Aspen Strategic Foresight:

The Future of Europe

Strategic Foresight Process
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ASPEN STRATEGIC FORESIGHT

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Introduction: The Future of Europe

While the EU is still struggling with the consequences of the financial crisis of 2008/09, the refugee crisis of 2015/16, and Brexit, COVID-19 poses another "make-it- or-break-it" risk for the unity and coherence of the European Union. Hence, the uncertainties that surround our world since the start of the COVID-19 pandemic make strategic foresight exercises more important than ever. While individual national governments initially aimed at safeguarding their own national interests and populations, the crisis has also triggered new forms of integration that have eluded the European Union for decades. The Franco-German proposal for an EU recovery fund based on common debt was celebrated as historic step towards European solidarity, which had been questioned more than once in recent times. The doors we open and close in the months ahead will define the future of the EU for years to come.

Against this backdrop, the Aspen Institute Germany facilitated a strategic foresight process over the course of four individual online workshop sessions between July and September 2020, guided by Dr. Oliver Gnad from the Bureau für Zeitgeschehen. We invited 16 experts from EU member states, the Western Balkans Six, the United States, and the United Kingdom, to conceptualize, develop, and evaluate different scenarios that could define the future of Europe. The composition of this expert group remained largely unchanged throughout this process and together we devised an early warning system to enable policy makers to track and trace the developments in our real world, to mitigate risks, and to seize opportunities as they are unfolding.

While the realities of Donald Trump's Presidency had a strong impact on our strategic foresight process, the election of Joe Biden as future President of the United States now offers the chance to jointly redefine the transatlantic relationship in three spheres: security, trade, and green recovery. In the sphere of security, Europe strongly depends on US security guarantees and its nuclear shield. Relations in trade are more at eye-level and in the sphere of green recovery, Europe arguably even lies ahead of the US. Focusing on these three spheres, our four fleshed-out scenarios per policy field on the future of Europe vary in degrees of global ambition and internal coherence of the EU. We dove into more details in our best-case scenarios, in the hope of figuring out how to bridge the gap between ambition and reality.

Process and Methodology

We initiated this process by conducting an in-depth survey among our expert group that aimed at identifying key drivers and uncertainties that will determine the future of Europe within the next five to seven years. From a 2027 perspective (the end of the upcoming budgetary cycle), we conducted a back-casting exercise, looking at (a) opportunities, (b) risks, and (c) counter-intuitive developments. A summary of the collected social, technological, economic, security, political, legal-regulatory, and ecological key drivers for the different scenarios can be found in the annex to this document alongside the indicators of our early warning system.

Security – Vision 2027: Autonomous Security

Introductory Remarks

Facing massive geopolitical shifts in the East, South and West, Ursula von der Leyen portrays the current Commission to be a geopolitical one. An increasingly unpredictable US administration, renewed US insistence on a more balanced burden sharing, and growing differences among NATO's member states have contributed to a decline in trust in the alliance's cohesion and the transatlantic partnership, to the extent that French President Emmanuel Macron labelled it as brain dead. This leaves the EU little choice but to invest more strategically into its own security. The escalating conflict between Greece, an EU and NATO member, and Turkey, a NATO member, Russia's annexation of Crimea, and continued conflicts in the MENA region are just some of the situations that require the reaction of a credible and powerful actor in international security from Brussels, especially if the EU wants to be in control of its own destiny, i.e. guarantee its security autonomously. The rhetoric of European leaders is ambitious but due to COVID-19 and the impending post-recovery austerity measures that will most likely result from the pandemic, future military spending is even further reduced in the Union's MFF 2021-2027. Against the backdrop defined by these multidimensional developments, we worked out four plausible security scenarios, which lead us into the year 2027 (i.e. the end of the current Commission's legislature).

The Scenarios: Muddling Through or Autonomous Security?

Will the EU continue to muddle its way through international security or achieve a status of autonomous security? Or will it end up somewhere in between? Our back-casting exercise led to four different scenarios in the realm of security for the year 2027. They fall within the two extremes "Muddling Through" and "Autonomous Security", defined by varying degrees of coherence and global ambition. The four scenarios are described in detail below.

Figure 1: Levels of the EU's internal coherence and global ambition in the field of security
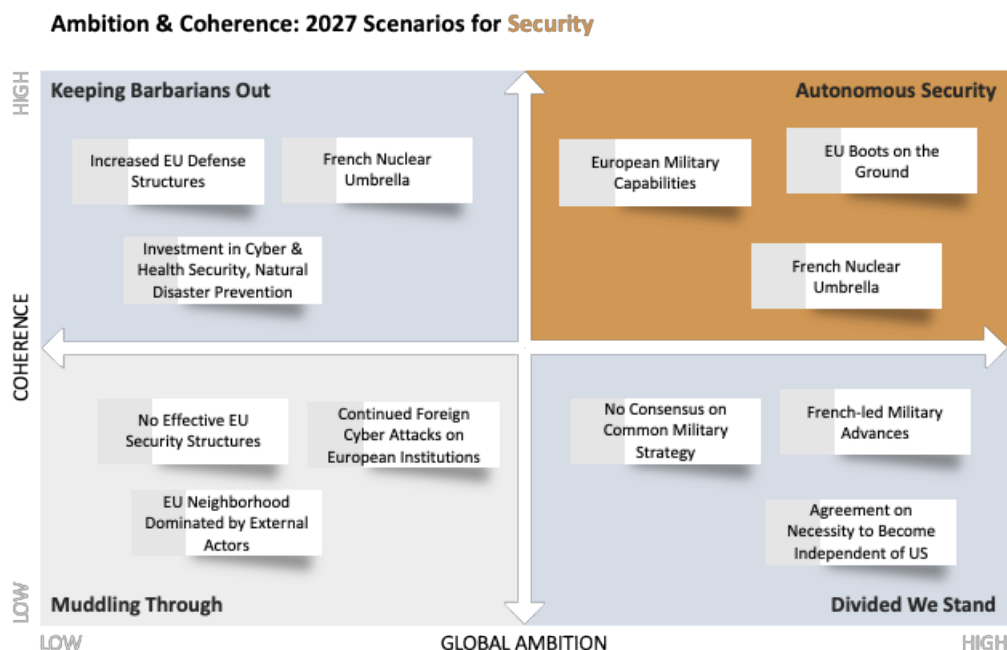
The "Divided We Stand" scenario in the bottom right of our matrix describes an EU with high global ambition but low internal coherence. It seems to mirror the status quo where developments in the transatlantic relationship motivated an alliance of the willing to not just widen and deepen PESCO but increase the investment into Europe's military capabilities. However, due to lacking internal coherence, there is little agreement among member states on joint strategies; shared geopolitical interests or policies; or capabilities, resources and command structures. The result is a highly fragmented, uncoordinated approach towards CFSP: French and Turkish military boots in Libya (with Italy at loggerheads with France), neglection of the Syrian Civil War, and a divided approach towards Russian and Chinese interferences, while conflicts in the Mediterranean Sea continue to burden the transatlantic alliance. The EU's military strategy is at best a patchwork of historically grown national policies defined by different levels of autonomy (France), US embrace (Poland), and inertia (Germany).

