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# Construyendo futuros competitivos sostenibles a través de la investigación transformadora

Building sustainable competitiveness futures through transformative research

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#### Europe's quest for competitive sustainability

La búsqueda europea de la sostenibilidad competitiva

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#### DEUSTO BUSINESS ALUMNI

## **EUROPE'S QUEST FOR COMPETITIVE SUSTAINABILITY**

## LA BÚSQUEDA EUROPEA DE LA SOSTENIBILIDAD COMPETITIVA

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**Summary:** 1. From competitiveness to competitive sustainability: rationale for broadening the scope for analysis and policy action. 2. Developing a renewed analytical and policy framework for competitive sustainability: mapping the relationship between competitiveness, environmental sustainability and social inclusion. 3. Towards a comprehensive policy framework to foster competitive sustainability in Europe. 4. Conclusions. References.

#### ABSTRACT

At a time of deep transformations, Europe is at a strategic crossroads that will define its near and long-term future. Europe needs to honour its commitments to achieve sustainability, while adopting decisive action to regain economic competitiveness and secure social and territorial cohesion. Europe requires a holistic and comprehensive action plan with measures in several interrelated fields to secure its competitive sustainability. Proposed actions cannot be adopted or assessed in isolation, without understanding the possible effects and trade-offs they may have on all the dimensions of competitive sustainability. To this end, the European Union (EU) has set out an ambitious policy agenda that is in the making. The EU Green Deal has identified the necessary commitments and defined the roadmap to achieve our ambitious to secure the transition of energy-intensive industries, crucial for Europe's economy, and the

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The opinions included in this article are exclusively those of the author and should not be considered as representative of the European Commission's official position. The author declares that this study was supported by his own individual affiliation and declares no funding or conflict of interest.

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development of a nascent net-zero technology industry that is subject to sharp policy intervention in different regions of the world. In addition, Europe is preparing a new European Competitiveness Deal inspired by the recent reports by Enrico Letta and Mario Draghi, that will include measures to truly fulfil the internal market and adopt an investment and reform agenda to support all businesses and sectors by boosting our digitization and innovation potential while defining a pro-innovation and pro-competitiveness regulatory framework. The implementation of this ambitious action plan requires strong cooperation and coordination between the EU and its Member States and their regions, and concerted efforts between the public and private sectors and the creation of strong public-private partnerships.

Key words: Competitiveness, Sustainability, Green Deal, Competitiveness Deal, R&I, Europe.

#### RESUMEN

En un momento de profundas transformaciones, Europa se encuentra en una encrucijada estratégica que definirá su futuro a corto y largo plazo. Europa necesita honrar sus compromisos para lograr la sostenibilidad, al mismo tiempo que adopta acciones decisivas para recuperar la competitividad económica y garantizar la cohesión social y territorial. Europa requiere un plan de acción holístico y completo con medidas en varios campos interrelacionados para asegurar su sostenibilidad competitiva. Las acciones propuestas no pueden adoptarse ni evaluarse de manera aislada, sin entender los posibles efectos y compensaciones que puedan tener en todas las dimensiones de la sostenibilidad competitiva. Con este fin. la Unión Europea (UE) ha establecido una ambiciosa agenda política que está en proceso de desarrollo. El Pacto Verde Europeo ha identificado los compromisos necesarios y definido la hoja de ruta para alcanzar nuestros ambiciosos objetivos de reducción de emisiones. Un Plan Industrial del Pacto Verde Europeo está apoyando y coordinando acciones para asegurar la transición de las industrias intensivas en energía, cruciales para la economía europea, y el desarrollo de una naciente industria de tecnologías de cero emisiones netas que está siendo objeto de una intervención política significativa en diferentes regiones del mundo. Además, Europa está preparando un nuevo Pacto Europeo de Competitividad, inspirado en los informes de Enrico Letta y Mario Draghi, que incluirá medidas para cumplir verdaderamente con el mercado interno y adoptar una agenda de inversiones y reformas para apoyar a todas las empresas y sectores, impulsando nuestro potencial de digitalización e innovación mientras se define un marco regulatorio pro-innovación y pro-competitividad. La implementación de este ambicioso plan de acción requiere una fuerte cooperación y coordinación entre la UE, sus Estados miembros y sus regiones, así como esfuerzos concertados entre los sectores público y privado y la creación de sólidas asociaciones público-privadas.

