

AMBITIONS FOR EUROPE 2024-2029

Harnessing regulation to
boost the Twin Transition

WHITE PAPER SUMMARY

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» FOREWORD FROM THE EXECUTIVE CHAIRMAN

Implementing an innovation and investment-boosting regulatory framework



As a new legislature begins, the European Union has rarely had to face so many serious challenges at home and abroad: Russia's war against Ukraine and threats at and to the EU borders; US structural disengagement; dealing with China, a partner, a competitor subject to production overcapacities, and a systemic rival; climate change; populism, illiberalism, xenophobia and antisemitism; artificial intelligence – which can generate a new Renaissance but also lead to dystopic scenarios; and, last but not least, multiple impediments to the EU strategic, technological, and industrial autonomy, and to its capability to successfully address global economic competition.

Polarisation is one of the main consequences of these developments. It refers to growing centrifugal trends within and between the various groups and societies in most parts of the world, including in the European Union and its Member States. Polarisation generates fragmentation which, in turn, affects governance, laws, and regulations, since these are driven by values and economic interests. Illustrations can be provided by trade and investment restrictions and unbridled subsidisation as well as

by the inaccessibility of essential technologies to the Global South, thereby increasing inequalities and resentment in those countries and, consequently, resulting in their unfriendly political positioning in global fora.

CERRE's mission is to contribute to robust regulation in the digital and network industries and service sectors. Therefore, the scope of these "Ambitions 2024-2029" for the next EU legislature deliberately does not address all the above challenges. Robust regulation implies, however, developing a set of rules which protect the interests of consumers and users, and uphold the democratic rights of citizens, while simultaneously incentivising innovation and investment. This is why our think tank benefits from a variety of perspectives – legal, economic, business, political and social science, engineering, data science, etc.- to address the width and diversity of our field.

I find, however, two common and complementary threads throughout the set of nine detailed recommendations outlined in this report: mitigating risks while seizing the opportunities presented by the twin – energy/digital – transition and deepening the single market to implement an effective European industrial policy.

Political risks as well as technological opportunities have increased and now supplement economic objectives, making regulation more multi-dimensional and complex than in the 90s and early 2000s, when economic objectives dominated. The risks involved relate mainly to security, autonomy, and democracy. With a view to mitigate these, the European institutions have, in the last five years, managed to secure approval of a significantly expanded EU acquis in several pivotal digital, energy, and climate areas. The focus is now shifting to implementation, with new challenges facing the EU institutions. For instance, much remains to be done to realise an effective, efficient, and fair dual transition in the public transport sector, including a leading-edge, smart, and sustainable European Mobility Data Space. Moreover, endowed with additional competences allowing it to become the European Digital Regulator, the Commission will have to adapt its role and ways of working to adequately enforce the Digital Markets Act, the Digital Services Act, and the AI Act, to mention a few. In the realm of energy and climate, appropriate institutional and governance frameworks will also have to be devised to reach net zero, adhering to a path which is politically acceptable.

Moreover, implementing an integrated EU industrial policy rooted in a deepened single market is clearly, in many instances, a necessary condition to secure the security and autonomy of the Union and, as such, enhance its democratic character. Therefore, even if the case for and the benefits of a single market in energy and digital are different,

“*Polarisation generates fragmentation which, in turn, affects governance, laws, and regulations, since these are driven by values and economic interests.*”

the report emphasises the need for robust, resilient, future-proof infrastructures in both sectors, as well as the crucial importance of developing fair and efficient energy and carbon markets and safe, vibrant, and competitive digital ecosystems.

In the last decade, the EU has managed to leverage its market power to impose its strong values of liberal democracy on technologies that it neither owns nor controls. This worked well for privacy, and it led to the “Brussels effect”. There is today, however, no certainty that this will reproduce across different foundational technologies, such as generative artificial intelligence, virtual worlds, and cloud computing.

Moreover, the EU has done better at regulating technologies than at removing bottlenecks in innovation, skills retention and investment generation. Referring to the requirements for the development of a thriving European AI sector, Mario Draghi noted recently that, while we have a world-class public network of high-performance computers, the spill-over effects to the private sector are limited. In addition, our power grids are still far from being up to level to meet the huge energy amounts needed to power the data centres without which there is no AI.