The "Muddling Through" scenario in the bottom left of our matrix describes an EU that not only lacks coherence but also global ambition. Similar to the "Divided We Stand" scenario, the lack of internal coherence prevents the establishment of effective EU military structures. There are plans for joint security procedures, but the Union is far from being able to defend itself or others by means of an EU-led military response. Consequently, the EU no longer projects far reaching political influence, let alone dominance, in its immediate surroundings, as China, Russia, and other external actors increasingly step up influence in the Eastern Neighborhood and the Western Balkans. European military strategies remain a conglomerate of insufficient national policies leading to a loss of geopolitical influence and inviting actors like China and Russia to embark on an even more coercive course.

In the "Keeping Barbarians Out" scenario, located in the top left of our matrix, the EU is defined by high levels of internal coherence but low levels of global ambition. New and more efficient decision-making processes make it possible to move forward key security policies which leads to a European grand strategy. France extends its nuclear umbrella to all EU member states, thereby decreasing Europe's dependency on the US. This grants the EU a high degree of independence as an autonomous actor in international security, but European military efforts exclusively focus on defense and security capabilities to ensure the integrity and sovereignty of EU member states. Investments in military hardware (incl. hypersonic weapons and nuclear capabilities), cyber-security, and natural disaster preparedness across the Union are the result of a newly built security consensus and improved coherence in more efficient decision-making processes. The military industry is integrated, making European security infrastructure independent from international arms trade. Such a policy could lead to a negligence of NATO, weakening American influence throughout Europe.

The "Autonomous Security" scenario in the top right of our matrix describes an EU that is defined by high levels of coherence as well as high global ambition. Given the current geopolitical climate, we view this scenario as the EU's best-case scenario for 2027. In it, the EU has gradually evolved into a global player in international security. It is defined by firm political consensus for widening and deepening defense and security cohesion, producing widespread support for an extension of PESCO and solid investments into European military capabilities. The EU is capable of protecting and projecting vital interests of its member states in its neighborhood and beyond. French advances for military operations in the MENA region are supported widely throughout EU member states such as Germany, Italy, and Spain. As a result, we will see European military boots on the ground in many theatres in the Greater Middle East region, the Sahel and the Horn of Africa. Within NATO the EU has a stronger voice, as EU member states have become one of the driving forces, in close cooperation with the United States and Great Britain. As a result of its military and geo-political capabilities, Europe plays an increasingly influential role in diplomatic negotiations for worldwide peace and stability, disarmament and arms control. Support and opposition for this scenario largely depends on

which actor is willing to sever itself from US military patronage. France is likeliest to take first steps in this direction. In a trade-off for the French nuclear shield, Germany could make concessions in form of a fiscal-social union emerging in the Eurozone. Despite their comparatively strong influence, states such as France or Germany would still require the support of smaller states. Deepened military integration would emanate from already integrated military forces, such as the German/Netherlands Corps, the Franco-German Brigade, the Eurocorps and further developing the EU Military Committee into a more-integrated command structure. If the UK were to be engaged in this European military alliance, it would largely depend on the gravity of external shocks that could lead states in Central Europe to join this endeavor. As long as their faith in American solidarity in a NATO Art. 5 scenario remains unshaken, they are unlikely to set themselves free from US military patronage. Another key actor whose support such an undertaking would require is Turkey, home of NATO's second largest standing military force.

This last scenario embodies the vision for the EU as a geopolitical player in international security affairs. But how do we get there? What policies, measures, principles, and tradeoffs are needed to embark on this trail?

Filling the Gap between Ambition and Performance

Looking at policies and measures that need to be put in place to transform the EU into a global military player, two principles stand out:

- Deepened political and military cooperation and integration, yet short of a full-fletched defense union.
- Reform of decision-making processes (i.e. widened qualified majority voting in the realm of CSDP with the possibility of opting-out) and an improved culture of compliance within the union.

But these measures would not change the current trajectory. Only more ambitious aims could lead to a change of paths – for instance the establishment of a European Security Board (ESB), roughly modelled after the UN Security Council (with permanent seats for EU member states that have integrated their military forces), with a Rapid Response Group at the ESB's disposal to react to immediate security risks. This ESB would also include crucial partners like the UK and Norway. As a result, Europe would act more coherently within NATO but would at the same time strengthen its autonomy in security matters.

The creation of new security structures should also be extended to integrated command structures and deepened cooperation in the intelligence realm. The EU further needs to put in place an EU Cyber Command to respond to newly emerging threats and be cognizant of other actors' offensive approaches in the realm of cyber security. The resources for these expansions of EU security structures can only be gathered through pooling and sharing of capabilities and resources among EU member states and the UK.

In essence: To achieve the best-case scenario, i.e. the EU establishing autonomous security, the crucial variables are improved internal coherence and increased defense spending. However, without reformed decision-making processes, it will be difficult to facilitate for the deepened military integration that is necessary to act more coherently within NATO and take steps towards ambitious projects such as the establishment of a European Security Board. It is such high levels of internal coherence that would let the EU be perceived as an autonomous security actor at eye level with the United States within NATO and jointly vis-à-vis other global geo-political superpowers.

Policy Example

Our analysis shows that a structural EU Security Initiative led by France, Germany and the Baltic states is necessary to reach the "Autonomous Security" scenario in 2027. The creation of a Rapid Reaction Force at the disposal of an EU Security Board could be based on Franco-German and Dutch-German integrated forces, including a French nuclear umbrella. Concrete policy steps that would pave the way for this undertaking are:

- Initiating a regular dialogue in the "3+2" format (Weimar Triangle plus the United Kingdom and the United States, probably also observers such as the NATO Secretary General and the High Representative of the European Union for Foreign Affairs and Security Policy)
- Founding this dialogue on trust-building measures between Warsaw, Paris and Berlin
- Establishing a political framework to react to immediate security crises
- Underpin such formats by means of unilateral, bilateral, and trilateral commitments to increase military budgets

The resources of EU institutions and EU member states required to enact the aforementioned policy steps include investments into 5G infrastructure and the means to overcome competition from China in this field. Member states will have to budget above and beyond their commitments for the European MFF and demonstrate political will and leadership to establish a state of autonomous security in Europe. Such political leadership in member states depends on several factors that are yet to be defined. In Germany, for example, far-reaching military integration in Europe is not unthinkable, even if the Green party will rise into the government coalition after the next elections.