Palabras clave: Competitividad, Sostenibilidad, Pacto Verde, Pacto de Competitividad, I+D+i, Europa.

## 1. From competitiveness to competitive sustainability: rationale for broadening the scope for analysis and policy action

The importance of **competitiveness** has been recognised in both academic and policy literature for decades. Since the seminal work of Michael Porter (1990), several academics and policy-driven institutions, such as the OECD (1992) or the World Economic Forum<sup>1</sup>, have been looking into the territorial determinants that can influence the ability of businesses to thrive and the creation of the right conditions to improve people's living standards. These studies have provided influential analytical and policy frameworks that identify key drivers to boost long-term productivity, as the precondition for future economic growth. Institutional robustness, strong educational and training systems, the creation of networks and closely intertwined linkages between local actors to spur innovation creation and adoption, appropriate infrastructure and improved access to technologies have been clearly identified as success factors and have been the object of policy objectives, many times with the active involvement of the private sector in order to build public-private partnerships. The policy influence of these studies has become visible in the definition of territorial development strategies and policies at regional, national and supranational level that have aimed at improving the territorial conditions to boost domestic competitiveness.

While these frameworks have proved relevant to understand the interrelation of territorial characteristics and economic performance, for both businesses and governments, there is also a general understanding that economic growth may not have been translating into the results that we want as a society. Growing environmental pressures which set us into unsustainable growth paths due to rising pollution and the negative consequences it brings on the health of citizens, the severe economic and social negative impacts associated with climate change, or the loss of biodiversity are some of the main reasons that have brought sustainability to the forefront of international and national policy agendas<sup>1</sup>. Moreover, and notably since the global financial crisis, there is a growing perception that the distribution of economic growth has not always been fair and that economic disparities, both between individuals and territories, have been on the rise leading to less cohesive societies with the associated political, economic and social consequences (Rodriguez-Pose, 2018).

Against this backdrop, it becomes clear that the traditional concept of competitiveness needs to be enlarged to take account of the environmental sustainability and inclusiveness dimensions into a unified analytical and policy framework. It is no longer possible to consider the negative ecological and societal outcomes of economic growth as by-products that need to be mitigated or dealt with afterwards as an undesired consequence of economic growth. Therefore, the introduction of a renewed version of

<sup>&</sup>lt;sup>1</sup> See commitments under the United Nations Framework Convention on Climate Change (COP).

competitiveness that aims at adopting this broader perspective has been coined in terms of "sustainable competitiveness" or "competitive sustainability", the latter used at times in the European context to mark the centrality of environmental sustainability as recognized in the European Green Deal Strategy. This renewed concept has been defined in different forms or fashions, depending on where the emphasis is placed. In this regard, Solability<sup>2</sup>, a sustainable intelligence think-tank and management consultancy, defines sustainable competitiveness as "the ability of a country to meet the needs and basic requirements of current generations while sustaining or growing the national and individual wealth into the future without depleting its natural, intellectual and social capital"; while the University of Cambridge Institute for Sustainability Leadership<sup>3</sup> defines "competitive sustainability" as "the ability of an economy, its companies and industrial ecosystems to excel relative to international competitors in their transition to sustainable development (with climate neutrality at its core) through investment in the necessary innovation".

## 2. Developing a renewed analytical and policy framework for competitive sustainability: mapping the relationship between competitiveness, environmental sustainability and social inclusion.

The broadening of the scope of the concept of competitiveness to include environmental sustainability and social inclusion objectives has brought about the need to redefine existing conceptual frameworks that have traditionally mainly focused on economic competitiveness. To this end, significant efforts have been carried out to better understand the nature of the relationship between these three objectives, and the role that different drivers play, identifying possible compounding and/or trade-off effects. In 2013, the World Economic Forum (WEF, 2013) already analysed these complex relationships and questioned how socio-environmental indicators could limit or foster the long-term productivity potential of a society by taking into account undesirable consequences of economic growth such as lower access to depleted resources for production purposes, the effect of pollution on the health and well-being of labour and increased public costs of a health system, or the negative impact of excessive socio-economic inequality in the development of robust in-