Robust regulation, as we promote it at CERRE, should play its full part in contributing to the objective of strengthening the EU technological basis. But obviously, this will not be sufficient without a significant, integrated initiative on innovation,

taking the form of consistent trade, competition, taxation, capital markets, and other relevant policies.

The 2019-2024 legislature has made significant progress in establishing a sound regulatory basis for efficiently mitigating the various risks facing the EU and enhancing its resilience. But, as shown by the results of the June elections for the European Parliament, the forces pulling in favour of a disintegration of our Union are, more than ever, at work and are growing. Therefore, to make the twin transition a popular success and safeguard democracy, it is high time for adequate and effective, investment-gearred, implementation of the regulatory acquis along an assertive, coordinated EU innovation policy.

It is far from being obvious to me that we will have another similar opportunity five years from now.

BRUNO LIEBHABERG



INTRODUCTION



WHERE ARE WE STARTING FROM?



As the outgoing European Commission's and Parliament's mandates draw to a close, they leave behind a legacy marked by ambitious targets for 2030, aimed at ensuring a future-ready twin transition.

Faced with industrial and public pressure, as well as growing geostrategic competition, the past term has been marked by a growing temptation to resort to more protectionist and inward-looking industrial policies for both the digital and the energy sectors. However, an open market will provide the necessary ingredients for the EU's dual transition.

The EU should continue to leverage its regulatory influence to ensure that technological advancements serve the public good and promote the region's ethical standards at the global level.

The EU must ensure that its core values – such as democracy, human rights, but also the protection of our planet – are embedded in the development and deployment of new technologies. Additionally, the EU should continue to leverage its regulatory influence to ensure that technological advancements serve the public good and promote the re-

gion's ethical standards at the global level. In other words, European values must shape digital technologies and not the other way around.

On the digital transition, Europe is on course for achieving its ambitious 2030 targets on infrastructure and skills, as well as on digitalisation, while also ensuring that technological advancements serve humanity, in that they enhance rather than reduce human agency and societal welfare. The focus should be on creating technologies that support human decision-making and interaction rather than replacing them, thus maintaining a human-centric approach to technology as proclaimed in the European Declaration for Digital Rights and Principles.

An innovative and competitive EU economy cannot be built on the regulation of technologies developed elsewhere – the “Silicon Valley effect” continues to prove more powerful than the “Brussels effect”. The EU must foster a robust environment for home-grown innovation, also because it can no longer ignore global supply chain pressures that threaten its growth objectives. This involves supporting startups and established companies alike, building on Europe's traditional industrial strength whilst continuing to promote trade integration at a global level.



On the climate agenda, Europe can today claim a position of global leadership. For the Green Deal to succeed as a sustainable growth strategy, the institutions' upcoming priorities must stay true to the EU's long-term net zero ambitions: the green transition of private sector investments can best be supported and attracted with a robust and simple regulatory framework, which provides for investment and planning security.

Europe's industrial leadership in technology will only prevail and - in the case of artificial intelligence (AI) materialise - if the region rolls out adequate infrastructure and affordable energy. We are in an era of rapid techno-

logical expansion that so far relies on an ever-growing, ever more power-hungry data infrastructure. The transition into a secure and environmentally sustainable energy supply will be costly, and the distributional effects of any policy in this field will receive higher political attention in the upcoming term.

The EU must strengthen its security and strategic autonomy in digital, economic, and energy sectors to ensure resilience against external shocks and dependencies in an increasingly volatile international environment. This involves a continued focus on becoming more independent from fossil fuel imports, but also to rethink the EU's approach to state aid, partnerships, and mergers. The EU should place a greater focus on the security and resilience of its infrastructure, which constitutes the backbone of any industrial activity in the digital and energy sectors.

Moreover, much remains to be done to realise an effective, efficient, and fair dual transition in the public transport sector, including a leading-edge, smart, and sustainable European Mobility Data Space.

The dual transition will be costly and pose significant risks and challenges to consumers and industrial customers alike. It is imperative to provide for an equal distribution of costs and to ensure broad public support for these necessary changes.



HOW DO WE ACHIEVE OUR GOALS?

In view of recurrent calls for an EU industrial policy with varying degrees of state planning and intervention, it is important to remain focused on fostering a competitive environment in a strengthened single market.

