EMPOCI
Accelerating sustainable energy-mobility transitions

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How phase-out policies strengthen Europe's automotive industry

Executive Summary

Europe is committed to phasing out the sale of new petrol and diesel cars by 2035.

Some assume that these net-zero sales targets are bad for business. This assumption is particularly prevalent in Germany, which relies heavily on its automotive industry.

However, recent research suggests that relaxing or scrapping these phase-out policies would do more harm than good to Europe's struggling automotive industry. This is because the targets generate **investment certainty** and thus help companies compete in the global innovation race.

This brief explains why credible phase-out policies strengthen the European automotive industry, rather than weakening it.

It also covers additional key steps European policymakers could take that would bolster the industry's global competitiveness.

Key Messages

1. **Phase-out policies strengthen Europe's automotive industry.** They sharpen strategy, facilitate planning and reduce inertia.

2. **Changing gears would be a mistake.** Phase-out policy works best when it's stable and ambitious.

3. **Complementary policies are equally crucial.** Stimulating European demand for EVs is a key task now.

4. **Supporting a just transition is critical.** Policies should actively address disadvantaged regions.

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Introduction

Europe's automotive industry faces multiple challenges: transformative technological change, fierce competition from emerging markets, and climate change risks.

Increasingly, critics are blaming the EU's phase-out policies for the industry's vulnerabilities – notably Regulation 2023/851 and the amended Regulation 2019/631 setting CO_2 emission performance standards for new passenger cars and for new light commercial vehicles.

This response is understandable, as the transition to net-zero technologies does require profoundly reshaping value chains and industrial processes. This can be highly disruptive for communities living in automotive industry hubs, particularly in Germany, France, Hungary, Czech Republic and Slovakia.

But reversing the *de facto* ban of the sale of new cars and vans with internal combustion engines (ICEs) will not solve the European automotive industry's problems. In fact, given fierce global competition for the best net-zero technologies of the future, weakening CO_2 emission performance standards would do more harm than good.

Our research – based on analyses of business strategies and extensive interviews with managers and industry insiders – suggests that a more strategic approach would be to stick with the existing phase-out policies and supplement them with policies to accelerate adoption of battery electric vehicles (EVs) and support vulnerable communities.

1. Phase-out policies strengthen Europe's automotive industry

It is crucial to understand that the transition away from ICE vehicles is an irreversible global phenomenon, beyond Europe's control.

It is also vital to understand that in the global innovation race, EVs have already emerged as the dominant new design. Driven by technological progress and supported by strong industrial policy, US and Chinese EV manufacturers have gained an innovative edge over their European rivals.

As a result, policymakers can do little to prevent the fundamental transformation required for the European automotive industry to survive. But they can provide a clear timeframe for the inevitable transition. This offers several advantages that can strengthen Europe's automotive industry in the face of global competition.

Why phase-out policies are good for business:

1. They sharpen strategy. Phase-out policies redirect strategic attention to net-zero technologies. This leads to more future-oriented strategies and a greater willingness to allocate resources to new technologies.

2. They support with planning. Setting a clear end date for ICEs limits uncertainty and provides the entire automotive industry with the same reference point for forecasting. This levels the playing field, making it easier to invest in next-generation technologies and transform production facilities and the workforce.

3. They reduce firm inertia, bad investments, and stranded assets. Without clear regulatory signals, businesses often are hesitant to go all-in on new net-zero technologies. This can result in inertia, with investments focused on incremental improvements to existing cash cows rather than shifting towards rapidly diffusing innovations. Phase-out policies help by providing clarity, thereby avoiding mis-investments and stranded assets.

4. They facilitate building an e-mobility system. A clear phase-out date makes it easier for the whole e-mobility system to undergo a coordinated shift to EVs – so that carmakers, suppliers, infrastructure providers, investors and trade unions are all aiming at the same target. This helps avoid costly delays and roadblocks.

What about China?

China's stable and long-term policy approach is a key reason for its accelerating e-mobility transition, positioning the country as a global forerunner.

The country is on track to meet two critical targets in its New Energy Vehicle Industrial Development Plan (2021–2035): 1) by 2025, ensuring 20% of new car sales are new energy vehicles; and 2) by 2035, making battery electric vehicles the "mainstream" in new car sales and achieving 100% electrification of its public fleets.

China's ambitious plan highlights the urgent need for European carmakers to adapt. Failure to offer affordable, high-quality EVs could result in substantial market losses and financial setbacks in the world's largest car market.