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<sup>&</sup>lt;sup>2</sup> https://solability.com/the-global-sustainable-competitiveness-index

<sup>&</sup>lt;sup>3</sup> https://www.cisl.cam.ac.uk/system/files/documents/cisl-competitive-sustainability-report.pdf

ternal markets that could lead to stifled innovation. It also provided a preliminary framework to assess the sustainable competitiveness of nations based on an adjusted index that qualified its traditional Global Competitiveness Index, measuring over 100 indicators and organised around 12 competitiveness pillars, with a certain number of social and environmental sustainability output indicators. Another relevant study aimed at broadening the conception and measurement of competitiveness has been carried out by Orkestra (2021), when a new competitiveness framework for wellbeing was put forward for the Basque Country. In this framework, the authors included three fundamental elements to understand competitiveness for wellbeing, with outcome indicators inspired by the Sustainable Development Goals in terms of life satisfaction, health, social life, material life, productivity levels or innovation and entrepreneurship. This framework also included a set of levers for competitiveness such as natural and physical capital, financing, knowledge, human capital or social and institutional capacity; and, finally, indicators of the structural context of a territory, which influence the overall performance in areas such as geo-demographic context, economic and business structure or institution-

These and other studies have pioneered a better understanding of an evolved concept of competitiveness, its determinants and possible measurement. They have highlighted the importance of moving away from previous models that only focused on the economic dimension and that have become therefore obsolete for policy purposes. Thanks to these studies, it has become increasingly clear that public policies need to pursue all three objectives at once and that there are no necessary trade-offs between achieving all three objectives as some of the most economic competitive and productive economies in the world also exhibit high levels of environmental stewardship and social inclusion, such as the Nordic countries, Canada or New Zealand. In the European context, there has been a decoupling of economic growth, which has grown by 61% from 1990 to 2021; and CO2 emissions that have fallen by 28% during the same period (European Commission 2023a), showcasing that economic growth and rising emissions do not necessarily need to go hand in hand.

al values.

At the same time, these studies have also highlighted some shortcomings that we continue to face to fully understand the dynamic and complex interaction between the different drivers of competitive sustainability at specific points of time and the existence of possible short-term trade-offs. While there is consensus on the final objectives, there is less so on the process or timing to achieve them. The investments associated

with the development and adoption of more sustainable production processes can impose costs on businesses without necessarily translating into productivity or revenue gains in the short term. If these businesses are not supported or they are confronted by international competition from businesses facing less stringent regulation or benefitting from stronger support, this could lead to short term competitiveness deficits that can alter their positioning in their global markets. Equally, citizens can also be confronted with higher cost of production of certain products (e.g. agricultural products) or the need to engage in significant investment to adapt to new regulations (e.g. housing requirements, low/no emission cars) that can lead to an "affordability crisis" and disproportionally affect particular segments of society and exacerbate disparities. Some of these tensions have flourished in recent years, with large-scale demonstrations from farmers in several countries, calls for "regulatory breathing space" by business associations such as Business Europe, or President Macron's statement on the need for a "regulatory pause" for new EU green policy in May 2023. Equally, there have been tensions in coalition governments around the implementation rhythm of measures to achieve sustainability and whether this stifles economic competitiveness. In some instances they have led to the collapse of coalition governments, like in Scotland in April 2024.

These tensions and debates have also shown the limitations of existing analytical frameworks to define clear policy guidelines and a policy roadmap that needs to juggle many different factors. They call for further analytical work that can provide more and better evidence for policy action.

## 3. Towards a comprehensive policy framework to foster competitive sustainability in Europe

Despite the analytical shortcomings described above, policy action and business strategies need to take short-term decisions with long-term consequences. These actions must take into account: first, the broad values and multiple objectives of society and business; second, the current state of play of their competitiveness levels, identifying strengths and weaknesses; and third, the rapidly changing international context where governments and businesses operate and the nature and scope of the policies adopted elsewhere.

