

THE EUROPEAN FILES

April-May 2019 - n°58



FROM SPACE, EUROPE LOOKS LIKE ONE. AT AIRBUS IT WORKS AS



If there's one thing that Airbus understands, it's the power of European integration. With highly skilled employees from different nationalities, diverse origins and multiple backgrounds Airbus holds the keys to success. Overcoming national barriers has also been the core of the EU integration. And with success. Space policy is a case in point. With the successful launch of Galileo – Europe's own independent, highly accurate global positioning system, and Copernicus, the world's largest Earth Observation Programme the EU has added value and delivered. Airbus stands ready to continue offering to the EU the best support it deserves.

Collaboration. We make it fly.





EDITORIAL

THE FUTURE OF EUROPE

t is a crucial moment in the history of Europe. It could be said that the global geopolitical context is a form of reckoning for the European institutions. Faced with increasingly expansionary and aggressive globalization strategies from other economies, Europe is forced to react in the hopes of maintaining its strategic autonomy. It is at this time that the European Union (EU) will have to change its agenda. As French President Macron declares, Europe's leadership is responsible for our continued "freedom, protection and progress".

The governance within the European institutions must usher in a new era of transparency and modernity—framing their work around objectives and not simply means. It is crucial that reforms are undertaken to promote democratic values and implicate as many European citizens as possible. A direct link to each individual is essential to avoiding an institutional crisis. No longer can the EU afford to maintain such tenuous links with its majority stakeholder—the people. The promise of a better tomorrow must incorporate all sides of European society as progress must be felt by each generation, each neighborhood.

Furthermore, Europe's future depends on a new wave of ambitious industrial strategy. The challenges are many; digitalization, climate change and energy transition entail major changes in the Union's industrial infrastructure. The balance must be struck between the European regulatory framework

and the hyper-competitivity of the global marketplace. Thankfully, Europe is not without its own advantages. Namely, it can rely on the optimization of competencies and sectors through its local, regional and national interconnectedness. Cooperation across each of these levels is essential to overcoming inequalities in economic development. Through its impressive financial resources, Europe can bet on an industrial transition that takes full advantage of developments in technology. New models for a circular economy and a transition to energy sources are as much a security issue as they are an economic one. This strategic pivot does not entail the destruction of what already works, but rather an opportunity to include stakeholders from new sectors from the totality of the European Union. As always, it is the dialogue between private and public stakeholders that is necessary for the creation and implementation of a coherent industrial strategy for Europe. According to Nobel laureate Stiglitz, the issue for Europe is "not to return to an earlier era but to reformulate the rules to address the challenges of a 21st century globalized economy". His input is as valuable as ever, as readers can see it in this issue of our magazine.

The new consensus is clear: Europe will not be able to progress if it continues to rely on outdated modes of development. This is an opportunity to write new standards for a greener economy where innovation drives sustainability and resilience; an opportunity

for ambitious proposals on taxation, defense and security cooperation, as well as reforming the existing political, economic and industrial landscape. Ultimately, it is up to the EU to create its own conditions for success.

In a period of crisis exemplified by Brexit, it is crucial that politics lead to reforms that strengthen and develop a new Union full of potential—a Union that understands and appreciates the value of its work in close collaboration with its main stakeholders: its citizens. This issue of The European Files does not shy away from the stakes and invites readers to join a cast of exceptional contributors in contemplation.

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Europe needs to shape its digital future, for the good of its citizens and the economy Stéphane Richard, Chairman and Chief Executive

Officer of Orange



For Europe's collective Renaissance



itizens of Europe, if I am taking the liberty of addressing you directly, it is not only in the name of the history and values that unite us. It is because time is of the essence. In a few weeks' time, the European elections will be decisive for the future of our

Never, since the Second World War, has Europe been as essential. Yet never has Europe been in so much danger.

Brexit stands as the symbol of that. It symbolises the crisis of Europe, which has failed to respond to its peoples' needs for protection from the major shocks of the modern world. It also symbolises the European trap. The trap is not being part of the European Union. The trap is in the lie and the irresponsibility that can destroy it. Who told the British people the truth about their post-Brexit future? Who spoke to them about losing access to the European market? Who mentioned the risks to peace in Ireland of restoring the former border? Nationalist retrenchment offers nothing; it is rejection without an alternative. And this trap threatens the whole of Europe: the anger mongers, backed by fake news, promise anything and everything.

We have to stand firm, proud and lucid, in the face of this manipulation and say first of all what Europe is. It is a historic success: the reconciliation of a devastated continent in an

unprecedented project of peace, prosperity and freedom. We should never forget that. And this project continues to protect us today. What country can act on its own in the face of aggressive strategies by the major powers? Who can claim to be sovereign, on their own, in the face of the digital giants? How would we resist the crises of financial capitalism without the euro, which is a force for the entire European Union? Europe is also those thousands of projects daily that have changed the face of our regions: the school refurbished, the road built, and the long-awaited arrival of high-speed Internet access. This struggle is a daily commitment, because Europe, like peace, can never be taken for granted. I tirelessly pursue it in the name of France to take Europe forward and defend its model. We have shown that what we were told was unattainable, the creation of a European defence capability and the protection of social rights, was in fact

Yet we need to do more and sooner, because there is the other trap: the trap of the status quo and resignation. Faced with the major crises in the world, citizens so often ask us, "Where is Europe? What is Europe doing?" It has become a soulless market in their eyes. Yet Europe is not just a market. It is a project. A market is useful, but it should not detract from the need for borders that protect and values that unite. The nationalists are misguided when they claim to defend our identity by withdrawing from Europe, because it is the European civilisation that unites, frees and protects us. But those who would change nothing are also misguided, because they deny the fears felt by our peoples, the doubts that undermine our democracies. We are at a pivotal moment for our continent, a moment when together we need to politically and culturally reinvent the shape of our civilisation in a changing world. It is the moment for European renewal. Hence, resisting the temptation of isolation and divisions, I propose we build this renewal together around three ambitions: freedom, protection and progress.

Defend our freedom

The European model is based on the freedom of man and the diversity of opinions and creation. Our first freedom is democratic freedom: the freedom to choose our leaders as foreign powers seek to influence our vote at

each election. I propose creating a European Agency for the Protection of Democracies, which will provide each Member State with European experts to protect their election process against cyberattacks and manipulation. In this same spirit of independence, we should also ban the funding of European political parties by foreign powers. We should have European rules banish all incitements to hate and violence from the Internet, since respect for the individual is the bedrock of our civilisation of dignity.

Protect our continent

Founded on internal reconciliation, the European Union has forgotten to look at the realities of the world. Yet no community can create a sense of belonging if it does not have bounds that it protects. The boundary is freedom in security. We therefore need to rethink the Schengen area: all those who want to be part of it should comply with obligations



of responsibility (stringent border controls) and solidarity (one asylum policy with the same acceptance and refusal rules). We will need a common border force and a European asylum office, strict control obligations and European solidarity to which each country will contribute under the authority of a European Council for Internal Security. On the issue of migration, I believe in a Europe that protects both its values and its borders. The same standards should apply to defence. Substantial progress has been made in the last two years, but we need to set a clear course: a treaty on defence and security should define our fundamental obligations in association with NATO and our European allies: increased defence spending, a truly operational mutual defence clause, and the European Security Council with the United Kingdom on board to prepare our collective decisions.

Our borders also need to guarantee fair competition. What power in the world would accept continued trade with those who respect none of their rules? We cannot suffer in silence. We need to reform our competition policy and reshape our trade policy with penalties or a ban in Europe on businesses that compromise our strategic interests and fundamental values such as environmental standards, data protection and fair payment

of taxes; and the adoption of European preference in strategic industries and our public procurement, as our American and Chinese competitors do.

Recover the spirit of progress

Europe is not a second-rank power. Europe in its entirety is a vanguard: it has always defined the standards of progress. In this, it needs to drive forward a project of convergence rather than competition: Europe, where social security was created, needs to introduce a social shield for all workers, east to west and north to south, guaranteeing the same pay in the same workplace, and a minimum European wage appropriate to each country and discussed collectively every year. Getting back on track with progress also concerns spearheading the ecological cause. Will we be able to look our children in the eye if we do not also clear our climate debt? The European Union needs to set its target - zero carbon by 2050 and pesticides halved by 2025 - and adapt its policies accordingly with such measures as a European Climate Bank to finance the ecological transition, a European food safety force to improve our food controls and, to counter the lobby threat, independent scientific assessment of substances hazardous to the environment and health. This imperative needs to guide all our

action: from the Central Bank to the European Commission, from the European budget to the Investment Plan for Europe, all our institutions need to have the climate as their mandate.

Progress and freedom are about being able to live from your work: Europe needs to look ahead to create jobs. This is why it needs not only to regulate the digital giants by putting in place European supervision of the major platforms (prompt penalties for unfair competition, transparent algorithms, etc.), but also to finance innovation by giving the new European Innovation Council a budget on a par with the United States in order to spearhead new technological breakthroughs such as artificial intelligence.

A world-oriented Europe needs to look towards Africa, with which we should enter into a covenant for the future, taking the same road and ambitiously and non defensively supporting African development with such measures as investment, academic partnerships and education for girls.