To remain internationally competitive, European carmakers must not only innovate in technology and product design but also upgrade their manufacturing capacity – and European phase-out policies are crucial for supporting this transition.

2. Why changing gears would be a mistake

Reversing course on European phase-out policies would be a mistake for two reasons. First, it would undermine policymakers' **credibility**.

- If businesses anticipate weaker phase-out policies in the future, they may lose confidence in making long-term net-zero investments, harming their future competitiveness.
- China's current EV market dominance is an example of how stable policy can pay off. Its rise only happened because of decades of focused government support, particularly in batteries and supply chains. Europe can learn from this by prioritizing strategic, long-term commitments to develop its own EV value chain.

Second, **ambitious** phase-out policies drive lasting success.

- Weaker phase-out policies are likely to tempt more companies to focus on incremental technologies over net-zero investments.
- Our research suggests these half-measures are often wasteful investments. For example, we found that some heavy-duty vehicle manufacturers initially focused on gas-powered alternatives instead of battery-electric or hydrogen fuel cells. This turned out to be an expensive misstep.

What about e-fuels?

Technology neutrality means designing a policy in a way that does not prescribe how the policy's objectives are to be met. In the early stages of a transition, technology-neutral policies can encourage the development of and experimentation with low-carbon innovations by keeping options open. But when a transition is advanced and genuine solutions are already known and have started to diffuse into mass markets, it is advisable to exclude options that face serious scalability and readiness challenges or are inappropriate to meet long-term targets. ICE vehicles running on e-fuels are one such option. While they could power existing cars and build on current assets, they will be costlier than alternatives and their availability in the future will be limited for light-duty vehicles given higher priority use cases. Keeping the door open for ICEs in new passenger cars would impair Europe's competitiveness in EVs, delay innovation, and waste resources on a marginal option. Instead, policy needs to signal clarity and stability, supporting the quick scale-up of the most promising technology options and their associated infrastructure.

3. Complementary policies are equally crucial

Phase-out policies are powerful but insufficient to win the global net-zero innovation race. Complementary policies are needed to future-proof Europe's automotive industry and its value chain. Here, we focus on three key areas for policy support: demand pull, technology push, and systemic policies.

1. Demand pull:

The recent drop in demand for EVs in Europe – mainly driven by Germany and France – is hurting many carmakers and their suppliers. Boosting demand should be a top priority for policymakers. Various levers can stimulate demand, such as:

- Consistent political messaging supporting net-zero technologies
- Prioritizing EVs in public procurement
- Abolishing fossil fuel subsidies and preferential taxation
- Incentivizing EV purchases for low-income households

2. Technology push:

R&D support for cutting edge solutions can help businesses take advantage of growing demand by building capabilities to become innovation leaders in the EV market. Examples include:

- R&D funding for crucial technologies such as batteries with a focus on the entire life cycle, including recycling (to reduce resource dependencies)
- Demonstration funding for testing bidirectional charging in real-life settings

3. Systemic policies:

Governments should ensure that different systems, technologies and markets can seamlessly work together. To upgrade the e-mobility innovation system, they could, for example:

- Facilitate international cooperation for infrastructure build up through standardization processes and cross-country corridors
- Reform electricity markets so they enable attractive, fair and competitive business models for smart, flexible charging solutions

What about suppliers?

Just like carmakers, automotive suppliers also benefit from the certainty of a phase-out policy. Sticking to ICEs threatens their long-term competitiveness in the global market. But the transition to EVs offers unique challenges for suppliers:

- Large suppliers may struggle to benefit from EV investments, as carmakers are increasingly developing and manufacturing key components in house.
- Small suppliers often lack the resources and expertise to develop new EV technologies and are heavily reliant on the European market.

This is why complementary policies of the kind we discuss here are crucial to support suppliers during this transition.

4. Supporting a just transition

The decline in ICE sales risks harming regions whose economies still depend heavily on the automotive value chain.

While many European carmakers have taken on the innovation challenge and are investing in retraining, some traditional component suppliers may face redundancy. Phasing out new ICE sales should therefore be complemented by regional policies that support reskilling programs and protect vulnerable workers during the shift to EVs.

One policy option to support a just transition is that the EU could extend its Just Transition Mechanism (JTM), which runs until 2027 and mobilizes public and private funding to address the challenges of carbon intensive regions in transition. An extended JTM could provide targeted support for the automotive industry.

Proactively shaping a just transition will be key to ensuring broad public support for a long-term net-zero strategy that helps regain Europe's competitive edge.

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