In the European context and in terms of policy, this means that first we must acknowledge the strong consensus on sustainability and the need to

avoid the vast economic and social impacts linked with pollution and climate change. The EU's international commitment to reduce by 55% our emissions by the end of this decade and guarantee intergenerational fairness where future generations can continue to foresee rising standards of living is a testament to this. Second, there is a growing realization that Europe's productivity growth since the mid-1990s and the sharp rise of digitization has been weaker than in other major economies, notably the United States. This has led to an increase in the overall productivity gap that hinders our growth potential and the ability of our business to thrive and spur stronger economic growth (European Commission, 2023b). Europe has trailed behind on the production, diffusion and adoption of new breakthrough, general purpose technologies such as next-level automation or applied Artificial Intelligence that are behind many of the latest innovations and the transformation of our economies. Third, recent years have been characterized by global geopolitical tensions, disruptions in the global supply chains caused by the Covid pandemic, the rising cost of energy due to Russia's invasion of Ukraine or the adoption of protectionist industrial policies in other regions aimed at improving the global competitive position of their industries and attract international companies to their territories. For example, the United States' Inflation Reduction Act will mobilise more than USD 360 billion by 2032 to attract manufacturing capacity. China has for years been subsidizing clean tech innovation and manufacturing through its Five-Year Plan and there is a pipeline of statebacked investments in cleantech industries exceeding USD 280 billion.

Against this backdrop, the European Union has defined an ambitious policy framework to boost Europe's competitive sustainability. This framework is based on three closely coordinated and interrelated strategic agendas and plans. The first agenda is the European Green Deal<sup>4</sup>. The key objective of this 2019 policy strategy is to make Europe the first climate-neutral continent by 2050 and with that objective in mind it enshrines a binding commitment under the EU Climate Law. These commitments require reducing emissions by at least 55% by the end of 2030, and a legislative package called "Fit for 55" provides a roadmap covering all sectors of the economy. The European Green Deal also includes a Social Climate Fund with a total budget of nearly 90 billion euros to support the most vulnerable citizens and small businesses with the green transition, to secure a fair green transition of our economy.

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<sup>&</sup>lt;sup>4</sup> https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55/

The second strategic set of actions, closely related to the European Green Deal, are those included in a *European Green Deal Industrial Plan* for the net-zero age<sup>5</sup>. This plan aims to enhance the competitiveness of Europe's net-zero industry and support the fast transition to climate neutrality, notably in energy-intensive industries such as chemicals and cement. The Plan recognizes the need to increase the technological development, manufacturing production and installation of net-zero products and energy supply to meet the targets set out by the European Green Deal.

The third agenda is the development of a New European Competitiveness Deal, as called by the EU heads of state and government at the European Council of 17-18 April 2024<sup>6</sup>. This Competitiveness Deal, while still in the making, will be characterized by the adoption of new and reinforced measures that should raise the general competitiveness of all our industries and include targeted measures for all businesses in Europe. This Competitiveness Deal will reinforce many of the already existing measures and introduce new ones to support business competitiveness. It is anchored around a set of drivers described in the European Commission's communication on boosting the long-term competitiveness of the EU: looking bevond 20307. This New European Competitiveness Deal will largely be influenced by the authoritative report prepared by Mario Draghi who provides key recommendations for immediate actions on ten mega sectors of the European economy, especially exposed to the green, digital and security challenges, as well as acting on a set of horizontal policies<sup>8</sup>. In his report, Mr Draghi pleads for acting on three crucial objectives that continue holding back Europe's competitiveness: (1) closing the innovation deficit vis-à-vis third countries like the United States for decades due to the rise of new and more complex technologies that are deeply transforming our markets; (2) developing a joint decarbonization and competitiveness plan that brings down the cost of energy and secures the green transition; and (3) increasing security and reducing vulnerabilities in our economies due to a rapidly changing geopolitical context that has exposed the potential of existing dependencies in areas such as access to raw materials into potential vulnerabilities capable of deeply disrupting our production processes.

<sup>&</sup>lt;sup>5</sup> https://ec.europa.eu/commission/presscorner/detail/en/ip\_23\_510

<sup>&</sup>lt;sup>6</sup> https://www.consilium.europa.eu/media/m5jlwe0p/euco-conclusions-20240417-18-en.pdf

<sup>&</sup>lt;sup>7</sup> https://commission.europa.eu/system/files/2023-03/Communication\_Long-term-competitiveness.pdf

<sup>&</sup>lt;sup>8</sup> https://commission.europa.eu/topics/strengthening-european-competitiveness/eu-competitiveness-looking-ahead\_en

This new policy framework, composed of different agendas that have been progressively developed and that build on each other, marks the centrality of regaining long-term competitiveness, while securing the transition towards sustainability in a fair manner. It identifies the need for decisive policy action to improve the overall conditions for competitiveness, while injecting a higher degree of directionality than in the past, to steer and guide the nature of the expected outcomes of these actions.