Freedom, protection and progress. We need to build European renewal on these pillars. We cannot let nationalists without solutions exploit the people's anger. We cannot sleepwalk through a diminished Europe. We cannot become ensconced in business as usual and wishful thinking. European humanism demands action. And everywhere, the people are standing up to be part of that change. So by the end of the year, let's set up, with the representatives of the European institutions and the Member States, a Conference for Europe in order to propose all the changes our political project needs, with an open mind, even to amending the treaties. This conference will need to engage with citizens' panels and hear academics, business and labour representatives, and religious and spiritual leaders. It will define a roadmap for the European Union that translates these key priorities into concrete actions. There will be disagreement, but is it better to have a static Europe or a Europe that advances, sometimes at different paces, and that is open to all? In this Europe, the peoples will really take back control of their future. In this Europe, the United Kingdom, I am sure, will find its true place.

Citizens of Europe, the Brexit impasse is a lesson for us all. We need to escape this trap and make the upcoming elections and our project meaningful. It is for you to decide whether Europe and the values of progress that it embodies are to be more than just a passing episode in history. This is the choice I propose: to chart together the road to European renewal.



The right moment is NOW: Why and how to develop a European industrial policy strategy



Peter ALTMAIERGerman Federal Minister for
Economic Affairs and Energy

In June 2017, 20 European Ministers of Industry attending the Fifth "Friends of Industry" Ministerial Conference signed the Berlin Declaration, which states that: "What we need is a kind of "Pulse of Europe: Industry edition", an impetus that will enable us to beef up our economies' capacity to innovate, enhance our future prosperity and create good jobs within the European Union." This was just one of many appeals made by EU Member States for industrial policy to be given particular consideration and for plans designed around industry to be drawn up in a European context.

Two years later, in February 2019, I endeavoured to provide this kind of impetus for Germany and also for Europe by tabling a National Industrial Strategy for 2030 (NaIS). The NaIS has attracted a lot of response. I have received positive responses, criticism and questions from Germany, Europe, and countries that are further afield. The enormous level of interest has shown me that there are many who feel that something needs to be done, but that there is a dissent about what the pathway towards a modern industrial policy should look like. We are all agreed, however, that actually producing goods comes with positive economic effects. The time has come for an industrial renaissance in Europe and the right moment for that - as the various different stakeholders in the industrial community unequivocally agree - is NOW:

- NOW, in the run-up to the European elections, is the time for us to position ourselves clearly, so that the new European Commission will have a clear understanding of the need for reform. The industrial sector continues to be part of the indispensible core of our economy. This means that it must also play a part in all that will ensure that Europe continues to thrive and prosper. Any reform must always begin with a clear assessment as to where the European Union stands with regard to international competition. For this reason, the Monitoring Dashboard for measuring the competitiveness of European industry, which was developed under the Austrian presidency, is an essential requirement for any analysis, and it will provide key pieces of information on investment activities, global market shares, the industrial share of GDP, and also the number of innovations in small and medium-sized companies (SMEs), of working robots, of industrial workers receiving continuing training, and information about the extent to which the industrial sector has harnessed digitisation. These insights will then allow us to devise bespoke solutions for our industrial policy. In a next important step, the new European Commission is asked to take account of the economic importance of the industrial sector and of the general need for industrial policy action by tabling its ideas on how to safeguard and strengthen the competitiveness of European industry by tabling a long-term industrial strategy by the end of 2019. The European Council is also asking for this to happen. The industrial strategy must have a focus on how to bring up investment levels, usher in the transition of the industrial sector into the digital age, strengthen innovation, promote and foster key-enabling technologies, safeguard strategic value chains, and protect the industrial sector from unfair international competition.

- NOW is the time for reviving the meaningful momentum of a joint European industrial strategy. There are some in Europe who are calling our economic union and our union of values into question. To my mind, the industrial sector is part this continent's 'joint cultural heritage'. Every day, the economies of EU Member States are becoming more and more intertwined as cross-border value chains in the industrial sector are being forged. This is something we want to use as a major

economic argument opposing those criticising Europe: more than almost any other industry, the European industrial sector is proof of the intricate network formed by small, mediumsized and large industrial enterprises whose trade is closely interwoven across the European continent. It is a ecosystem formed by innovative industrial companies over centuries, and one that has no equivalent elsewhere in the world.

- NOW is the time to make a concerted effort to create what we call 'European champions'. A 'champion' by this definition is a company of any size that is able to compete internationally and to actively drive technological progress. If we want to activate, support and protect our existing and future European champions, we need to find a well-focused and thought-through European response to government intervention and protectionism. Part of this response is to strengthen strategic value chains in Europe. Two 'Important projects of common European interest' (IPCEIs) have already been launched respectively initiated in the fields of microelectronics and battery



cell production. In the case of the IPCEI microelectronics, four European states have invested in forward-looking innovations, thus acting in the wider economic interest. I am confident that we will be able to also get the IPCEI battery cell production up and running, together with partners in Europe. Our invitation to apply for funding under the IPCEI battery cell production has met with a lot of interest. The initial talks we have had suggest that we can be optimistic. Whilst we approve of the procedure in general, in particular with regard to its objective of safeguarding technological leadership, we must bear in mind that processes have yet to be considerably sped up. I can see a great deal of potential here and am closely following the work of the 'strategic forum', which has identified another six value chains that are of strategic importance and for which the forum seeks to get additional pan-European projects on key-enabling technologies off the ground.

- NOW is the time to safeguard and strengthen Europe's technological leadership. It was technological prowess and leadership that made Europe strong in the past – the same things that will continue to give us a decisive competitive edge in the future. Technology is the dominant force driving structural change. We talk about 'game-changers' such as artificial intelligence, automated and connected driving, or nano and biotechnologies. We talk about Industrie 4.0, the use of new materials, about innovative medical technology and

medical products. They all have the potential to revolutionise industrial companies and entire industries. They are transforming our value chains and turn industrial processes upside down. To harness these technologies means to secure long-term economic growth. This is why strengthening these technologies and promoting research and development in general is rightly one of the objectives that feature prominently on the list for the next Multiannual Financial Framework.

To my mind it is key that we harness the opportunities for technological leadership, because this will be decisive in our efforts to ensure that future economic output and the jobs of the future will be created here in Europe.

- NOW is the time for a discussion on modernising European competition law. The basic principles underpinning competition law have proved their worth. However, at a time when the digital revolution is changing the world at breakneck speed, when the platform economy and its logic of 'the winner takes it all' are embedding themselves firmly in our economy, we must review our existing regulations to see if they are still fit for purpose. This review of our competition law also becomes necessary as our industrial sector is becoming more and more integrated both at global and at European level. How are we dealing with statecontrolled and state-subsidised companies from non-EU countries? Do we sufficiently take into account the strategies adopted

by countries outside the EU as we consider potential competition? Our tasks include those of ensuring effective competition and a level playing field in the future. After all, competition is the most important factor driving innovation. And competition law is key for protecting competition.

- NOW is the time to level the global playing field. In a first step this will require modernising the WTO's multilateral rulebook, in particular the rules on industrial subsidies and forced technology transfer. We are currently working with the other EU Member States to see how international rules, for instance rules on public procurement, can help guarantee a level playing field for all. We are willing to engage in constructive discussions about what could be effective instruments that help promote a mutual opening up of the global public procurement markets.

For me, there can be no doubt that we must continue to work hard on reducing distortion in international competition. In this context, I expressly welcome the free trade agreements negotiated by the European Union with countries including Canada and Japan. These FTAs are an important contribution to the effort of shaping globalisation, for instance by maintaining high levels of consumer protection, labour and environmental standards.

- NOW is the time for future-proofing the European industrial sector: there are economies that over the past few years have neglected their industrial contributions to GDP and have had to learn some hard and painful lessons. Once technologies and jobs have moved abroad, they will not come back by themselves. But in Europe, our industrial core is indispensible for the success of our social model. I am firmly convinced that a flourishing industrial sector has the right to remain and to stay part of our diversified overall economic model. Its economic relevance, its impact on our society and economy, and its unfettered innovative nature that always looks to the future make the industrial sector more 'hip' than it has ever been.

The time has come and the moment is NOW. Many of the developments we have seen in recent years and the last few decades have raised some essential questions about the viability of our European industrial sector and of the prospects of the entire European continent and the economic model it represents. Let us seize this opportunity, let us safeguard our technological sovereignty, let us improve our business environment for industry, let us level the playing field, let us embody the social market economy and pave the way for a sustainable future for industry. I am looking forward to us doing just that.



A new approach for the future of industry in Europe



Bruno LE MAIREFrench Minister for Economy and Finance

e are at a time of great political change.

According to economic theory, growth and the global production of wealth

are cyclical. Growth periods are followed by periods of economic downturns in which resources are reallocated.

Librations of an annual section

I believe there are political cycles too. Not simply those created by elections, but those we experience every thirty or forty years when the balance of power is totally reshuffled. We are at that turning point.

On the one hand, China has had tremendous economic success in the last couple of decades. And its ambitions today - which it now makes no secret of - are not just economic. It has technological ambitions, with its Made in China 2025 plan. China is no longer the workshop but the laboratory of the world. It has the will and the capacity to develop and control all strategic technologies in the coming years: artificial intelligence, energy storage, quantum technologies etc. But it also has geopolitical ambitions: these are set out clearly in its project The New Silk Roads project. China is striving to become the new economic and political geostrategic power of the 21st Century.