The EU should encourage innovators, and not merely protect the losers of the twin transitions or pick the next winners. Regulated market forces should drive success and failure, ensuring a level playing field rather than undue competition amongst EU member states. It is important to leverage the EU's digital acquis to encourage openness and ac-

cessibility in digital networks, platforms, and data to spur innovation and create opportunities for new innovative entrants and existing businesses. By promoting competition and innovation through smart regulation and breaking down barriers via interoperability and data sharing, the EU can create a more dynamic and competitive economy.

Europe's single market remains the dual transition's most important asset and best ally. It is the *conditio sine qua non* for the region's leadership in technology and a pioneering net zero growth and productivity model. A unified market is becoming more important

In a context of poly-crisis and heightened geostrategic competition, it is essential to ensure that EU policies are coherent and mutually reinforcing, thereby accelerating progress towards the EU's ambitious climate and technology leadership goals.

when outside competition is reduced for economic security purposes. The best way of dealing with the new geopolitical imperative is to do one's homework and concentrate on the implementation of the EU's Green Deal and digital acquis. Accelerated and more decisive action is needed.

The transposition and implementation of the digital provisions should involve a clear definition of the roles, objectives, tasks, and financial responsibilities of both market players and state institutions to create a bal-

anced and efficient regulatory environment. This clarity will ensure that both public and private sectors can contribute effectively to advancing Europe's growth and productivity agenda. In that same vein, new policies should aim to stimulate the demand side through the creation of an environment where consumers are eager to adopt new technologies.

It is also crucial to break down the complexity of existing rules and achieve better coordination, not only at the EU level but also amongst national regulatory authorities (NRAs). Aspects of the current regulation, such as in the telecoms sector, must be reviewed and adapted to new market realities. If a second Von der Leyen Commission achieves its original ambition to reduce the regulatory burden ("one in, one out"), and to truly simplify regulation, funding mechanisms, and contradictory rules, this would not only make compliance easier for businesses but also enhance the cost efficiency of the dual transition. In a context of poly-crisis and heightened geostrategic competition, it is essential to ensure that EU policies are coherent and mutually reinforcing, thereby accelerating progress towards the EU's ambitious climate and technology leadership goals.

Finally, fast-paced change that puts a significant regulatory burden on industry and consumers requires a complete application of the EU's better regulation principles, which emphasise transparency, evidence-based policymaking, consideration of the long-term implications of each policy, as well as stakeholder involvement. By fully applying these principles, the EU can ensure that its regulations are not only effective but also adaptable to new challenges and opportunities. This approach will help avoid further overly burdensome regulations that stifle innovation. It will, on the contrary, promote a regulatory environment that supports sustainable growth, enhances competitiveness, and ensures resilience against external shocks. Furthermore, an ongoing evaluation and refinement of existing regulations will be necessary to keep pace with the dynamic global landscape, ensuring that the EU remains at the forefront of both the digital and green transition.





NINE AMBITIONS FOR EU 2024-2029



AMBITION 1

Towards a new regulatory approach



Both the twin transition and the geo-political developments facing the EU require that the institutions adopt a novel way of working to better adapt to new challenges and issues arising out of new roles and competences.

European institutions should maximise the synergies between the different policies and various legal and financial tools. The Commission, which has acquired important new regulatory powers in the last mandate, has much to learn from the ways of working of experienced actors who understand what makes markets and business models successful. Additionally, the many laws adopted between 2019 and 2024 should be evaluated in an independent and robust manner. These evaluations are essential to correct the inevitable flaws and unintended consequences of laws, especially with new regulatory regimes which often have been adopted quickly, leav-

ing several trade-offs to be appraised and decided on during the implementation phase.

Regulation should be well-targeted and risk-based. This is why asymmetric regulation focusing on those firms presenting the highest risks to public interest concerns should in general be preferred to symmetric regulation which applies across the board and may increase the barriers to entry for small and innovative firms.

Finally, regulation should be simple and easy to comply with and enforce. The answer to an increasingly complex economy and society should not be increased regulatory complexity but, on the contrary, regulatory simplicity. Moreover, to deal with rising unpredictability in the world, new regulation should be resilient and principles-based, allowing for experimentation.