More precisely, the European competitive sustainability framework will be anchored around four main vectors.

1. The European internal market: As clearly indicated by the Letta Report<sup>9</sup>, the construction of a European internal market has been crucial to guarantee the size and sophistication that our businesses need to grow and be globally competitive. Founded under the principles of fair competition, cooperation and solidarity, it has promoted the free movement of people, capital, goods and services so that resources could move freely to those activities that would be more productive within the European Union and therefore of higher reward. However, we must also acknowledge that our internal market has not been completed yet, as several and important parts of our economies, such as capital markets, electronic communication networks and services, energy markets or public procurement continue to suffer from excessive fragmentation due to unharmonized regulatory frameworks at Member State level. This incompleteness prevents stronger scale ups of innovation in crucial sectors of the economy that have undergone rapid transformation. Therefore, improving Europe's competitiveness requires measures to truly fulfil the potential of the internal market, such as those aimed at introducing the "once only" principle in taxation, customs or regulatory reporting. In addition, completing the single market for services or the deepening of the Capital Markets Union and the Banking Union will be crucial to overcome fragmentation and ease cross-border investments through better alignment of insolvency rules, simplified access to capital markets (notably for SMEs), robust market infrastructure, better access to financial information and more integrated supervision. Furthermore, achieving an Ener-

<sup>&</sup>lt;sup>9</sup> https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf

gy Union that secures the supply of abundant, affordable and clean energy to European industry will require electrification using net-zero and low-carbon solutions, flexibility and important infrastructure investment to update and upgrade the grids, storage and interconnection of the national markets.

- 2. A smart innovation-based pro-competitiveness regulatory framework: A well-functioning, clear and predictable regulatory framework is essential to provide a clear rulebook for businesses operating in Europe, while securing the achievement of our objectives as society. The EU Green Deal has introduced the necessary regulation to meet our sustainability goals and provide a predictable framework that can guarantee confidence and stability for investors. Moreover, when preparing new regulations, the Commission uses one of the most advanced better regulation systems in the world and a new "competitiveness check" that accompanies the impact assessment exercises of any legislative proposal to identify the expected impact on cost and price competitiveness, international competitiveness, the capacity to innovate, and SME's competitiveness. Furthermore, measures to streamline and reduce the necessary reporting obligations, with the objective to reduce 25% of this burden, and the use of more innovation-friendly approaches such as greater use of regulatory sandboxes and testbeds are also in preparation.
- 3. Investment and improved access to finance: Improving economic competitiveness and securing the green transition towards a zero-emission economy will require significant public and notably private investments in key areas such as physical and digital infrastructure and the development and uptake of new technologies through investments in Research and Innovation (R&I), education and skills. In Europe, 85% of overall investment is private and thus securing adequate access to financing for businesses is crucial. However, the depth of EU capital markets is less than half of the United States in percentage of GDP, even if Europeans' savings are much higher than those of Americans, and thus channeling these savings towards appropriate investments becomes more complicated. Moreover, capital for innovation, measured as venture capital, remains underexploited and is 20 times lower than that of the United States. At a time of deep transformation, the amount and speed of mobilizing these investments become even more important to guarantee success. Strong public investment

plans are needed also to act as a lever to mobilise and channel savings into private investment and to create the conditions for better and broader access to finance for businesses. Many of these investments need a strong directionality towards fulfilling our sustainability objectives. In this regard, the Commission has estimated that achieving the current 2030 climate and energy targets will require €260 billion of additional annual investment, about 1.5% of 2018 GDP, in a wide range of sectors. This flow of investment will need to be sustained over time and requires mobilising both the public and private sector.

Against this backdrop, the EU and its Member States need to present strong and targeted public investment plans that can spearhead and de-risk investments in the development and adoption of new technology and large-scale infrastructures and to adopt the necessary measures linked to the deepening of the Capital Market union to unlock private investment, diversify sources of funding and allocate capital efficiently across Europe.