On the other hand, the United States maybe temporarily but maybe for many years to come, is shutting itself from the outside world with a populist and protectionist political project: America first.

Europe is caught between these two giants and their ambitious political projects and is struggling to find its place. It has also been weakened – first by the financial crisis, then the eurozone crisis, then populist movements taking over in many countries and of course the referendum in the UK which embodies many of the ills of Europe. Brexit also reminds us all that the European project is not permanent: it can come to an end.

Faced with this situation: what should those of us who believe in the European project and in the future of Europe as a global power? I think we have a simple choice.

Either we allow ourselves to be dragged down into old European rivalries that will lead us to new forms of feudalization, with countries no longer working together. Such an approach will undermine our economies but also our ability to be a European political power. Or we unite behind an ambitious and common project, stable and proud of its values: a new empire.

I do not mean an empire of domination but a peaceful empire, in the words of Alexis de TOCQUEVILLE. An empire based on rules, on shared values and a shared culture, with strong external borders, an empire where the history and language of each nation is fully respected but also capable of looking towards and embracing the future.

It would be an empire with a unique approach to sovereignty which reflects what Europe is: a combination of national sovereignty and European sovereignty. In some areas – welfare states, education or justice systems, it is for national government to be the ultimate decision makers and that won't change. In other areas, if we want to be truly sovereign, able to exercise our power on the global stage, we must work together. Pooled or shared sovereignty does not undermine national sovereignty as populists like to claim. On the contrary, it strengthens national sovereignty and we should not be ashamed to say so.

Industrial sovereignty or technological sovereignty is a case in point. Joining forces in these areas is the condition to be sovereign.

The alternative is that we lose the global race and end up being vassalized.

This peaceful empire has strong economic values. It champions a renewed capitalism

which is neither capitalism «with Chinese characteristics», nor the capitalism of the «American way». It is a fairer and more sustainable capitalism that must meet the challenges of today: the unacceptable rise in inequalities, among and between nations, as well as the desperately urgent climate change challenge.

One of the pillars of this peaceful empire should be a common industrial policy. We think, with my counterpart Peter Altmaier, that we have to work on three key aspects.

First, we need to create, develop and produce new technologies. Innovation is the only way forward to ensure our industry remains competitive.

That is why France has decided to create a 10 billion euro fund for disruptive innovation. We hope that this fund will pave the way for a similar European fund. We all can have our own and separate funds at the national level – in France, in Ireland, or Poland. But then we won't be able to compete with the USA or China. If we want to fund innovation, we need to pool our funding.

It is also why we need a fully functioning Capital Markets Union. It is needed to finance innovation. Why is there no European Google or Apple? Why are there more than 150 unicorns in the US, more than 80 in China and only 40 in Europe?

It is not a matter of creativity or talent, it is a matter of financing. And today we're lagging behind our main rivals.

A couple of interesting figures on venture capital financing in the world in 2018: 100 billion (euros) in the United-States, 80 billion in China, 20 billion in Europe. We need to invest much much more to stay in the innovation race – on artificial intelligence, on space, on energy storage. The technologies of the future require massive investment. And we are not doing nearly enough today.

But innovation isn't just a matter of financing. It is also a matter of smart industrial partnership. We need to develop new ways for companies to work together, share research and development costs and the outputs too. That is what we are doing with Germany

and Poland and hopefully other European countries for fourth generation batteries. And that is what we must of our time do on artificial intelligence, perhaps the greatest technological challenge.

Europe was powerful in the twentieth century, in great part because of its success in mastering the nineteenth century industrial revolution. To be powerful in the twenty-first century, Europe must become a global leader on Al. And we have all the assets: top uni-

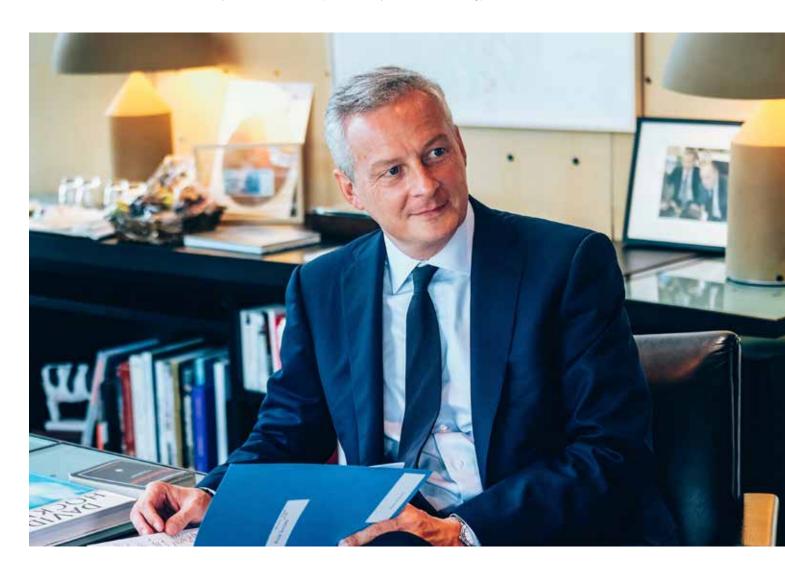
be one any time soon. This puts European companies at a massive disadvantage. When some countries heavily subsidize their own companies, how can companies operating mainly in Europe compete fairly?

This entails changes to European competition rules. I strongly believe it needs to be one of the key priorities for the next European Commission.

Finally, we have to be capable of defending our technologies, companies, and markets.

When you develop a new technology, it

unfair extra-territorial sanctions and to trade freely when it is legitimate to do so. It also means using trade policy effectively: we are the biggest trade bloc in the world, we should not underestimate our own ability to frame trading relationships and make them fairer.



versities, engineers, data scientists and great innovation policies. But we now need to make it happen.

Second, we need to adapt our regulatory framework.

European competition rules need to be adapted to the global economy. Competition is global. We need to agree on a new set of rules, more in tune with the world as it is today. A world that is more brutal and less fair.

Despite our best efforts, there is no regulatory global level playing field. And there won't

doesn't come for free. It entails billions in spending and years of hard work. We cannot let these technologies be spied upon or simply stolen. France has reinforced its control over foreign investments in key sectors. And I am glad that Europe has recently agreed a more rigorous screening of such strategic and sensitive investments.

Protecting our industry also means protecting our capacity to trade as we choose. Along with Great Britain and Germany, we have created a new financial vehicle called Instex. It will enable our companies to avoid

This simple choice – between a Europe that turns on itself and a Europe that embraces the future – is the choice European citizens will have to make in the May European elections. More than ever, their choice will shape the future of the European project. A European renaissance is possible, but only if we are united. And only if we act now.

Our common destiny is at stake in these next European elections





Manfred WEBER
MEP (EPP Group)
Spitzenkandidat for the EPP

he next European elections will be historic in many ways. They will determine whether the European Union is able to act in the coming years to improve the lives of Europeans, to ensure their security, the prosperity of our economies and the sustainability of our model of society, or if it is permanently paralysed and divided.

For me, in the coming weeks, the campaign must be the occasion for debates between the different candidates, parties and projects involved. This is the only way to allow Europeans to choose the direction they wish to give to our continent.

This is also what the lead candidate process, involving the European parties' candidates for the Presidency of the European Commission, is all about: it's about transparency and about building a true European democracy.

While our continent is under threat both from inside and outside, while populists and nationalists are trying to divide us and to destroy what we have achieved with the European project in the past 70 years, my position is very clear: I believe that what unites the countries and the people of Europe is much stronger than what separates us. I believe that through dialogue and listening, our differences can be overcome. I believe that the unity of the European Union is our most precious asset in an increasingly hostile world and that apart

from membership of the EU, there is no good future for any of our countries.

But I am also convinced that for far too long the European project has been built too far from the people: this is what people all over Europe have told me during my "Listening Tour" throughout the continent.

We will be able to recreate this link between Europe and its citizens only if we reform Europe.

Europe is not "Brussels"; it's not people dressed in grey hurrying through anonymous corridors. It's the 500 million citizens who make Europe's heart beat every day, who every day profit from Europe's progress, and who, united in the European Union, are capable of accomplishing great things. That's the meaning of our campaign slogan, "The Power of WE".

with 10.000 new European Border and Coast Guards by 2022. It's a Europe that fights terrorism and organised crime with a European FBI, where joint investigative teams combine information to catch terrorists before they attack. It's a Europe that puts a stop to accession talks with Turkey. It's a Europe that establishes a new rule of law mechanism to ensure that the independence of the judiciary, freedom of the press and the fight against corruption are upheld in the European Union.

A smart Europe means pooling all our talents, knowledge and resources to address what really makes a difference in citizens' lives — like launching a European Masterplan to join our forces in the fight against cancer. By linking vast amounts of information through a decentralised database, we can overcome the research gap by harnessing the potential of Big Data. We will strive to reach the same quality



If elected President of the European Commission, my priority will be to build a **strong Europe** that protects its citizens and values; a **smart Europe** of ideas and innovation; and a **kind Europe** that takes care of its citizens.