- 1.1 Better integrate policy tools and maximise synergies**
- 1.2 Smart enforcement of the new laws**
- 1.3 Independent and robust ex post evaluation**
- 1.4 Adhere to better regulation principles to enhance public interest and innovation**



AMBITION 2

Build robust, resilient, and future-proof digital infrastructures and foundational technologies

Digital infrastructures provide the foundation upon which the digital economy is built.

Today and in the future, ‘infrastructure’ (or the inputs into digital services), includes not only traditional telecommunications net-

works but also cloud infrastructure (on which telecommunications network functions will rely), satellite services, and the data required to train AI models or other digital services.

The existing European telecommunications regulatory framework is now over 20 years old and needs to be modernised. The first 10 years of privatisation and liberalisation of telecommunications markets involved removing public finance and influence from the sector. The last 10 years have seen the reintroduction of public funds to support the accelerated rollout of new fixed fibre networks and their extension to uneconomic rural areas. Markets work well when resources can be quickly reallocated or repurposed. Europe’s old copper telecommunications networks need to be retired as soon as possible for economic, security, and sustainability reasons, and in most cases, during the term of the new Commission.



- 2.1 A new digital networks regulatory framework
- 2.2 Rethink the role and organisation of public funding for digital infrastructure
- 2.3 Accelerate the retirement of old digital technologies
- 2.4 Apply cloud services regulation to vertical relationships



AMBITION 3

Ensure a safe, positive, and fair online platform ecosystem

Digital services are pervasive with well over half of the EU’s population being regular users of some of the largest social media and video-sharing platforms, online retail platforms, and search engines.

In some Member States, usage of certain very large services nears ninety percent. Under the last Commission, landmark legislation was passed to improve contestability in these markets and prevent harm to consumers and wid-

er society. This Ambition suggests priorities for the implementation and evaluation of these legislative developments.

Entry barriers in digital markets are significant due to the presence of strong network effects and the competitive advantage that data can confer. However, for digital markets to function well, an efficient entrant should be able to enter and potentially displace established incumbents. Competition on a dominant platform should be fair and transparent for third parties so that new or existing market players can develop their services. It is also essential

to facilitate easy switching between digital services for users.

There is likely no need for new legislation to bring the instruments that address potential harms from online services together. Still, more coherence and clarity of the synergies would likely make for better protection of consumers and prevention of harm in societies, as well as improved conditions for market players. Additionally, a robust evaluation of the relevant rules is an important step in appraising the effectiveness of their implementation.

- 3.1 Protect market contestability by preserving multihoming and improving merger control**
- 3.2 Enhance competition on dominant platforms through the development of open standards for Application Programming Interfaces**
- 3.3 Empower users in digital ecosystems**
- 3.4 Build coherence in the various instruments that address preventing harm from online services**
- 3.5 Establish robust evaluation systems for assessing the implementation of the Digital Services Act**



AMBITION 4

Create a thriving, vibrant, and competitive data and innovation economy

Data is the central resource of the digital economy and the key driver of digital innovation.

Consequently, it has become the focal point of European regulation to aim to mitigate data concentration, resolve data fragmentation, and ensure the protection of personal data. Data is also powering the rise of AI leading to the rapid growth of new AI-based services and the invention of generative AI tools that seemed impossible only five years ago. This raises new regulatory challenges and calls for ambitious policy approaches to ensure that Europeans can reap the benefits of these digital innovations.

The previous Commission has pursued a comprehensive data strategy with the goal of unlocking data troves to foster competition and innovation. However, a lack of coherence creates legal uncertainty, raises compliance costs – especially for SMEs – and may therefore ultimately even raise, rather than lower barriers to the free flow of data, reinforce size advantages, and undermine the potential of the European economy to harness data. Data is the fuel on which the European economy thrives in the age of AI and the Internet of Things (IoT).

Therefore, it is of utmost importance for the next Commission not to rest on what has

been achieved, but to remain vigilant and to quickly reassess, harmonise, and streamline EU data laws in order to remain at the

forefront, as other jurisdictions, particularly in China and the US, lead in the area of platforms and AI.