Non-intended or counter-intuitive consequences of the aforementioned policies could be the formation of opposition within member states, especially regarding QMV. Once the EU establishes itself as a major player in international security, the United States could increase demands for more balanced burden-sharing, especially vis-à-vis China. As a consequence, burden-sharing within NATO is adjusted: EU-NATO Members assume responsibility for security in Europe and its neighborhood while the US protects geostrategic interests of all NATO members. With a renewed burden-sharing within NATO and closer coordination of policies towards China, the US would therefore remain firmly engaged within NATO. Support would come from EU member states such as France, Poland, Germany, the Netherlands, Greece and the Baltic states, if they are steered by firm political leadership. The United States, the United Kingdom, and the majority of NATO member states are likely to take a supportive stance as well.

Trade – Vision 2027: Mission Possible

Introductory Remarks

At the time the European Union was founded, the premise that countries which trade with one another become economically interdependent and therefore less likely to slip into violent conflict, laid the foundation on which the EU and its economic power was built. On the same token, the EU and the Unites Sates became the world's largest trading powers – enjoying widespread influence and little competition for their status as global norm setters throughout the second half of the 20th century. With China's rise and the emergence of a more multipolar world, this has changed profoundly. There is competition between sets of values, systems of governance, and trade regimes. The international organizations meant to regulate the monetary, trade and financial system established in Bretton Woods are increasingly weakened. Next to China and the United States, the EU is still one of the major players that dominate the international trade arena. However, due to the interdependencies,

which define our globalized world and impact the power structures therein, the Union's willingness and ability to stand up for its principles will determine whether it can hold its own among those actors that try to (re)define the norms and values of the modern international trade arena. What the future of the EU could look like and what it takes to arrive in the EU's best-case scenario for 2027 was the guiding question for our back-casting exercise.

The Scenarios: Between Protectionism and the Role of a Global Norm Setter

Four scenarios with varying degrees of internal coherence and global trade ambitions of the EU are the result of a back-casting exercise we conducted for the year 2027. These scenarios fall within extreme forms of protectionism (Me, Myself, and I), and the EU as a global norm setter (Mission Possible). These two extreme scenarios as well as the ones that fall between them are described in detail below.

Figure 2: Levels of the EU's internal coherence and global ambition in the field of Trade
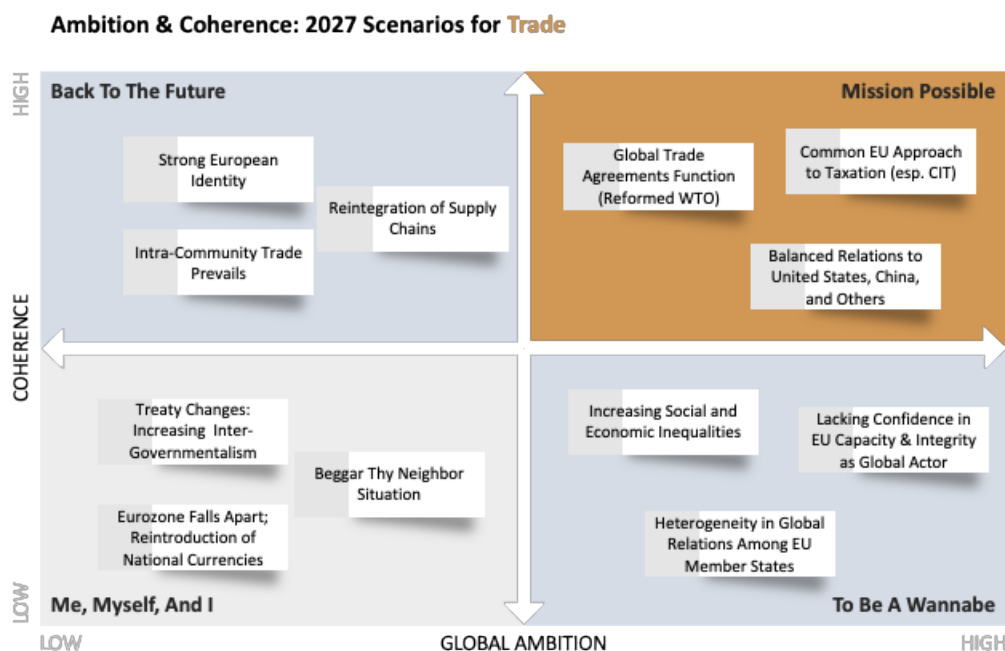
The "To Be a Wannabe" scenario in the bottom right of our matrix describes an EU with high global ambition but low internal coherence. By and large, it mirrors the status quo. There is a skepticism, even rejection of globalization and liberal market principles due to increasing social and economic inequalities within and between member states. This in turn feeds tensions between EU member states over social, economic, financial, and trade policies. In this scenario, different bilateral alliances and degrees of economic interdependence of EU member states also lead to growing inconsistencies in global affairs – i.e. aiming at favorable trading relations with China on the one hand while trying to maintain a credible position on human rights and liberal values on the other. EU enlargement is increasingly reduced to economic cooperation. Simultaneously, populists throughout Europe manage to inflate EU skepticism in several member states. Especially in the Union's East and South discussions about a potential exit perspective emerge in public discourse.

The "Me, Myself, and I" scenario in the bottom left of our matrix describes an EU that not only lacks coherence but also global ambition. Similar to the "To Be a Wannabe" scenario, internal coherence further deteriorates. The inability to find common ground on trade policies, industrial strategies,

migration, and social standards lead to the erosion of Europe's capacity to shape the global trade order. The decreasing levels of extra-community trade have a negative impact on social cohesion and equality, which in turn effectuates a rise in nationalism and protectionism. Due to the COVID-19-induced economic crisis, the Eurozone falls apart and national currencies are reintroduced. In line with this spirit of disintegration, member states engage in mercantilism, creating a beggar thy neighbor situation as national interests are prioritized. This means member states pursue their own national ambitions and policy in relations to China, the United States, and Russia. This has a detrimental effect on the EU's position globally. Policy for the EU's neighborhood is put on the backburner and enlargement is not on the agenda. The EU stands at the brink.