A Europe that is strong is a Europe that will protect its borders from illegal migration and from smugglers and human traffickers

level of cancer care in each European country. Therefore, we will encourage an agreement among European level organisations representing cancer institutions, healthcare professionals and patients on a set of core standards and evidence-based indicators to measure the quality of all cancer services. We will step up our prevention strategy to reduce the cancer burden by outlining a coherent European

Cancer Prevention Strategy, building on previous EU-led and stakeholder initiatives. Furthermore, patients from remote areas have to be able to benefit from the same quality of care as patients in central areas. Harnessing the potential of technology will enable us to breakdown distance barriers. It means developing smart homes for seniors where they can continue to live independently and close to their families. It means creating 5 million new jobs for our youth, to stop brain drain through a strategy based on four pillars: trade, infrastructure, innovation and our social market economy. It means cutting over 1.000 outdated regulations and cutting the number of EU functionaries, to reduce the burden of bureaucracy and make Europe more efficient and accessible to citizens.

A Europe that is kind is a Europe where a new Digital Transition Fund — financed in part by a new Digital Fair Tax that makes sure Internet Giants contribute their fair share — helps protect all our workers from being left behind when digital disruptions occur in the labour market. It's a Europe where new homebuilding loans financed by the European Investment Bank help make sure young families don't have to live in their childhood rooms at their parents' overcrowded flats,

but can own their own houses. It's a Europe where we preserve our values and make the EU a role model for the world by enforcing a global ban on child labour: no one should be allowed to exploit children's innocence to make a profit. Finally, a Europe that is kind is a Europe where we continue the ambitious fight against climate change by honouring the Paris and Katowice agreements; where we invest together in the development of low-emission aeroplanes; and where we call for a global ban on single-use plastic.

These are my proposals for a strong, smart and kind Europe. These are my pledges to the people of Europe. If I become the next President of the European Commission, these proposals will see the light within the next five years.

The Power of We means that it is the people of Europe who decide. It means unity and strength. It means that we will open a new chapter for Europe with optimism and hope, not fear. Together we can do it.



A new social contract for Europe





Frans TIMMERMANSVice-President of the European Commission
Spitzenkandidat for the PES

Interview by Hughes Belin

Q: After Brexit, what is the future of Europe? Where is the EU headed?

A: I find the 2016 referendum and Brexit so unspeakably sad. I respect the vote of the British people, it's their sovereign choice and a possibility offered by the treaties of the European Union. But the last few years have really show how difficult it is to untangle fifty years of close cooperation.

These elections will be about the future of Europe and the soul of Europe, about standing firm against a right-wing backlash based on nostalgia and reactionary politics. I'm standing for a Europe based on values, to give voice to those who want cooperation not confrontation.

The EU has given us all an unparalleled period of peace. It has brought together a continent that was so divided only 30 years ago. But it is also more than that, it is about facing the future as part of a community that is much bigger than the national community. When you appreciate the magnitude of the challenges facing us with climate change, or international trade, or the seriousness of the migration challenge. Then there is only one thing we can do as Europeans: work together to chart a positive course. This is the only way forward.

Q: What flagship measures do you propose at European level in the framework of your "new social contract for Europe"?

A: Rewriting the social contract means creating a sustainable, democratic and fair Europe, and doing it quickly. A big part of a fairer society is an equal society, for men and women. I am a convinced feminist. I've been saying it for many years now. We need to defend women's rights now, we need more feminists, male and female.

I'm going to put this principle at the heart of the Commission I lead. It's time we closed the gender pay gap and pension gap. It's time women and men have the same work-life balance. It's time to put an end to gender-based violence and sexual harassment. That's why my Commission will implement a binding EU Gender Equality Strategy, to finally make this a reality. By the end of my mandate, I want the gender pay gap to be gone, to be zero.

Another key issue for me, and wherever I go in Europe people raise this with me, is housing. Young people say we can't afford to live in our cities, or we need to live with our parents, because everything is so expensive. And then there's the sustainability issue, we need all houses to be more energy efficient.

So why not make more European structural funds available to regional governments to address this specific issue. We should be telling local government, if you have plans for housing and you ensure a certain proportion are affordable housing and are energy efficient, you will get support from Europe. That way we can address the housing need. We can prove to people that Europe can make a positive difference to their lives.

And then there's all the changes around work and the new models of employment that have sprung up because of Deliveroo, and Uber, and other companies. I want people to have steady jobs, not zero hours contracts. People who work in these types of jobs aren't 'entrepreneurs', they are workers who deserve rights and protections like everyone else. They shouldn't be left at the mercy of the market when they can't work because they fall off their bike delivering food, or become ill.

Q: What is your industrial strategy for Europe? How will you give European industry a future?

A: We need to make sure that we don't deplete the resources of the world, and instead we reuse them, that we go to a circular economy, an economic system which minimises waste and makes the most of resources. This is where Europe's future lies. And this is urgent. The longer you wait, the more difficult it's going to be, the more costly it's going to be.

But how we approach this is vital. If you go up to a person and you talk to them about Europe's industry and the green economy and the end of the world, they will not be receptive when their only worry is how they get to the end of the month, whether they have enough money to provide for their family or not.

So, if you want this circular economy to be a project that can be embraced by many people in society, we need to make sure that social sustainability is front and centre. We want to start the move to a greener Europe to come with a guarantee of social sustainability, because we will not get the European population behind sustainability if they don't see that we also support Europe's industry and workers.

Q: How do you propose to take forward environmental protection and EU leadership on climate change?

A: Climate change is urgent. Never let anybody tell you that changing our society into a sustainable society is a luxury, it's essential. People live where they live, and we should guarantee that they can live there without becoming sick because of bad quality air, or water, or the environment more generally. My commission will raise the EU's climate ambitions, protecting biodiversity and cutting pollution. Our work to eliminate single use plastics is just one example of how we do this.

Q: How do you see the EU's relationships with big trading partners such as the USA, Russia and China evolving?

A: Look at the challenge coming out of America and Russia. Look at how China is continuously trying to gain the upper hand in trade and in so many other areas. And if you just think about the size of the test facing us with climate change, and the seriousness of the migration challenge. Then, there is only one route through it: we need to work together as Europeans to come up with a plan to meet all these challenges. When we speak with one voice we stand on an equal footing with the USA, Russia and China, and we can use our trading relationship to make sure our world economy is more sustainable ecologically, and more progressive when it comes to standards and workers' rights. Europe can be a benchmark for social justice, dialogue, multilateralism, human rights, decent work, the rule of law, sustainability development, gender equality, and so much more, but only if we Europeans stick together.

Q: How can the EU institutions best be adapted to fulfil your programme?

A: As Commission President, I would put the Sustainable Development Goals at the core of my work programme, and task each of my Commissioners with delivering on specific Goals. It is important that the EU institutions work well so we can tackle poverty, inequality, environmental degradation, and promote sustainability, prosperity, peace and justice. I think it is really a matter of setting the right direction for the EU and concentrating our efforts on delivering a more fair, free and sustainable Europe for all.



It is time to Renew Europe





Margrethe VESTAGER
EU Commissioner for Competition
Team Europe Member

oon you can vote! In just a few weeks' time European citizens will vote in Europe-wide elections and set our Continent's direction for the five years to come. These are extremely important elections at an important moment.

It is hard to deny that Europe today is the best place to live in history. Together we have achieved so much. We have learned to cooperate, to make decisions together, and to shape our own future. We have built common understanding, common institutions for democracy and justice. Now we have the responsibility to safeguard those. We have achieved peace and prosperity after centuries of conflict. What we have achieved is a positive ideal for many others in the world.

But this doesn't make it all perfect. Many people are not well off. Many people feel unsure about the future. I feel that uncertainty as well. Technology is changing so fast and we can't always tell what will become of our data, the way we work, even our democracy. Doing the right things – studying well, working, engaging – no longer seems enough to guarantee every child a good job. It is impossible even to guess what our planet will look like, after climate change reshapes the landscapes we know best.

From the feelings of uncertainty we can find the impulse to change. Because we won't solve those problems just with feelings.

We won't solve them either by just blaming Brussels or blaming Europe, as if it were an external force we can't control, outside of our democracy. And we will not fix anything by putting labels on other people - such as "populists". Just because certain problems are put forward by people we tend to disagree with doesn't mean those problems don't matter.

Politics are not a pantomime of heroes and villains. It is engaging people for real - as different from one another as we are. We need to commit ourselves to a reasoned debate about how we can actually tackle Europe's problems.

We need to be open, not just about what is going wrong, but also about what is going right. We're lucky in a sense that in today's digital global society our political debates have the potential to be open and free - as never before. Politics is no longer something we take part in only during election time.

And since the future is digital, the European Union should be at the forefront of harnessing this potential for everyone and make the EU the most attractive place for companies in the digital economy. We must build a fully-functioning Digital Single Market and we believe the EU should be the first to create a solid legal framework for new technologies such as blockchain, artificial intelligence and others to be used in the economy and public life. Competition among companies in the digital space is good and drives innovation, but we shall not hesitate to use our powers to prevent the development of monopolies and to ensure fair competition.

In Europe, there shall be no virtual borders. We abolished mobile phone data roaming fees and now we want to abolish unjustified geoblocking. Every citizen should have the freedom to access their home news and entertainment services anywhere in our market.