- 4.1 **Harmonise data regulation**
- 4.2 **Make the General Data Protection Regulation fit for the age of AI and the Internet of Things**
- 4.3 **Promote institutions and technologies that facilitate data sharing, data transaction, and data value creation**
- 4.4 **AI Neutrality: Protect competition and innovation benefits from AI in complementary markets**



AMBITION 5

Developing fair and efficient energy and carbon markets

Continued monitoring of the effects of the energy transition on various demographic groups remains crucial.

Lessons from past crises highlight the importance of targeted support to prevent the misallocation of resources, particularly in instances where subsidies inadvertently prop up fossil fuel industries. Establishing a European Energy Transition Observatory would facilitate the systematic assessment of distributional impacts, guiding policy decisions towards equitable outcomes.

While the commodity markets were heavily impacted – especially in 2022 and 2023 – carbon markets proved essential to once

more nudge EU decision-makers to accelerate the transition to clean alternatives in power markets. The crisis facilitated a step change in the carbon price, suggesting the increasingly significant role that carbon price might play on the path to net zero. This brought carbon prices to levels long dreamed about by economists and, for a time, to levels consistent with what CERRE modelling has suggested will be necessary to deliver net zero in 2050.

Despite these positive tests of the single market in energy and carbon, more steps are needed in developing fair and efficient energy and carbon markets that can keep Europe on track to meet net zero by 2050.

- 5.1 **Extend the EU Emissions Trading System in sector scope, country coverage, and openness to Certified Emissions Reductions**
- 5.2 **Promote further improvements in energy efficiency**
- 5.3 **Extend and deepen the integration of the single energy market**
- 5.4 **Fast-track the rollout of low-carbon investment**
- 5.5 **No dramatic market changes: stick to a market design that works**
- 5.6 **Better link the wholesale and retail markets**



AMBITION 6

Building resilient and sufficient energy infrastructure

The past few years – with their overlapping Covid-19 and energy price crises – have demonstrated the resilience limitations of the EU’s energy systems and critical infrastructure.



While consistent efforts have been made to reinforce it, additional steps must be taken. Despite commendable progress in deploying renewable energy sources, the infrastructure supporting their transmission and distribution is reaching its capacity limits.

This inefficiency not only hampers the scaling up of renewable energy but also jeopardises the achievement of net zero targets. Therefore, reaching a high resilience level of the European energy system calls for significant upgrades and expansion of the energy infrastructure, that would allow an increased integration of the intermittent generation, while also ensuring flexibility of generation, transmission, and distribution.

Moreover, achieving net zero necessitates an increased pace of electrification and requires additional grids, as bottlenecks are already causing disruptions in several regions.

- 6.1 Resilience needs to be defined in regulation
- 6.2 Increase investment in energy grids and expand cross-border interconnections
- 6.3 Coordinate clean investments across gas, electricity, and hydrogen networks and ensure equitable cost allocation
- 6.4 Deploy smart infrastructure at a fast pace, facilitating a higher consumer engagement



AMBITION 7

Creating appropriate institutional and governance frameworks to reach net zero

The quest for net zero is an ambitious policy endeavour that requires a transformative approach to the sector’s governance.

As we progress to net zero regulation, its

impacts will come under more, not less, scrutiny. At the moment, the international regulatory landscape is a patchwork, with some jurisdictions charging ahead with innovative low-carbon technologies and others strug-

gling to break free from the inertia of fossil fuel dependence.

Current governance structures are often mired in traditional regulatory approaches, such as ex post regulation, which may not be agile enough to deal with the rapid changes in energy technologies and markets. Moreover, the coordination of network planning is also challenged by regional disparities, requiring a more localised approach to manage the transition effectively. The future presents the dual challenge of main-

taining momentum towards net zero while ensuring the reliability and affordability of energy. This will involve integrating intermittent renewable energy sources, retrofitting infrastructure, fostering innovation, and addressing the socio-economic impacts of decarbonisation.

Policymakers are tasked with the complex job of overhauling existing arrangements to meet the net zero challenge head-on. This requires a multi-layered strategy focusing on structural, regulatory, and market reforms.

- 7.1 **Audit and incentivise National Energy and Climate Plans**
- 7.2 **Establish the European Energy Transition Observatory**
- 7.3 **Energy regulation needs to become more dynamic**
- 7.4 **Consider social and technological equities**
- 7.5 **Openness to adjusting targets**



AMBITION 8

Supporting effective, efficient, and fair public transport in Europe

Since its conception, the European Union has prioritised its transport and mobility agenda, with the aim of making the transport system an effective backbone of the continent, both in support of the economy and in pursuit of strengthening a collective European identity.