In the "Back to the Future" scenario, located in the top left of our matrix, the EU is defined by high levels of internal coherence but low levels of global ambition. EU institutions are strong and enjoy public confidence. A sentiment of European identity influences the development of an EU-wide trade, fiscal, and social union. The increasingly inward-looking union enjoys increasingly high levels of public confidence, which helps to strengthen intra-community trade. The EU internal market retains certain degrees of autonomy and independence from China and other big trading nations that become increasingly assertive, based on the reintegration of supply chains into an extended EU neighborhood as a result of the COVID-19 pandemic as well as bilateral agreements with foreign trade powers. While the Union is less concerned with the politics, norms, and values in its neighborhood, it has an interest in increased levels of economic integration and agreements with countries in its neighborhood in order to establish zones of intensified trade that surround the internal market.

The "Mission Possible" scenario in the top right of our matrix describes an EU that is defined by high levels of coherence and global ambition. It stands for a fair, free, open, and rule-based international trade order in which the EU can go toe-to-toe with the US and China. The EU grows into the role of a normative actor that influences the rules for global trade. In order to take up the challenge of competing with the United States and China in areas such as trade, engineering, and spectrums of technological advancement, such as 5G or AI, the EU is driving innovation by pooling resources dedicated to shared and inter-disciplinary science and research. Member states agree on a common taxation scheme – including leading on digital taxation – applying to corporations and companies that are based within the Union and want to trade with it. The Eurozone is stable and expanded and makes more efficient fiscal transfers within the internal market possible. Public confidence in the EU is high, due to more economic and social equality among member states. Member states have become more integrated, making possible an effective management of migration. The EU becomes more autonomous by diversifying its energy imports and reaches an agreement to revive atomic energy production as a bridging technology to fight climate change while furthering green innovations. Being a confident player with a coherent strategy and unified voice, not only in global trade but also geopolitics, Europe balances its relations with China, the United States, Russia and others. Formats that facilitate for negotiations with and require positioning vis-à-vis such powerful foreign actors are carried in bilateral negotiations, as EU officials represent a consolidated and coherent position of all member states.

We want to set our compass for this scenario where the EU is a player on equal footing with global superpowers. How do we get there? What policies, measures, principles, and tradeoffs are most relevant for Europe today with a view to achieving such standing?

Filling the Gap between Ambition and Performance

Looking at policies and measures that need to put in place to transform the EU into a norm setter in global trade, several principles stand out:

- The EU stands and advocates for a fair, free, open, and rules-based international trade order. Renewed Euro-Atlantic cooperation in institutions such as the WTO leads to necessary reforms and the enforcement of WTO rules.
- Internally, the EU sets norms and standards for products and production and develops an effective sanction mechanism for those that do not comply. Agreement on such policies are forged by compensating for economic losses of those most affected. Externally, sanction mechanisms are included into conditionality agreements for financial aid and assistance to international partners.
- The required consensus among the EU's net-payers is found to take steps towards an EU fiscal-social union. Here, trade-offs in other policy fields, such as security, play an important role: While Germany's security and integrity highly depends on foreign countries' security guarantees (in this scenario from France and/or the UK), Germany would compensate with deeper fiscal and social integration.
- The EU and the United Kingdom manage to redefine their relationship and future trade relations ("Soft Brexit"). Similar to the negotiations on the establishment of a fiscal-social union in the Euro zone, trade-offs in the realm of military cooperation and security play a role here.
- While accession negotiations for potential member states continue, privileged rights for aspirant countries regarding the four freedoms are increased but a lacking membership perspective further opens the gates to stronger influence of geopolitical actors in the region, such as China and Russia but also Turkey and Saudi Arabia.
- Further key measures include the strengthening of environmental, human rights, digital, and consumer protection laws.
- Also, negotiating free-trade agreements with non-EU countries should be prioritized and already existing economic trade agreements should be extended.
- EU funds for neighboring countries need to be increased but compliance with the aforementioned protection laws and values need to be strengthened.

In essence: To rise to the best-case scenario, i.e. the EU becoming a global norm setter in production and trade, the crucial variable is internal coherence. Without higher levels of coherence, it seems unlikely that the EU will move into the direction of a fiscal and social union, which could serve as a basis for the credibility of tough negotiation positions that might become necessary to define the future relationship with the UK and the arrangement of free-trade agreements, environmental standards, human rights as well as digital and consumer protection laws. The lack of such coherent norms and standards for products and production prevents the establishment of proper sanctioning or compensation mechanisms in conditionality agreements for financial aid or assistance schemes with international partners. Without proper and efficient conditionality agreements, it will be hard to set standards of a fair, free, open, and rule-based international trade order.

Policy Example

Our analysis shows that establishing a European fiscal-social union is a highly contributing factor to increase internal coherence, which is a precondition to complete our "Mission Possible". The envisioned fiscal-social union would initially be confined to the Eurozone and requires a reform of the Maastricht criteria. It is defined by improved cohesive measures (cohesion funds), EU-wide investments in education and the health sector, a reformed system of EU taxation schemes, and

continued mutualization of debt. Concrete policy steps that would pave the way for this undertaking are:

- Making decision taking more efficient: from unanimity to QMV
- Finding political compromises on fiscal-social issues, EU resources, EU debt, and EU taxation schemes as well as an EU competitiveness charter
- Learning curve after COVID-19: taking early decisions to engage in burden-sharing, EU fiscal crisis-prevention and recovery schemes
- Cohesion fund reform: rule of law conditionality, improved effectiveness of monitoring and sanctioning mechanisms
- Creating a European Health Union: cooperating closer on health issues coordinated by the European Commission
- Moving towards the establishment of an EU fund for research that drives forward European innovation in transdisciplinary projects and undertakings. These would encompass initiatives along the lines of European Excellence Hubs and other forms of cooperation between universities across Europe.

The resources of EU institutions and EU member states required to enact the aforementioned policy steps include financial means, but more importantly public support and bold political leadership – particularly in Germany and other "frugal" EU member states. Furthermore, EU institutions need to improve their capabilities for (brave) strategic political thinking, policy innovation, and to develop effective tools to measure compliance with EU measures and to counter disinformation. Non-intended or counter-intuitive consequences of such a course may lead to weakened national governments, decreasing social activism at the national level, a (perceived) democracy deficit, and increased bureaucratization as well as overcomplicated rules.