The Europe that we have built up together is a tremendous achievement that should not be taken for granted. But Europe can and must do more.

This is not about trying to play down the scale of the enormous challenges we face. It's not about ignoring the problems of today by diverting attention to the achievements of the

past. It's just the opposite. It's about having the confidence to act.

We need to engage with Europe's citizens to offer and discuss an alternative and positive, realistic and inclusive vision for the future.

European Liberals have a vision for the future of Europe: freedom, opportunity, prosperity - in a sustainable and socially inclusive Europe.

We want a Europe that is rich in its diversity and united in standing up for the fundamental rights and freedoms of its citizens. We want a Europe that protects the rule of law. We want a Europe that embraces the potential of the technological and digital evolution, of innovation and of what the World's biggest research programmes can bring. We want to find ways to fight climate change that creates jobs and makes sure that everyone can take part.

We want a Europe that protects us as citizens against threats like climate change, terrorism, cyber conflict and organised crime. We want a Europe that defends entrepreneurship and businesses. We want a Europe of open markets and trade. We want a Europe that pursues economic innovation to lead in a competitive world.

But most importantly, we want a Europe where all European citizens feel included, where we all stand a fair chance of making it, and where we can take care of one another if needed.

As a member of ALDE's Team Europe, this is the message we will be promoting all across Europe, conversation after conversation, country after country.

The recent election of Zuzana Čaputová as the first female President of Slovakia proves that a positive, liberal and progressive campaign on values and vision rather than a campaign of character attacks, fear-stoking and populistic slogans is what voters want.

These are not normal elections. It is time to let go of old campaign habits. We want to come together to find real solutions making our values become true in everyday life. It is time to Renew Europe.

'More Europe' is the answer





MEP (ALDE Group) -Team Europe Member

Interview by Hughes Belin

Q: After Brexit, what is the future of Europe? Where is the EU headed for? What is our common project?

A: I believe the project remains the same as it is stated in the Treaty: an ever tighter Union. The paradox is that [despite the rise of populism] all opinion polls show it is a widely shared goal. European peoples want a European army, a European policy for asylum and immigration, a common fight against climate change, and a common defense of privacy on the Internet. And those who enjoy the Euro do not at all want it to disappear. People sense strongly that their protection and prosperity can be much better guaranteed at European level than at national level.

However, political parties which are supposedly pro-European are [today] wary of pushing for the path of more political integration. Hence they are failing to convince people that the answer lies in 'more Europe' and as a result, voters are naturally distracted by populists who lure them with promises of protection behind national borders.

Q: How should European institutions evolve to bring them closer to European citizens? What concrete initiatives could be put in place during the forthcoming parliamentary term?

A: French President Emmanuel Macron, in his op-ed to European people published in multiple

newspapers on the 4th of March, concluded by calling for the organisation of a wide-ranging conference on the future of Europe, open to civil society. It would take place after the European elections. This is an excellent initiative to which I lend my full support because it would allow for a reflection on and proposals for institutional adaptations that are essential to introduce more democracy into European decision-making.

My general vision on this is that we have to create a pan-European democratic space to allow European citizens to vote directly for their representatives – including the President of the European Commission. Regarding this in particular, the centre-right EPP group in the European Parliament made us waste an opportunity to make progress on this by refusing to allow for transnational lists in the upcoming elections

Q: What relationships should Europe foster with big global players such as the US, China and Russia? Is cybersecurity a priority in this regard and if so, what can we do about it?

A: The EU has made some progress indeed, as shown by the involvement of the High Representative of the Union for Foreign Affairs and Security Policy, Federica Mogherini, on the Iran nuclear deal and the European unity facing the American U-turn on it. Since the election of US President Donald Trump, the outbreak of a nonfriendly, or even hostile, American diplomacy towards Europe, has become a huge challenge for the EU. In this context, cybersecurity is obviously a priority - if not a new topic - for Europe. Russian cyberattacks are a constant source of concern. That is why we have launched legislation to counteract fake news before the European elections.

Q: The new generation of European citizens of voting age is concerned about the fight against climate change. Should it really be a priority for Europe? If the EU runs ahead on the regulatory front, it risk lagging damaging the international competitiveness of many of its industries. How would you tackle this conundrum?

A: I understand the impatience of youth, which finds that the energy transition is not happening fast enough. However Europe is leading the fight against climate change and it is thanks to the EU that the very ambitious Paris Agreement on Climate Change was adopted in December 2015.

The unilateral withdrawal of the US is a hard blow but I think the involvement of China and India, not to mention the private and state-led initiatives in the US – including the rebellion of a big state like California – will, at the end of the day, force Washington to see reason.

The Paris Agreement is a legal framework aiming at reassuring industry on the political will of national and international authorities to foster and accompany the necessary changes in production and consumption patterns. Naturally, this transition hangs from research and industrial innovation. We have to encourage and stimulate it. For example the EU is poised to ban packaging and other items made of single-use plastic. It is a strong incentive to develop alternatives and the recycling industry. The current political term has been committed to enabling a circular economy and the next one must continue to do so, so that the greening of the economy really translates into more jobs.

Q: What kind of industrial policy do you envisage for Europe? Does EU competition law need to be adapted to the new realities of the global economy? Which sectors should the EU address as a priority?

A: European legislation on competition was designed in the 1980s, when from the perspective of the creation of a single market, we wanted to avoid privatised national ex-monopolies buying each other up to become oligopolies. At the time, international competition was limited to the US and to a lesser extent, Japan. On top of that, our markets were much more closed. The situation is very different today. We have open markets where even the biggest European companies look like dwarfs compared to the behemoths in the US, China, Japan and even Korea and India. Hence there is a need to revisist our competition rules to give a chance to the emergence of European champions.

Priority should be given to the consolidation of the telecommunications sector. In order to stand firm against Google-Amazon-Facebook-Apple, Europe must have a single market for telecoms. This market remains fragmented today, which is an obstacle to the development of European start-ups in the digital economy. I have no doubt that this industrial policy challenge will be a major one for the forthcoming legislative term. \diamondsuit

Let's act. Together!





Bas EICKHOUT

MEP (The Greens/EFA Group)

Co-Spitzenkandidat for The European Greens

Interview by Hughes Belin

Q: What is the future of Europe? After Brexit, what are we heading for?

A: We don't know how Brexit will unfold. It certainly has stirred up a debate where people realise that they can also lose something. Europe has been taken for granted for too long. More and more people realise that it is vulnerable. It's easy to criticise but in the end we need it.

I think support for Europe has gone up. But it's a temporary correction triggered by Brexit. Now is a crucial moment because people realise something needs to happen. We must use this moment to fundamentally change the way we cooperate at European level, otherwise it may fall apart again.

Clearly from our perspective, Europe must become green, but even more important we also say 'social'. Because people feel that Europe has become an unequal society, where companies use European schemes to avoid taxation, for example. And in the end, people pay the price. The growing inequality in our society is partly because of Europe, we need to be honest about that. But we can also fix it: it's not a law of nature, but just because politicians didn't dare to put taxation policies in place. That can change.

Q: You are not the only ones calling for radical change: other parties are demanding the same and meeting with a lot of success among voters. What is your added value?

A: We see the rise of the populists, claiming they want change. However, the only thing they're good at is claiming they want change; they don't propose any alternative. They only know what they don't want, they do not know what they do want. And that's where we come in: we are also challenging the status quo, but we do know what we want.

The party of Manfred Weber, the EPP, has been a leading force in this Europe of today that so many people are protesting against. Manfred Weber now, in election time, is claiming that it's time for a new chapter. But the EPP has been writing this book for decades! I don't think that the new chapter of the EPP will be very exciting. It's going to be business-as-usual.

And that's not what people want. People take to the streets because they want another Europe, a clean Europe, a social Europe, a Europe fighting corruption, a Europe fighting tax avoidance, a Europe where companies pay fair taxes. And they can't get that with the EPP.

This is going to be the core of our campaign because we want to avoid a kind of fake choice: "it's either us or the others who are against Europe" because if you limit the debate on Europe to that question, you're not serving the people who are calling for change. The Greens will fight for change, together with the movements that are out there. Our main campaign will not be against populism or "are you for or against Europe?" but "what kind of Europe do you want?". We want a Europe of change, a Europe that is green and socially fair.

Q: There are indeed lots of protests in the streets, especially the young generation asking politicians to be serious about climate change. Will climate be one of the central themes in the European campaign?

A: Those kids on the streets are really the most full of fight and the most active, but the movement is much broader than that. Look at

the rise of the green vote in several countries. It's now the younger generation waking up the older generation. That's the fight we are going into together.

Coming back to climate, it will be one of the central themes of the European elections, yes. I'm not sure it will be the same in every country, but I think it will be climate-centred in a many countries. In some, it will be more about energy dependence on Russia. In others, it will be more about air quality. But in some it will only be about climate. People are concerned about climate change. And our vision on the future economy and how to interlink it with climate policy is definitely going to be a big campaign theme for the Greens.

Q: How can you link climate and environmental policies with a strong industrial base needed by Europe to provide jobs?

A: I know that sometimes people say "Greens don't understand economics", but that was back in the 1980s. Since then, we've moved on it; now it's time for the world to move on. We are definitely talking about the economy here: when we talk about green policies, we talk about green economy. It is about a vision for the future of industry in Europe.