Much has been done in the last decades, from fostering decarbonisation and the internalisation of externalities to the advancement of trans-European transport networks. In pursuing a unified EU approach to mobility and transport, the aspiration to create a single transport market to benefit travellers and citizens has seen high levels of success.

Market deregulation and liberalisation, however, should not just be goals themselves, but rather a means to establish a better public transport system in Europe. In that regard, the public transport system must improve in at least three ways: become more effective in supporting the European economy and cities, more efficient in providing increased availability of services at lower public expenditure, and fairer – both in terms of accessibility for parts of the European population with limited mobility, and

geographically, expanding the network to increase the availability of adequate transport to all territories within Europe.

In the future, European institutions are well advised to review their regulatory efforts and to ensure they become even more incisive in the reality on the ground. Regulators and planners must strength-

en their interactions, and collaboration at all levels. Historically, decisions to increase investment in transport have been centralised, occurring with a significant delay in response to calls from the market. This pattern must be avoided, its cause reconsidered, and investments in regulated and deregulated markets must inform each other.

- 8.1 **Make rail interoperability a reality**
- 8.2 **Stimulate countries and regions to effectively liberalise local public transport**
- 8.3 **From trans-European networks to trans-European services**
- 8.4 **Adequate transport services for each territory**



AMBITION 9

Establish a leading-edge, smart, and sustainable European Mobility Data Space

The European Mobility Data Space (EMDS) is a concept proposed by the European Commission as part of its broader Digital Single Market strategy and Sustainable and Smart Mobility Strategy.

The EMDS aims to establish a unified framework for sharing and accessing a wide range of mobility-related data across the European Union. This EMDS shall include, but is not limited to, traffic management and public transportation schedules, including usage, freight, and logistics information, as well as data from new mobility services like car-sharing and ride-hailing. While ensuring privacy, data from the private sector shall also be integrated into the EMDS to reduce emissions, stimulate economic growth, and establish safer, greener, and more accessible transportation solutions,

benefiting both urban and rural areas across Europe.

The Commission should establish transparent and secure policies that reassure and motivate private entities to share critical mobility data generously and responsibly in its coming mandate. Additionally, high-capacity and secure digital platforms should be developed and implemented to facilitate an efficient, reliable exchange of mobility data across the EU. Uniform data formats and protocols should be formulated and enforced to ensure consistent data quality and comparability across different systems and regions. Finally, the EU should leverage a better availability and usability of mobility data to spur innovation in environmentally friendly transportation technologies and systems.

- 9.1 **Create a robust governance framework, incentivising the private sector to contribute actively to the development of the European Mobility Data Space**
- 9.2 **Establish a robust data-sharing infrastructure for the European Mobility Data Space**
- 9.3 **Create a standardisation of data in the mobility sector to enhance comparability**
- 9.4 **Enhance access to data for sustainable mobility solutions**



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ABOUT CERRE

Providing high quality studies and dissemination activities, the Centre on Regulation in Europe (CERRE) is a not-for-profit think tank. It promotes robust and consistent regulation in Europe's network, digital industry, and service sectors. CERRE's members are regulatory authorities and companies operating in these sectors, as well as universities.



CERRE'S ADDED VALUE IS BASED ON:

- Its original, multidisciplinary and cross-sector approach covering a variety of markets, e.g., energy, mobility, sustainability, tech, media, telecom, etc.;
- The widely acknowledged academic credentials and policy experience of its research team and associated staff members;
- Its scientific independence and impartiality; and,
- The direct relevance and timeliness of its contributions to the policy and regulatory development process impacting network industry players and the markets for their goods and services.

CERRE's activities include contributions to the development of norms, standards, and policy recommendations related to the regulation of service providers, to the specification of market rules and to improvements in the management of infrastructure in a changing political, economic, technological, and social environment. CERRE's work also aims to clarify the respective roles of market operators, governments, and regulatory authorities, as well as contribute to the enhancement of those organisations' expertise in addressing regulatory issues of relevance to their activities.