Support for such policies should be found in institutions such as the European Commission and the European Parliament, reflecting favorability among the public / civil society. Member states are likely to be split on this issue with some large member states, such as Spain, Italy, and France, and small member states, such as the Baltic states, Belgium, Slovakia, and Slovenia in favor of establishing a fiscal-social union. Based on its experience with Coronabonds during the COVID-19 crisis, the EU takes steps to extend this instrument to strengthen the European Union internally and as an instrument to harmonize policies in other areas such as migration, security, energy transition, climate protection, and digital transformation. Germany's support would depend on the initial confinement of these measures to the Eurozone and a reform of conditioning, monitoring, and sanctioning mechanisms for non-compliance to standards and the reformed Maastricht criteria. Among party families throughout Europe, the Socialists, and the Greens are likely to support such a measure, while favorability could also be found within the EPP. Progressive corporations, SME's, and start-ups are further advocates of such policy. On the other side of the spectrum, we expect the member states that have recently been labelled as the "frugal" ones. They are joined by factions within the EPP and Renew Europe party, "illiberals", and eurosceptics among the public. Neoliberal companies would also oppose the discussed policy measures. We also expect the United States, Russia, and China to remain critical of such developments.

Green Recovery – Vision 2027: Global Green Superpower

Introductory Remarks

The Green New Deal – now re-labelled as Green Recovery – is one of the signature projects of the new EU Commission. For now, however, the climate protection policies put forward in- and outside the EU fall short of the demands put forward by leading scientists. Instead, we witness a lack of consensus among European governments regarding priorities and approaches in different sectors such as energy, industry and manufacturing, agriculture, mobility and transport. The lack of a common European approach to environmental issues can partially be explained by economic differences. Asymmetries and socio-economic inequalities within the EU that were increased by the global financial crisis of 2008/2009 reinforce different prioritizations of green recovery among member states. While the ambitious climate goals defined by the European Commission are prioritized and well-accounted for in the proposed 2021-2027 MFF, the COVID-19 pandemic is likely to further strain budgets. Arguably, despite all rhetoric, European governments will have to cut funding for sectors such as research, education, infrastructure, cyber security, and climate protection. Against this backdrop we conducted a back-casting exercise by defining a desirable future and working backwards to identify policies and measures that will fill the gap between the EU's ambition and performance.

The Scenarios: Between Division over Green Policies and Becoming a Global Green Superpower

The result of this back-casting exercise are four scenarios for 2027 that are defined by varying degrees of ambition and coherence of the EU. The two extremes span from "Green Alchemy" (low levels of global ambition and low levels of coherence) to "Green Global Superpower" (high levels of global ambition and high levels of coherence). As laid out in detail below, the two variables of coherence and ambition guide us through scenarios of the EU in which divisions over green policies create internal tensions among member states and where coherent green policies see the Union emerge as a global green superpower.

Figure 3: Levels of the EU's internal coherence and global ambition in the field of Green Recovery
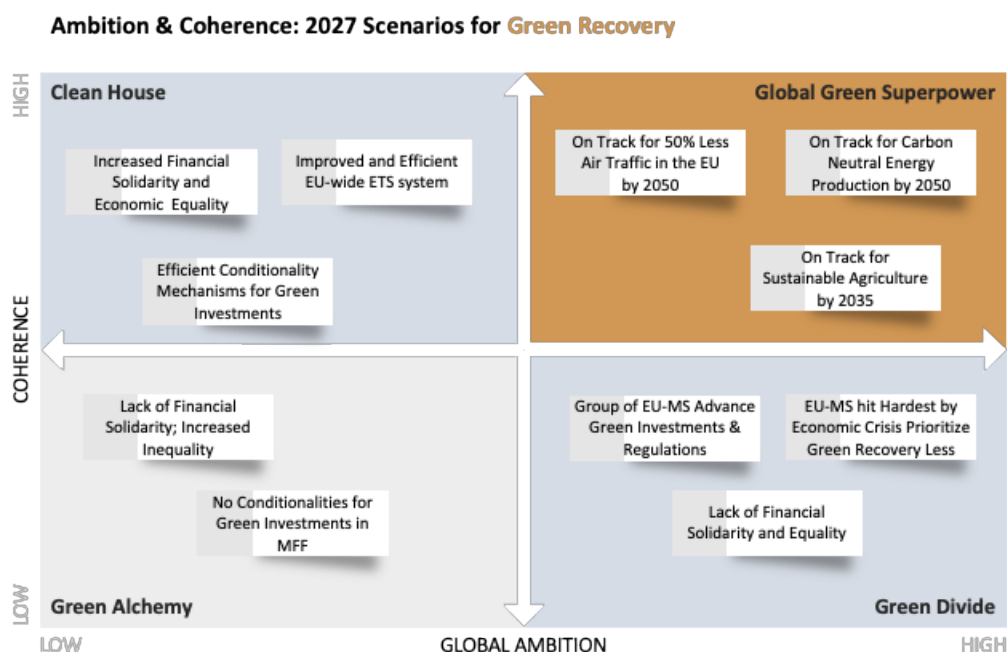
The "Green Divide" scenario in the bottom right of our matrix describes an EU with high global ambition but low internal coherence. It seems to mirror the status quo, as a core group of member states drives the EU's global ambition to move forward with green investments and regulations, including the digital market. However, the low level of internal coherence leads to a stark asymmetry in terms of how states prioritize the green agenda. Especially countries that still heavily rely on fossil fuels and those which were hit hardest by the financial crisis tend to reject some, if not most, of the measures proposed by the Commission. The incoherence in this scenario is amplified by a lack of financial solidarity among member states.

The "Green Alchemy" scenario in the bottom left of our matrix describes an EU that not only lacks coherence but also global ambition. Similar to the "Green Divide" scenario, the lack of internal coherence prevents a common approach to Green Recovery and hinders the establishment of effective conditionality mechanisms for green investments. A lack of EU leadership and financial solidarity, increased economic inequalities, incoherence in monitoring standards, and unanimous decision-making hinder any real progress in Green Recovery.

In the "Clean House" scenario, located in the top left of our matrix, the EU is defined by high levels of internal coherence but low levels of global ambition. Increased levels of internal coherence result in new and more efficient decision-making processes, which lead to greener EU policies and proper conditionality mechanisms, including effective monitoring and sanctioning. Hence, the EU is able to facilitate funding for green investments in the MFF, the COVID-19 recovery fund, or the CAP funding scheme for ecological farming and small businesses. Furthermore, a more robust and EU wide ETS System is put in place. Consensus is found on EU standards for meat and dairy production as well as the digital market. Economically weaker regions are in a position to agree on far reaching reforms as increased financial solidarity among member states leads to the mitigation of economic inequalities. These regions seize opportunities such as near-shoring, stimulating their economic development and relieving them of the short-term toll green reforms are taking on their economies.