Our message to Manfred Weber is that his vision is killing industry. The only way for European industry to have a future is as an innovative, green industry. That's where the jobs are. Look at all the projections for circular economy. Look at renewable energy. This is where the future jobs are. The countries which are investing early have more green jobs than fossil jobs. Europe can only compete internationally on innovation, green innovation.

So we have a very strong industrial vision, and when we talk about 'green and social', for us, economy is fully part of that. Adding the word 'social' is the core of economics' need to change. This explains why we are putting so much emphasis on taxation: the level of taxation on bigger companies has gone down while the level of taxation on labour and consumption has gone up. This explains why you have the 'gilets jaunes' in France: they are not necessarily fighting an environmental policy, but rather another tax. This is socially unfair,

we have to change that. Hence we are talking about a 'green and social Europe'.

Q: What about your 'Green New Deal'?

A: I'm very happy that other parties are now so convinced that the Green New Deal is a good idea. We have been talking about it for a few years already - it dates back to the Green's campaign of 2009. We battled against austerity right from the start. We said how stupid it is, especially in difficult economic times, to cut public expenditure. Because it is exactly in those times that there is need for investment. On top of that we also have a vision on where to invest, to change your economy, to make it less dependent on fossil fuels. We will continue. And the more people join our ideas the better. Because this is exactly the way we have to go: growth of investment but with a clear idea on where you want that investment.

Q: According to the latest polls, the usual grand coalition between the Socialists and EPP is not an option for ruling the forthcoming parliament. Would you be part of a governing coalition (and if

so, which one?) and where are your red lines?

A: We know there will be no grand majority, no grand coalition and that's good news. We now have more options for change. We will discuss, of course, with the party that becomes biggest and which will have the opportunity to form a majority. To form a majority, you need to talk to all the different parties in the European Parliament. And we will have our demands ready. They will be about social (taxation) and climate issues. Democracy will also be a key demand. But I'm not going to say this is our red line because this is going to be a negotiation.

If we can deliver fundamental changes in Europe - economically, socially, environmentally and democratically - then we will judge the package as a whole and go ahead. So yes, we will talk but we will not just say yes to business-as-usual' with a little green touch. We want fundamental change.

If Manfred Weber is willing to shift from his past policies and move in that direction, then

we can talk. We can form a majority with him. If he doesn't want to, i.e. if he wants to keep moving to the right as the EPP is doing in more and more countries, then it will be without us. We are open for discussion, but we have our demands: our call for change is serious.

Q: What do you mean by 'democracy will be one of our key demands'?

A: It is a lot about that right now: the rule of law is more party politics than a fundamental value. Look at the EPP: they are critical of Romania because it has a socialist government. The Socialists are critical of Hungary because it's EPP. They're both critical of Poland because it's ECR. Juncker is praising Bulgaria only because its Prime Minister's party is a member of EPP. Guys! The fundamental values of Europe are way more important than party politics. It's killing the debate on the future of Europe. 🜼



Let's retune the **European Union!**





Jan ZAHRADIL MEP (ECR Group) Spitzenkandidat for the ACRE

Interview by Hughes Belin

Q: After Brexit, what is the future of Europe? Where is the EU headed?

A: Brexit embodies the democratic and institutional crisis in the EU. For the first time in the history of European integration, a member state has decided to give up its EU membership. The decision made by UK citizens has clearly shown that the so-called 'ever closer union' is no longer advantageous, and hence not sustainable for all member states

I travel a lot and I can tell you, whenever being asked about Brexit, be it in Asia, Africa, America, my feeling is that the EU's image was damaged by it, regardless of what people in Brussels think. Because if you have a club and one of your strongest and most successful members decides to leave this club, then those looking at it from outside inevitably start to ask "what's wrong with that club"?

But I don't believe the EU is facing the 'to be or not to be' question. It does not have to be 'more EU' or 'no EU'. There is a different option

- a flexible EU, pragmatic, reasonable and fair. An EU that puts its member states first. That is the direction I would like to see the EU take.

Q: What flagship measures do you propose at European level to "retune the EU"?

A: The EU needs to be reformed. The reform I have in mind however is a lot different from what you might hear from Mr Weber or Mr Verhofstadt.

Contrary to them I believe the EU should not aspire to become a superstate. Instead, we should focus on those areas where the EU adds clear value, for example the single market or a common trade policy whilst ending excessive bureaucracy, over-regulation, and any further expansion of the EU's competences.

Such reform is possibly the last real opportunity for the EU to survive.

In order to make the most cost effective and efficient EU possible, we need something I call a 'Great Review' of the entire "acquis communautaire" - the biggest legal self-assessment since the foundation of the EU.

Therefore, my College of Commissioners would focus entirely on assessing the existing body of EU law, removing what is no longer necessary or inefficient, and improving what can be made to work better.

We also have to seize the opportunity to become the world leader in trade. Much has been done so far so we have a solid base to build on. Our task as politicians is to enable businesses to thrive and create jobs. Opening up international trade and completing the single market is the easiest way to achieve this.

Q: How can the functioning of the EU best be adapted to meet today's challenges?

A: I think the EU could be a good servant but it is a bad master. That's why I believe in a scaled-back and fairer EU - an EU delivering the basics, with a controlled budget, returning unneeded powers back to the capital cities, a multi-currency EU, and a firm but fair immigration policy driven by Member states.

I have spoken to a lot of people across Europe during my tour these past couple of months and I can tell you that people are seriously unhappy with the status quo. They tell me that they feel the EU has taken too much power from them and does not care about the issues that matter most to them. That it goes about its business in Brussels and has stopped listening to them.

We have to change this. Regaining the trust of people is crucial. And the next European elections are a unique opportunity to show people that the EU can adapt and respond to these concerns.

There are areas where the EU has an important role such as research, the single market, and trade agreements; but there are areas which should be left to the national governments to deal with because they simply know better.

The EU's role is not to replace national governments. We do not need a common European solution to every problem that

Q: How do you see the EU's relationships with big trading partners such as the USA, Russia and China evolving?

A: The EU is progressing with the US. Some of the recent actions have been counterproductive but we are trying to find a way forward. I am confident that this will happen as both economies are so mutually dependent that trade cooperation will continue. We must therefore strive to find ways to break down more barriers, probably not through a large deal such as TTIP but possibly via sectoral agreements. The Commission has already started working on this.

It will also be interesting to see what comes out of the US' relationship with China and the trade talks they are having. The EU shares many of the same concerns with China as the US, particularly in terms of technology and strategic investments which should be properly screened. From the EU side we should be pushing the Chinese to open up more of their markets for investment by European firms - this is beneficial to both us and them.

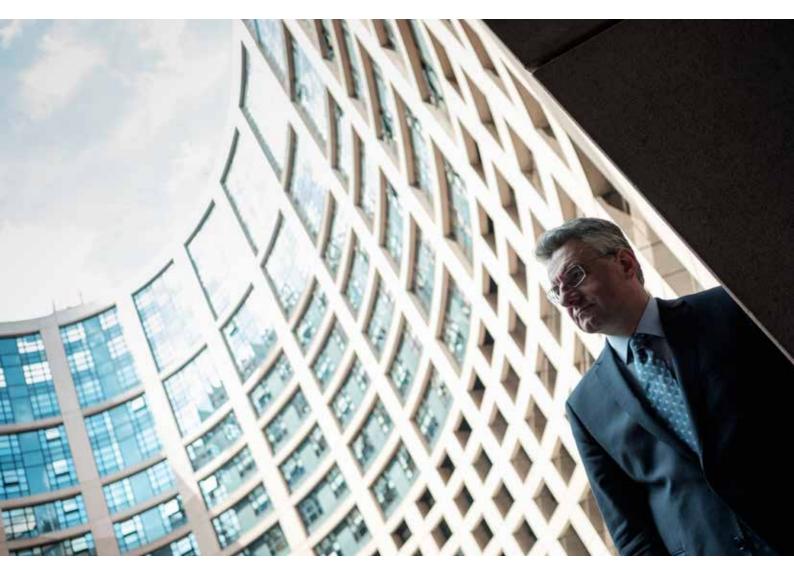
Russia continues to prove that they cannot be relied upon, particularly for countries in Central and Eastern Europe. We should continue to diversify our energy suppliers as we are still far too dominant on Russian gas, and while their provocative actions continue we should ensure sanctions remain in place.

Q: What is your industrial strategy for Europe? How will you give European industry a future?

A: It is difficult to have an overall industrial strategy for Europe as we have 27 or possibly 28 very different economies that are structured in completely different ways. We need to ensure

responsible for approximately 10% of global emissions. We have adopted ambitious policies to reduce our emissions but globally they mean very little if others do not follow. It's not for the EU to do more right now, we need to encourage China and India, who are much bigger polluters, to follow EU's example.

I believe the EU needs to build its long-



our competition policy promotes a level playing field, rather than creating European monopolies out of national monopolies which seems to be what some countries are calling for.

The EU should focus on where it can add value. This means providing pro-growth investment through the budget and the European Investment Bank which supports research and innovation and tackles common challenges such as the clean energy transition.

Q: How do you propose to take forward environmental protection and EU leadership on climate change?

