the earliest adopters of electric vehicles, one of the most significant sectors driving EV adoption over the 2020s will be commercial fleets as they transition large numbers of (predominantly diesel) vehicles to electric.

Fleet managers across markets tell us that they want to de-risk their charging strategy, which for on-the-go charging is likely to mean getting vehicles charged with certainty as quickly as possible, rather than facing the uncertainty of their EVs ‘doing battle’ with the existing fleet of ICE vehicles for on-street parking (and charging)

spaces. We believe ride-hailing and taxi companies will increasingly rely on this model.

bp supports an EV Strategy which is:

- **Market led**, responding to demand and need from consumers and fleets who will want to make the transition in the right way for them. Public funds should be directed where private investment is unattractive.
- An appropriate policy environment that **stimulates investment**, ensures **competitive outcomes**, and ensures **appropriate standards**.
- Recognises that **grid connectivity** is the number one determiner of the ability to roll-out electric vehicle charging infrastructure.
- **Adaptable**, enabling charge point operators, OEMs, regulators, and governments to quickly respond.
- **Coordinated** across jurisdictions on EV uptake and networks, and network investment and tariff reform.

4. Decarbonized grid needed to support decarbonized transport

- Mindful of government objectives for 80% renewables by 2030, there's a need for rapid transition of electricity generation toward renewables.
- Beyond generation, there's also a requirement for focus on network capacity and access improvement – including transmission investment and regulatory streamlining.
- Tariff reform and revenue pathways for private sector charge point operators, including flexibility in the rules to sustain private sector investment and incentivize the latest technologies.

EV-specific recommendations

- Leverage the large-scale demand as well as turn EV fleets over by incentivizing commercial EV fleets
- Fund grid transmission - particularly in regional Australia with a high concentration of renewables.
- Identify demand hubs for public charging including the adequacy of installed capacity and if not, what policy, regulatory or other investment incentives may be valuable.
- Consider a clear hierarchy of responsibilities for EV charging infrastructure such as:
 - Charge Point Operators - predicting and then meeting market demand for charging opportunities.
 - Network providers - delivering the connections that Charge Point Operators require; and
 - Regulators - ensuring that network providers can deliver the connections, in a timely, reliable, and cost-effective way.
- Establish a government and industry board to steer and hasten a regulatory pathway for EV strategy implementation.

5. HEAVY TRANSPORT

The policy issues facing hydrogen fuel cell electric vehicles (FCEVs) requires similar policy solutions to those of EVs.

While the regulatory and policy space is more complex, there are key considerations that can be addressed immediately to achieve parity with diesel engines, increase supply to Australia, and encourage a local supply chain.

Notably, Europe has begun placing minimum production and supply targets on FCEVs and other low emissions vehicles, leading to constrained availability of zero and low emission trucks globally, not just in Australia. Both a global and domestic approach is needed.

The pace of the transition, regulations and policies for heavy trucking does not match passenger vehicles or light commercial vehicles. Any improvement to emissions standards needs to be GHG-based and be technology agnostic including allowing low-zero emission vehicles (i.e. hydrogen-ICEs) be part of the interim policy solution.

Truck OEMs have yet to commit any timeframes to Australia. Other countries more aggressive H2 trucking policy is resulting in adverse policy outcomes – the market is unable to keep up - but Australia risks in falling behind without similarly aggressive targets. While targets are welcomed, policy should not out pace technology and manufacturing capability – there needs to be flexibility built into the supply chain while managing the readiness of local supply chains to service OEMs (i.e. after market components). There are several regulatory opportunities that can support more supply of low emissions and zero emissions trucks, local supply and refueling infrastructure and sources (i.e. hydrogen).

bp Australia supports and recommends:

- Leveraging innovation and technological advances with open and **competitive global supply chains**.
- Using targets and incentives to help **drive down technology costs**.
- Providing **targeted local manufacturing support** to guarantee safety, reliability, and after-market support.
- Setting **targets for OEMs** to increase supply.
- **Streamlining accreditation via Australian Design Rules** to align with international standards and increase the purchase range of electric heavy vehicles that can be imported to Australia including:
 - **Increasing the minimum truck width** from 2.5 to 2.55 metres, with additional consideration for refrigerated trucks that may require up to 2.60 metres and providing at least a one tonne mass concession to zero emission / electric trucks.

The role of decarbonised (drop-in) fuels

There's no doubt electrification is key to decarbonising transport. However, policy that focuses on decarbonising new vehicles via electrification alone will not be enough. It will take more than a decade for Australia's vehicle stock to turn over, and throughout this time – widespread use of the internal combustion engine will continue.

bp urges the Government to consider complementary policy to reduce transport GHG emissions. Given the relative minor adjustments required to existing fuels infrastructure and the potential abatement opportunity, decarbonised (drop in) fuels may play a material role to abate GHG emissions from Australia's transport emissions.

Beyond ground transport, decarbonised fuels such as sustainable aviation fuels (SAF) have a critical role to play in decarbonising aviation, where other technologies (electrification and H-ICE) are yet to mature for commercial aviation.

There's an opportunity for government to design policy to encourage both the production and use of low carbon fuels, including:

- Establishing credible and internationally consistent emissions reporting and certification for biofuels and other low carbon fuels. bp supports policy based on emission reductions which includes multiple sustainable feedstocks / production pathways.
- Incentives, grants, concessional finance, Contracts for Difference (CfD) or other price guarantee / tax incentives in support of domestic feedstock and biofuels production, particularly for early capacity that bears more risk. Domestic capability has the added benefit of contributing to Australia's fuel security.
- Demand side policy such as a low carbon fuel standard (LCFS) or biofuel mandates. These policies require GHG intensity of fuels to decrease over time. Like vehicle emissions standards, both policy mechanisms have been implemented in other markets.