The "Global Green Superpower" scenario in the top right of our matrix describes an EU defined by high levels of coherence and global ambition. Challenges fundamental to the European Green Deal, such as the phase out of fossil fuels, are being overcome. A comprehensive European carbon tax system applying also to imported goods generates revenue that flows into the EU budget for new green investments. There is a comprehensive regulatory framework for conditionality of EU assistance for green recovery reforms in non-EU countries. Internal coherence and global ambition enable European leaders to exercise their leadership globally; the EU becomes an exporter of green norms and standards. Economic growth is increasingly decoupled from resource use, the European economy is on track to produce zero net emissions of greenhouse gases by 2050. This is achieved while being mindful of the different burden this process places on the economies of different regions, being careful not to increase inequalities and maintaining high levels of coherence.

This scenario embodies the vision of the EU Commission's Green New Deal and it is therefore the scenario we set our compass for. But how do we get there? What policies, measures, principles, and tradeoffs are needed to embark on this trail?

Filling the Gap between Ambition and Performance

In order to move towards the top right scenario for 2027, there are several policies we should put in place targeting the energy sector, agriculture, mobility and transport, and industry and manufacturing.

To be able to realize carbon neutral energy production by 2050, policies should prevent the licensing of new coal plants from now on, limit the renewal of licenses for existing coal mines after 2027 and prohibit the activity of coal mines by 2040. The common energy market would have to be strengthened, and the economic and social costs of the transition in the most affected member states compensated for. This could be made possible by an internal carbon tax for high emission energy production that generates revenue for new green investments that target the regions struggling most with the transition. Crucial for this transition would be gas-based energy production and/or a revival of atomic energy as an interim energy source. Here, lingering conflicts in the Mediterranean and in the European Neighborhood may become an obstacle in diversifying energy sources and these conflicts might have severe knock-on effects on further integrating European security. Dependencies on gas as an interim resource also means a shift vis-à-vis "transit countries" such as Turkey.

While Germany and France would likely be driving forces of policies that pave the way for said transitions, disagreement between them would have to be solved on the issue of nuclear energy. Opposition to carbon neutral energy production would likely come from Central European member states such as Poland, whose current energy mix would require far-reaching and costly reforms. Russia, although a likely profiteer from dependencies on gas as an interim resource, would likely be opposed to such an ambitious plan of energy diversification. While they would profit in the short run, their position in energy security and therefore international security would be weakened, if the EU were to reach its goal of carbon neutral energy production on its way to become a global green superpower.

In order to realize sustainable European agriculture by 2035, the CAP would have to facilitate for increased functionality within the EU in order to project policy goals externally, such as the phase-out of industrialized mass production of agricultural products and introduction of a sufficiency-based approach for European agricultural products (integrated agriculture) and, as a consequence, the phase-out of exporting heavily subsidized agricultural products from mass production. EU funds in this sector could be conditional on a minimum standard of production and use of chemicals, while green and organic farming could be incentivized. These instruments should increase the creation of flower strips (uncut areas around the agricultural fields for insects, for example beetle banks), resting times for fields, and less monocultures. A potentially necessary trade-off could be to not subsidize organic farming exclusively, but merely stronger than other forms of farming. To qualify for any level of subsidy, however, the following EU-wide minimum standards should be introduced. In the meat industry, only those who do not engage in mass production, guarantee standards for space in stables, provide their animals proper nutrition (for example reduced usage of drugs, especially antibiotics), and facilitate for appropriate waste disposal should be eligible for subsidies. Subsidies should then no longer be linked to the absolute number of animals on a farm but rather also take into account its size (in acres of property). Further policies in the agriculture sector should ban the usage of Glyphosate and strictly regulate that of other chemicals. Awareness campaigns, such as labels, should be used increasingly to promote integrated approaches to agriculture, the climate friendliness of agricultural products, and high standards of animal treatment in the meat industry. Further standards that could be promoted by labels are production standards and their effect on the well-being of the production site's environment (for example the ground water, CO2 emissions but also the general health of workers, consumers and people that live in close proximity. Obligatory labels (and tariffs) on imported agricultural products not fulfilling the previously described minimum standards could be introduced in order to raise the consumer's awareness for the negative effects a given product entails. Ideally, these policy measures should lead to a reorientation of industrial farming. This is because, as of now, the major surplus that is produced within the EU is heavily subsidized. These subsidies create incentives to export a surplus of agricultural products to (weaker) foreign markets, sometimes even having the effect of destroying local farms as they cannot compete due to a lack of equal subsidies.

In a scenario with high coherence and global ambition we expect Germany, France, and the Commission to be driving forces, even though the two highly influential member states profit from the CAP as it stands. This is due to the pressure by consumer behavior and preferences as well as increased popularity of green parties in their respective political landscapes. Opposition is to be expected from the agriculture industry lobby, large corporate organizations as well as member states that do not prioritize green recovery and would yet be affected by changes in subsidy policies.

In the sector of mobility and transport policy should facilitate for 50% less air traffic in the EU by 2050. This would require discouragement of flights both in terms of supply and demand, support for travelling by train and the encouragement of "local" vacations, meaning rediscovering Europe as primary tourist destination for Europeans. To this end, high-speed train infrastructure across Europe should be strengthened in a common system that targets the connectivity of economically weaker regions. This should be done with a view to the transport of persons but also with a view to facilitate for near-shoring production, leading to supply chains that are based on rail, rather than air cargo. Key measures would be higher taxation of air travel (especially on kerosene) in combination with compensation schemes designed to support environmentally friendly projects, reforestation, or water quality management. This should be accompanied by subsidies for train travel, investment into sustainable transport infrastructure and other forms of environmentally friendly tourism. Drivers of such policy could be smaller member states without mass tourism but also countries such as Germany and France. Opposition could root in the South, among new member states, and external actors such as China that have already invested extensively in the infrastructure of Central Europe and Southeast Europe.

Reforms in the industry and manufacturing sector should tackle the issue of corporate taxation, the problems of which are currently driven by competition among member states to design most attractive taxation schemes for large companies. In an attempt to keep supply chains short and cause as little pollution as possible, locally produced goods should be supported by schemes that incentivize producers to nearshore. Circular economy concepts would also help to get this sector on track for a sustainable economy by 2050. Difficulties are likely to arise with the cost of digitalization, the internalization of external costs, and disagreement on compensation schemes for companies most affected by reforms, which tend to have well organized and influential professionals lobbying their interests with policy makers.