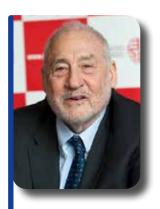
A: Let's be honest: Europe is arguably the cleanest continent in the world, and we are

term strategy based on the Member States' capacities. In some countries, particularly in Central and Eastern Europe, their energy systems and industry are still based on fossil fuels and if we impose rapid and stringent requirements, we risk irreversible damage to the economies of those countries.

We also need to take into consideration certain social constraints, because if we impose radical changes on people against their will, they will resist and we will see "yellow vests" everywhere.

So, in short, we need to stick to our commitments under the Paris Agreement, support and encourage our industries to change, and invest in research and sustainable technology but we need to do it in a pragmatic way with achievable goals and targets.

Rewriting the rules of the European Union



Joseph STIGLITZ
Chief Economist and Senior Fellow, Roosevelt
Institute (US), Nobel Prize in Economic
Science in 2001

Interview by Hughes Belin

obel prize winner Joseph Stiglitz has coordinated a book called Rewriting the rules of the European Union. It was commissioned by the Foundation for European Progressive Studies (FEPS), a think tank of the Party of European Socialists, to feed the political debate ahead of the European elections. This book fits well with Prof. Stiglitz's earlier work with the Roosevelt Institute, a New-York-based progressive think tank: Rewriting the Rules of the American Economy provides a detailed analysis of how rules, institutions and policies have changed in the US over the last few decades, and how, by rewriting those rules, one could restore growth and shared prosperity. The goal of both books is "not to return to an earlier era but to reformulate the rules to address the challenges of a 21st century globalised economy", Stiglitz explains

According to the new book about Europe, "the real problem is not with inadequate enforcement of Europe's rules, but with the rules, institutions and structural reforms themselves". Had the EU more rigorously enforced its own rules, "Europe's economic performance [over the last few decades] would have been even worse", Stiglitz and his team say. But "rewriting the rules will not be any easier than creating them", they warn.

Q: How come American economists are better placed than European ones to judge the rules governing Europe?

A: This effort was mostly by European economists - only two of us were from the US. The whole team was really a European team. When writing Rewriting the Rules of the American Economy, we felt very strongly that what was happening in the US was global. There were similar reforms underway in continental Europe. Ideas about what makes for a good market economy are global, although they have to be adapted to particular countries and institutionalised in a particular context. I always think that having a global mix of scholars is useful - I would do the same when looking at the US. Europe is an interesting case, we argue, because you have a lot of [policy] experiments going on.

Q: One difference with the US is the European social model. The US did much better than the EU on the last economic recovery. Is our social model to blame, as some argue?

A: A key factor for the success of Europe and the reason that Europe is not riven with the inequality that characterises the US, is the European social model, the welfare state. If it were not for that, the performance of Europe in the euro crisis would have been far worse. The irony is that several leaders in Europe have blamed the welfare state for the crisis. Yet those countries with the longest-standing welfare states such as in Scandinavia did not have a crisis. The crisis had nothing to do with the welfare state. On the contrary: it actually mitigated the downturn. The crisis came from neoliberal policies to liberalise the financial sector. People who tried to shift the blame to the welfare state did so for political reasons, not as part of an economic analysis. We call for a strengthening of the welfare state. 2020 is different from 1960 - people don't have the same kind of lifelong jobs, for example - so it needs a different kind of welfare state.

Q: Do you realise how difficult it is to change anything institutional in Europe?

A: One of the challenges when writing the book was keeping in mind exactly how difficult it is to change the treaties in Europe. We didn't just want 'blue sky' analysis such as "here is what you should have done". We set

the discussion at two different levels: "here is what you should have done, but given where you are, here is how you can reinterpret the rules you have". There are many possible reinterpretations of rules that could free up Europe and create a more dynamic, growthoriented continent. The 'rules' we are referring to are those governing institutions and policymaking i.e. all the ingredients that shape the economic infrastructure but that we usually ignore.

Q: Can you give us some examples?

A: Beginning at the macroeconomic level, the Stability and Growth Pact is misformulated. There has been no focus on employment. We say it should be a 'growth, stability and employment' pact. That's a change in a European rule: we need to reinterpret it. Another example is the Pact's 3% deficit, 60% debt mantra: those numbers were pulled out of a hat. There is no economic literature supporting them. And yet they are upheld as sacrosanct. This has consequences. The EU created a macroeconomic framework centred on convergence criteria, or the premise that if you have certain rules it will bring countries closer together. But a single currency can only work if countries are similar enough. The actual rules led to divergence: the countries have been moving apart and they did so not just by an accident but because of the rules.

Q: Perhaps because the ideology of euro is not strictly economic - there is also a political dimension to it?

A: The euro was clearly an attempt to bring Europe closer together: it was an ideology where sharing a single currency was a symbol of being all together. But still it has an economic dimension to it: having the euro means you cannot adjust interest rates, you cannot adjust your exchange rate. And that's my criticism: having committed to that ideology of solidarity, you have to create the institutions to make it work. You've taken away key instruments for adjustment and you have to put something in their place.

Q: What has Europe done well?

A: In one area, Europe has been doing fantastically well: competition policy. EU Competition Commissioner Margrethe Vestager has become the emblem of good competition

policy. It's like in the US back when we had the first antitrust laws in the 19th century. But in the last 50 years the US has become very lax in enforcing competition policy. Some say one of the reasons for our poor performance in equality is the lack of enforcement of competition laws and bad labour laws.

Q: Are labour laws also a problem in **Europe?**

A: The decentralization of bargaining has weakened the bargaining power of workers. And in a way, the timing is bad because there were other forces such as globalisation already contributing to weakening wages - trade with developing countries has a tendency to lower the wages of unskilled workers in particular. Rather than pushing back against that, changes in labour law in Europe and America have made it worse and have strengthened globalisation, which in turn makes it even worse.

Q: What should Europe's industrial policy be?

A: We call for industrial policies and active labour market policies as an essential component of a successful European strategy. One aspect that has probably not gotten the attention it deserves is place-based policies. The discontent and anxiety we are seeing in the US, the UK and elsewhere in Europe is often focused on particular places. There is a big divide between urban and rural, and the parts of a country that are being de-industrialised are suffering. The new global ideology takes for granted that people move to where the jobs are at zero cost. It foresees no social capital that is place-based.

Q: Do you address climate change, one of the big themes during the current European election campaign?

A: We haven't spent as much time on climate change as we could or should have. We were focusing on a broad array of policy issues and climate is ultimately more of a global [than European] issue, but we do talk about the importance of climate change as a fundamental driver of change in the way the economic rules have to be written to push for a greener economy.

Q: Where are we with Brexit?

A: Brexit is in a way a reflection of the failures of Europe. If the EU and the Eurozone had prospered more, there would be a lot more enthusiasm to be part of that club. Everybody in the world has been astounded by the mismanagement of the [Brexit] process [in the UK]. To me one of the most striking things is that the debate about two years ago, ahead of the referendum, paid no attention to what has become one of the key issues: the Irish question. I find it now a compelling reason for a new referendum. The grounds to decide on Brexit were flawed. *



REWRITING THE RULES OF THE EUROPEAN ECONOMY

A REPORT BY JOSEPH E. STIGLITZ NOBEL LAUREATE IN ECONOMICS



Which industrial policies in Europe for the Space



Elżbieta BIEŃKOWSKAEU Commissioner for Internal Market,
Industry, Entrepreneurship and SMEs

he EU is a global leader in the space domain. Space technology, data and services are an intricate part of the daily lives of European citizens. EU investment has enabled the development of European space technologies at a unprecedented level and speed.

The EU has so far invested some EUR 14 billion to develop and operate the best Earth observation system in the world – *Copernicus* - and the best satellite positioning system in the world – *Galileo*. Copernicus sets global standards by offering the most accurate climate and environmental data, 24/7. With Copernicus, we are monitoring Earth; we are saving lives at sea or in the aftermaths of natural disasters. Galileo is delivering beyond expectation: it is the most precise global satellite navigation system in the world, with a precision of around 20cm. Some 700 million users worldwide use it and this number is growing every day.

As Europeans, we are proud of these worldreference programmes! Not a single EU Member State could have done it alone. This is the successful result of European cooperation.

Europe is a true space power with world-class European space industry. For the next EU budget for 2021-2027, the Commission proposed an increased budget for the EU Space Programme of EUR 16bn. The new budget will be used first, to maintain and upgrade the existing infrastructures of Galileo and Copernicus, so that our

systems remain at the top. Second we will adapt to new needs, such as fighting climate change, security or internet of things. In addition, two new initiatives will serve the security objective: (i) a Space Situational Awareness system to avoid collision and debris on key satellites and which could constitute an embryo of a European Space Traffic Management & (ii) a Governmental Satellite Communication initiative to provide Member States with reliable and secure satellite communication.

Further to improving the lives of our citizens, the EU Space programme impacts positively on the EU space industry in terms of revenue, employment and technology innovation, but also far beyond the traditional space industry. The overall benefits of our programme for the EU economy are estimated around EUR 120 and EUR 195 bn over the next 20 years. These benefits represent a return of investment for Europe of between 10 to 20 times the costs of the programme. Thousands of companies rely on free Copernicus data and Galileo satellite navigation signals to innovate, to develop new products and services and to start new business concepts, creating new jobs and boosting growth.

