



POLICY PAPER – TECHNOLOGY OPENNESS.

DEFINITION AND IMPORTANCE OF TECHNOLOGY OPENNESS.

The BMW Group has identified openness to different technologies as central to its strategic orientation. Technology openness ensures different drive types are developed and used in parallel, so that mobility solutions can be specially tailored to the different needs of different regions and individuals.

This strategy makes the company extremely flexible: in countries with a limited charging infrastructure, for instance, a hydrogen or hybrid drive may be the better choice, while elsewhere the focus may be on battery-electric vehicles. By keeping an open mind to multiple technologies, the BMW Group can better prepare for the different infrastructural conditions around the world, but also for geopolitical challenges such as dependence on raw materials.

ADVANTAGES OF A STRATEGY OF TECHNOLOGY OPENNESS.

BMW Group's strategy of openness to different technologies offers several advantages:

- **Consideration of customer needs:** By offering different drives, the BMW Group can respond to different individual mobility requirements. Customers can choose the drive that suits them best, depending on their driving profile, priorities and circumstances (such as their living situation, access to the charging infrastructure, commuting distance, cost of the respective energy).
- **Consideration of regional specifics:** Different markets have different technological and regulatory requirements: some countries can scale up electromobility quickly, while in others hydrogen or highly efficient combustion engines play a more important role.
- **Resilience to geopolitical challenges:** Staying open to diverse technologies minimises dependencies on specific raw materials or markets. Difficulties in obtaining raw materials for batteries, for example, can be partially offset by using hydrogen technologies.

CONTRIBUTION TO ACHIEVING CLIMATE TARGETS.

The BMW Group believes that a flexible approach of openness to different technologies is crucial in addressing the different requirements of the markets while still achieving the Paris climate goals. Any kind of drive can help protect the climate: every tonne of CO₂ saved matters – irrespective of what type of drive “delivered” or saved it. By integrating different technologies, the BMW Group aims to facilitate the transition to climate-neutral mobility – while still addressing the specific requirements of different regions and customers:

- **Battery electric vehicles (BEVs)** play a key role in reducing CO₂ emissions, especially in regions with a well-developed charging infrastructure and high rates of renewable energies in the electricity mix.
- **Plug-in hybrids (PHEVs)** are an important bridging technology for customers in regions that lack a nationwide charging infrastructure. They can significantly reduce CO₂ emissions, especially in urban traffic, yet still offer the flexibility needed for longer-distance journeys. PHEVs are also a good introduction to electric driving and can smooth the transition away from the combustion engine.
- **Efficient internal combustion engines (ICE)** powered by increasingly decarbonised fuels also help reduce CO₂ emissions. For several years now, BMW Group vehicles have been approved for higher rates of renewables in fuel, such as E25, B10, HV100 and all eFuels (within the EN228, EN590 and/or EN15940 fuel standards).
- **Hydrogen fuel-cell electric vehicles (FCEV)** will offer an emission-free option for customers who don't have daily access to the charging infrastructure and but do have high personal mileage.

CONTRIBUTION OF LEGISLATORS.

In its dialogue with political decision-makers, the BMW Group advocates for market-oriented legislation that enables innovation in various areas of technology and promotes competition. The BMW Group is an outspoken supporter of adapting laws that are not yet technology neutral, such as the EU CO₂ fleet emissions laws.

In addition, regulatory objectives require stable framework conditions that are rooted in policy. This will ensure sustainable and emission-free mobility over the longer term without ruling out individual technologies. Aspects that should be addressed include the availability of critical raw materials, expansion of the charging and refuelling infrastructure for BEVs and FCEVs, and the availability of CO₂-free electricity, hydrogen and fuels.

Conclusion

The BMW Group's strategy of openness to different technologies ensures flexible and sustainable future mobility. By advancing different drive technologies simultaneously, the company can cater to the different requirements of different regions and customers, making a clear contribution to reducing both CO₂ emissions and dependence on geopolitical factors.

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