In essence: To rise to the best-case scenario, i.e. the EU becoming a global green superpower, the crucial variable is increased internal coherence. However, as long as there is no consensus on the establishment of a fiscal and social union it seems unlikely that the required levels of internal coherence are realizable in our envisioned timeframes. Moreover, this would require effective monitoring and sanctioning mechanisms, a condition that net-payers into the EU budget are likely to insist on. However, without reformed and more efficient decision-making processes such agreements seem unlikely to be found anytime soon.

Policy Example

Our analysis shows that in order to become a global green superpower, Europe would have to achieve carbon neutral energy production by 2050. This would entail the gradual phase out of coal, the creation of a far-reaching carbon tax, combined with an investment fund for innovation in the sector of renewable energy. Further, there is need for an EU platform that is open to the EU neighborhood / EEA countries and regulates funding for investments into research and innovation driven projects. Concrete policy steps that would pave the way for this undertaking are:

- Making decision-taking more efficient: from unanimity to QMV
- Refusing new licenses for coal mines and plants
- Phasing-out existing licenses for coal mines by 2040
- Establishing a renewable energies investment fund within the 2021-2027 MFF
- Introducing a carbon tax on imports in 2022, gradually increasing the tax until 2030, feeding the generated income into the renewable energy investment fund
- Establishing an EU platform for education, knowledge exchange, and especially funding for innovation by 2021
- Achieving a renewable energy sources share of at least 32% by 2030 in all EU member states

The resources of EU institutions and EU member states required to enact the aforementioned policy steps include funds generated through the aforementioned carbon tax, and a fixed budget share in the 2021-2027 MFF for innovation and investments linked with cohesion funds. Further requirements include the necessary know-how and personnel to run the EU platform. Effective sanctioning mechanisms for non-compliance, which are based on QMV, in the fields of rule of law and energy 2050.

These policy steps could have unintended and counter-intuitive consequences – amongst others, these far-reaching and ambitious reforms could generate support for Eurosceptic parties throughout the EU, risking a deepening of internal divides. The phase-out of coal and interim reliance on gas an energy source would feed into the Turkish-Greek conflict in the Mediterranean and also strengthen Russia's position in Europe.

Overall, however, carbon neutral energy production in Europe is a policy Russia would be opposed to. The same holds true for China and the US. Energy companies, business associations, and trade unions with coal-dependent portfolios and clients, as well as member states that base their economies on fossil fuels more than others, are also likely to stand in opposition to such policy. Support is likely to be found in Germany, France, Scandinavian EU member states and the EU Commission. Green parties, climate activists, and innovative companies are also likely to favor carbon neutral energy production in Europe.

List of Abbreviations

5G:	Fifth Generation (Technology)
AI:	Artificial Intelligence
CAP:	Common Agricultural Policy
CFSP:	Common Foreign and Security Policy
CHN:	China
CO2:	Carbon Dioxide
COVID-19:	Coronavirus Disease 2019
CSDP:	Common Security and Defense Policy
EC:	European Commission
EEA:	European Economic Area
EPP:	European People's Party
ESB:	European Security Board
ETS:	Emissions Trading System
EU:	European Union
EU-MS:	Member State of the European Union
GDP:	Gross Domestic Product
GER:	Germany
GRE:	Greece
IPR:	Intellectual Property Rights
MENA:	Middle East and North Africa
MFF:	Multiannual Financial Framework
MS:	Member State
NATO:	North Atlantic Treaty Organization
P5:	Permanent Members of the United Nations Security Council
PESCO:	Permanent Structured Cooperation
PISA:	Program for International Student Assessment
QMV:	Qualified Majority Vote
RES:	Renewable Energy Sources
RUS:	Russia
SME:	Small and Medium-sized Enterprises
TUR:	Turkey
UA:	Ukraine
UK:	United Kingdom
UNSC:	United Nations Security Council
US:	United States of America
WB-6:	Western Balkans Six
WTO:	World Trade Organization

Annex

Development of Indicators and Indicator Validation

Thinking in alternative possible futures is a necessity for political contingency planning – not only for risk management but also for early recognition of windows of opportunities.

But in the world of decision-makers thinking in alternatively plausible futures is not sufficient. Decision-makers need a transmission belt to make use of scenarios in their daily work. To be able to react timely to developments, they need an early warning tool which helps them detect scenarios as they unfold in the real world.

It is therefore essential to underpin critical scenarios with a set of distinct indicators – observable phenomena which can be collected, reviewed and evaluated over time. Indicators enable policymakers to track events, to spot emerging trends, to separate relevant information from noise, and to avoid surprise.

To fulfil all these criteria, indicators need to be "hard". That is to say, they should only measure data that hint at the emergence of a single plausible scenario, not many others. Practice shows that setting up lists of indicators can become a cumbersome task. Because indicators are only useful if they fulfil all five validation key criteria:

- Observability: The indicator needs to be based on data which is observable and collectible over a long period of time.
- Reliability (referring to the quality of collected data itself): Data must be consistent over time, ensuring that collectors are able to observe the same phenomenon over time.
- Stability: Indicators need to be stable over time to allow for comparison and to track trends as they emerge.
- Validity: Data need to be found that measures exclusively the indicator in question, no other indicators.
- Uniqueness: An indicator should measure phenomena which can only occur in a specific scenario. If a phenomenon appears in different scenarios at the same time, it is not distinct and cannot be used for tracking or tracing a specific scenario.

To be of better use for policymakers, the development of indicators and 'policy incubators', i.e., workbenches for strategy elaboration, are indispensable. For the sake of keeping an overview, we only present a selection of those indicators that fulfill the first four validation criteria and indicate which ones complete the fifth and are therefore "hard".