4. Innovation: Investing in innovation today translates into enhanced competitiveness tomorrow (European Commission, 2013-2). Scientific and technological developments and the wide adoption of new technologies result in breakthrough innovations that create new markets and deeply transform existing ones to achieve higher productivity. R&I, coupled with other investments in intangible assets such as education, skills and digitization are the basis for high levels of innovation. Digital technologies, such as Artificial Intelligence, Quantum Computing, 5G or Cloud Computing are driving much of the ongoing transformation of our economies. However, Europe overall is trailing behind with insufficient investments in R&D and the development and adoption of digital technologies. At 2.2% of GDP, investment in R&D is well below that of the United States (nearly 3.5%) or China (2.4%), and the EU share in the global ICT market has fallen from 21.8% in 2013 to 11.3%. Moreover, the green transition requires new skills, leading to a certain degree of skills mismatches and shortages. Evidence reveals significant gaps in current R&I funding to achieve Europe's ambitions to secure its green transition. For example, in the energy sector, and according to the International Energy Agency (2021), achieving the target of net-zero emissions by 2050 will require rapid largescale deployment of available technologies, as well as the development and widespread use of those technologies that are far from mature today. Currently, almost 50% of carbon dioxide emission reduction technologies are expected from those technologies that are at demonstration or prototype stage, and that will require large investments in R&I.

As a result, boosting R&I investments and their efficiency, by adopting necessary reforms when needed, will require strong public commitment and the creation of the conditions to leverage more private investments. Many of these actions will need to benefit from a higher degree of directionality to inform and drive the transformative policies that are needed to boost competitive sustainability. In this regard, EU investment and funding programmes, such as the framework programme for R&I (Horizon Europe), Cohesion Policy or the Recovery and Resilience Facility, the EU's investment response to fight the post-pandemic crisis, have all included important targets to support the green transition.

## 4. Conclusions

At a time of deep transformations, Europe is at a strategic crossroads that will define its near and long-term future. Europe needs to honour its commitments to achieve sustainability, while adopting decisive action to regain economic competitiveness and secure social and territorial cohesion. The sense of urgency to act in Europe is loud and clear as many key indicators point to a decrease in overall competitiveness that started decades ago, and that if unreversed could lead to an inevitable slow-paced decline that could compromise our social model.

Europe requires a holistic and comprehensive action plan with measures in several interrelated fields. Proposed actions cannot be adopted or assessed in isolation, without understanding the possible effects and tradeoffs they may have on all the dimensions of competitive sustainability. To this end, we need to better understand the interrelations between economic competitiveness, sustainability and inclusion, both from an analytical point of view and a policy perspective. Questions related to the process and timing to achieve competitive sustainability rank high in the current policy debate and demand better analysis to support better informed policies.

Notwithstanding the need for more and better evidence, policy actions need to be promptly adopted. At European level, an ambitious policy agenda is in the making to strengthen Europe's competitive sustainability. The EU Green Deal has identified the necessary commitments and defined the roadmap to achieve our ambitious emission targets. Moreover, a Green Deal Industrial Plan is supporting and coordinating actions to secure the transition of energy intensive industries, crucial for Europe's economy, and the development of a nascent net-zero technology industry that is subject to sharp policy intervention in different regions of the world. Furthermore, Europe is preparing a new European Competitiveness Deal that will include measures to truly fulfil the internal market in Europe and adopt an investment and reform agenda to support all businesses and sectors by boosting our digitization and innovation potential while defining a pro-innovation and pro-competitiveness regulatory framework. These measures will continue benefiting from a high degree of directionality, as in the past years, to steer the outcomes to the general objectives society demands.

The implementation of this ambitious action plan requires strong cooperation and coordination between the EU and its Member States and their regions. The direction, objectives and proposed actions need to be fully shared at all levels of intervention and this will require a strong coordination framework to create synergies and avoid possible overlaps or confusion among stakeholders.

Moreover, the deep ranging effects of the foreseen transformations will also require concerted efforts between the public and private sectors and the creation of strong public-private partnerships. While the public sector needs to show leadership and steer at a time of disruptive change through appropriate investments and the provision of a stable and reliable regulatory framework, businesses will also need to engage in ambitious investments that will help transform and thrive in a rapidly evolving context that defines a new and enlarged competitiveness model.

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