Security Indicators – Vision 2027: Autonomous Security

Defense Spending

Increased defense spending in EU-MS (up to / beyond 2% GDP NATO goal)	Not Unique
Parties commit in election platforms to increased defense spending	Not Unique
Amount of defense spending in MFF 2021-2027	Not Unique
Increased defense spending is part of coalition treaties	Not Unique

(Geo-) Political Agreements

Operationalization of "global strategy", incl. threats deriving from climate change, migration etc.	Not Unique
Complementary to existing "global strategy": adoption of European Security Doctrine (grand strategy)	Unique
Negotiations on French nuclear guarantees for EU	Not Unique
EU-MS / EC / formal joint statements and positions un UNSC	Not Unique
Initiative to exchange French UNSC/P5 seat for an EU seat	Unique
Creation of EU Security Board	Not Unique
US administration support strong and increasingly EU pillar within NATO	Not Unique
NATO declining: decreasing of US troops in Europe (in particular in countries vulnerable to external attack)	Not Unique
NATO declining: decreasing of US NATO funding	Not Unique
Undermining of NATO rhetorically	Not Unique
Extension of QMV in CFSP matters	Not Unique
US call for collective military action outside NATO territory not followed by EU NATO members	Not Unique
US does not intervene through NATO in intra-EU / European neighborhood military conflict (i.e. GRE-TUR, WB-6, Baltics)	Not Unique
Discourse on military strategies in EU neighborhood (Eastern and Southern Partnerships, MENA) and beyond (Africa, Asia)	Not Unique

Soft Brexit talks on EU-UK security cooperation	Not Unique
EU playing major role in international security discourse / disarmament talks etc.	Not Unique

Military Capabilities

Extended PESCO collaboration; deepening of PESCO (i.e. setup of EU Military Council)	Not Unique
Buildup of integrated European Command structures and infrastructure independent of NATO	Not Unique
Enhanced military cooperation / integration between EU-MS (i.e. on military mobility)	Not Unique
Further integration of EU-MS military units (such as GER-NL Corps); pooling and sharing of military equipment on EU level	Not Unique
Establishment of EU Rapid Response Group	Not Unique
Establishment of EU Cyber Defense Unit	Not Unique
Increased Intelligence sharing and cooperation amongst EU-MS	Not Unique
More EU boots on the ground (MENA, Baltics, UA – under integrated EU command)	Unique
Procuring EU-made military equipment (incl. cyber, 5G)	Not Unique

Awareness / Communicative

Public discourse in favor of increased defense spending and role of hard security	Not Unique
Discourse about European Security Doctrine (grand strategy)	Unique
Debate in many EU-MS on need for EU military cooperation / integration	Not Unique
Changing public threat perceptions / perception of increased risk of military conflict (CHN, RUS, MENA, WB-6, intra-European)	Not Unique

Trade Indicators – Vision 2027: Mission Possible

General

Decreased Gini coefficient & flattened Lorenz curve in EU Member States	Not Unique
% of decisions adopted by QMV	Not Unique
Confidence of citizens in EU institutions	Not Unique
Alignment of PISA scores amongst MS	Not Unique
Public health statistics	Not Unique
Budgetary expenditure for identified areas	Unique
Key socio-economic indicators aligned between MS	Not Unique

Political / bureaucratic level (laws and regulations)

Redefinition of the global trade order (WTO rules)	Not Unique
Reset of trade relations with China and others	Not Unique
Innovation: increasing IPRs and EU Fund for Research	Not Unique

Communicative / perception level (awareness and shared knowledge)

Awareness for value of international trade agreements among European citizens	Not Unique
Awareness for the relevance of European food standards	Not Unique

Other

Reintegration of supply chains in the EU neighborhood	Not Unique

Green Recovery Indicators – Vision 2027: Global Green Superpower

General

Initiative for reform of EU decision making	Not Unique
Sanctioning mechanism for non-compliance as part of MFF	Not Unique
Conditionality mechanisms for green investments in 2021-2027 MFF	Not Unique
Sanctioning of non-compliance with EU climate goals/green investment policies	Unique
Strict monitoring of compliance with EU climate goals/green investment policies	Unique
Public pressure reflected in voting behavior (for green parties) and adoption of greener policies by mainstream parties as result	Not Unique
Budget cuts in climate protection policies on EU level	Not Unique
Budget cuts in climate protection policies on national levels	Not Unique
More ambitious climate policy proposals by core member states	Not Unique
Level/speed of member state alignment with EU green policies (implementation)	Not Unique
Readiness of member states to spent on green policies beyond their own countries	Not Unique
Readiness of member states to spent on green policies within their own countries	Not Unique
Increased economic inequalities in member states	Not Unique
Funding for green investments in the MFF	Not Unique
Gradual reduction of greenhouse gas	Not Unique

Energy Production

EU-wide strategy for phase-out of coal as required by Paris Agreement	Unique
Ban on new licenses for coal plants from now on	Not Unique
No renewal of licenses for existing coal mines allowed in the EU	Not Unique
Prohibition of activity of coal mines by 2040	Not Unique
Compensation mechanism for economic and social cost in affected member states	Not Unique

Public pressure reflected in voting behavior (for green parties) and adoption of greener policies by mainstream parties as result	Not Unique
Reduced coal production	Not Unique
Share of renewables in energy mix	Not Unique
Decision to set up platform for education, knowledge exchange and funding for innovation	Not Unique
Number of people employed in coal vs. renewable sectors	Not Unique
Increase in gas-based energy production	Not Unique
Revival of atomic energy	Not Unique

Agriculture

EU-wide minimum standards of production as prerequisite for CAP subsidies in meat production and agriculture	Unique
Unified EU standards for meat products	Unique
Unified EU standards for dairy products	Unique
Unified EU standards for agricultural products	Unique
EU-wide minimum standards of production as prerequisite for CAP subsidies in meat production and agriculture (repeated for 78)	Unique
Ban of glyphosate in the EU	Not Unique
Regulations for the use of other chemicals in agriculture	Not Unique
CAP subsidies no longer linked to number of animals, but number of animals linked with size of farm	Not Unique
Ban of drug use in meat production	Not Unique
Minimum standards for stables/barns	Not Unique
Increased incentives for organic farming in CAP	Not Unique
Public pressure reflected in voting behavior (for green parties) and adoption of greener policies by mainstream parties as result	Not Unique
Awareness campaigns of production standards and their effects on environment	Not Unique
Obligatory label for animal treatment	Unique
Obligatory label for climate friendliness of agricultural products	Unique

| Obligatory label for animal treatment | Unique |
| Reform of CAP based on support for integrated or organic agriculture | Not Unique |

Mobility and Transport

Higher taxation of air travel	Unique
Obligatory compensation schemes designed to support environmentally friendly projects, reforestation, or water quality management for air travel	Unique
Awareness campaign for train travel and tourism within the EU	Not Unique
Investment in high-speed train infrastructure across Europe	Not Unique
Growing number of electric cars, charging points, decreasing number of old traditional cars	Not Unique

Industry and Manufacturing

More robust and EU wide ETS System	Not Unique
Application of ETS System to imports (tariffs based on ETS System)	Unique
Introduction of an EU wide carbon tax (reflecting carbon footprint of product)	Not Unique
Introduction of an EU wide carbon tariff for imports (reflecting carbon footprint of product)	Unique
Supply chain regulations (social and environmental standards) to be ensured by EU industries and businesses	Unique
Near-shoring of production	Not Unique

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