However, Europe cannot rest on its past achievements in space. Massive changes are undergoing in the space sector worldwide, with new entrants - private or public -, new business models and disruptive technologies. The space sector is going through an industrialisation process. The cost of doing space and accessing space has been dramatically cut, and will continue to decrease.

This is therefore paramount for the European Space Sector to act and react to these changes. Failing to do so, it is Europe global position that is at stake.

For this, we need first in Europe a change of mind-sets towards a European approach to 'New Space'. This is true for the industry, but also for the public authorities. We need to accept to take more risks. We need to open up our tools, such as procurement, to more innovative solutions. We need to open space to new sectors and business models. We need to develop space hubs that will bring together actors from the space and digital sectors at regional and national levels, as well as support entrepreneurs and companies who want

to use and develop space-based applications, from green and smart farming to smart mobility.

Synergies are there – we need to exploit them. Space can act as multiplier when integrated to non-space sectors.

The new EU Space Programme will precisely foster this new space ecosystem in Europe. We will promote space entrepreneurship so that space start-ups can grow in Europe. We will support innovation partnerships, and develop dedicated financial instruments for space start-ups and scale-ups, including a European Space equity fund under the InvestEU umbrella. We will also make it easier to access space and test new technologies in space through an in-orbit testing programme. This will be a strong innovation accelerator.

Second, we need to acknowledge that Space is a strategic asset for Europe. This is not only a question of economics, but a question of strategic autonomy and non-technological dependence from third countries. Galileo, while compatible with GPS, can work independently from it. Copernicus provides an independent monitoring system of planet Earth. Both are central to Europe's strategic autonomy and security.

Space is an enabler of Security. There should not be any more taboo in Europe about the link between space and defence. Through the EUR 13bn European Defence Fund that the Commission propose, we will support the development of space based defence applications and capabilities.

Additionally, there is no Space policy for Europe without autonomous access to space. This is why we will support a European access to space, through European launchers, by aggregating our institutional demand, supporting ground infrastructures and deploying new technologies.

Our challenge in the next years is to explore new approaches and new business models to better leverage Europe's position in the global space sector.

The EU space programme will help us to achieve this, together.

What industrial policy for Europe's defence and space



Monika HOHLMEIER

MEP (EPP Group)

urope's freedom, prosperity and unity depends on its ability to defend a political vision of freedom and rule of law, the idea of a social market economy, and being on equal terms with competitors from East and West. Further integration is paramount to maintain the Union's position in today's global order and requires increased common efforts by the Member States in areas that have been neglected in the past. New momentum could be witnessed recently with the Treaty of Aachen, by which Chancellor Merkel and President Macron underlined their support for increased European defence integration. I consider it as very important that the area of defence and space is becoming a focal point of European politics because it will leverage our position as important political actor as seen from the global perspective and as a provider for world leading space technology and defence

Our future European industrial policy in the area of defence and space must be built on fair competition, robust public-private cooperation, reliability and predictability for European enterprises as well as dedicated political and financial support by the Member States and the European Union alike. Pre-requisite for such a policy are clear rules for the internal market, intelligent governance support at EU level and synergetic capacities for administrative support to help with funding programmes offered by the EU. Looking at external competitors and their heavily state-subsidised undertakings,

Europe needs to bundle its economic intelligence to safeguard the interests and the competitiveness of European industry. We must design a framework for strategic industrial diplomacy, promoting European champions in the global market, guaranteeing a fair level playing field and in parallel stress the need for cooperation with other nations for large-scale programs such as space exploration. Eventually, we require a global market strategy to break into new markets and realise business opportunities outside of the European Single Market.

Industrial policy must also guarantee adequate opportunities, in particular for small and medium-sized enterprises (SMEs), to be competitive along the entire supply chain, offering complementary services and engaging in innovation processes. The EU has to ensure that SMEs receive large administrational and technical support to develop their capacities. A further key element of the agenda must be the continuation of large scale European Public-Private Partnerships. For example, we need fixed agreements on rocket launches in Europe

to ensure competitiveness since other countries are significantly subsidising such activities in their countries to push European competitors out of the market. A final aspect that one has to highlight is security. Space leadership as well as a strong and resilient European defence industry strengthen our independence and reduce our reliance on foreign technologies. We need a Europe that takes greater responsibility for its own security, to respond and protect itself against technologically advanced external threats. We must in this regard pay special attention to the topic of cyber security, establishing a EU Cyber Competence Centre to develop technology strategies and IT-capacities to defend critical infrastructure for the benefit of all Member States.

In financial terms this must translate into growing contributions from the EU Budget. While the proposal by the Commission for the next Multiannual Financial Framework (MFF) foresees EUR 16 billion for the Space programme and the European Parliament even calls for EUR 16.7 billion, it might be worth a discussion to establish an even higher budget to keep up with significantly bigger investments made by China and the USA. However, we should simultaneously engage in strategic partnerships with third countries to position ourselves as equal players.

The European Defence Fund (EDF) is a novelty and the Commission proposes a budget of EUR 13 billion for the years 2021-2027, of which EUR 4.1 billion should directly finance collaborative research projects. Collaboration across borders must be the common denominator in the field of research as studies by the parliament estimate the cost of non-Europe in the area of Common Security and Defence Policy to be some EUR 26 billion a year, much due to duplications of research activities and a lack of economies of scale for the industry. The EDF plans another EUR 8.9 billion funding to complement the investments of Member States by co-financing the costs for prototype development as well as testing and certification, triggering far-reaching research and innovation actions. EU funding must unfold the huge potentials and synergies lying covered in this area to push forward the European defence agenda, while creating high quality jobs, strengthening EU competitiveness and the defence performance of all Member States.

As the chairwoman of the Sky and Space Intergroup, the future development of Europe's space strategy is a special priority for me. Building satellites without the help of third countries is of strategic importance for all of us. European citizens, businesses, public institutions and military forces depend increasingly on reliable satellite infrastructure and connectivity capacities. The monitoring of climate changes in the agriculture sector, weather surveillance, localisation support and navigation, search and rescue support are just a few examples that illustrate how accustomed we all have gotten to such services. Furthermore, offering up- and downstream services with the help of European satellites will allow companies to offer a growing number of services and provide start-ups with room for innovative ideas. Our common goal must be that such services are offered by European companies, decreasing the presence of foreign providers.

Concluding the guidelines for the EU's industrial policy for defence and space it becomes evident that these sectors actively contribute to the strategic autonomy and technology independence of the Union, displaying Europe's ability to lead. Any future industrial policy must underline this and accompany Europe's quest to remain a free, prosper and united continent.

Ensuring European leadership in strategic industries



Nathalie ERRARD Senior Vice President Europe and NATO Affairs, Airbus

n 2019, Airbus is turning 50 years old. In the late 1960s, an ambition to challenge the monopoly at the time inspired a new, simple, yet bold idea: the industrial collaboration between 4 European countries. Today, the Aeronautics, space and defence are sectors of excellence of the European economy with global leadership across the globe. In 2017 alone, they were a key driver of economic development, representing €220.2Bn of total turnover, more than 860 000 direct jobs and provided a positive contribution to the EU trade balance (€30Bn in EU exports). Airbus figures prominently in these numbers as a leading European Aerospace & Defence company.

These impressive figures should not hide the fact that our sector is at a turning point in its history. The truth is our future is more and more uncertain at a time we are facing multiple challenges, with global trends (climate change, migration, technological disruption transforming industry), as well as an evolving competitive landscape. Our industry is an area of strategic competition: numerous countries have developed and implemented far-reaching strategies on how to position their countries to secure a top position in the global value chain, especially in our sector. Looking at the increased amount of events and articles that have seen the light in the last months, including unilateral tariffs on European aircraft products, the desperate need to ensure a level playing field for European strategic industries is more prominent than ever.

With this context in mind, there is no other answer for the EU than launching a robust and consolidated Industrial Strategy for Europe with a strong execution phase for

our continent to deliver on jobs, growth, and most importantly competitiveness in this new era taking shape in front of us. Our common duty is to make sure that the European industry will remain competitive globally and at the forefront of fast-changing technological developments.

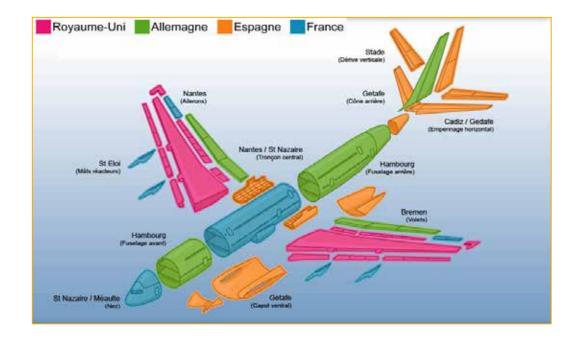
The transversal dimension must be core, but a sectorial approach encompassing industries of strategic interest to Europe must also be included. This is all the more important so that our sector contributes in its three components – Aeronautics, Defence and Space – to the strategic autonomy of Europe in many dimensions: civil-military cross-fertilization, defence & security independence, access to space to name a few.

How can we work together to shape the future of the European industry looking forward and what should we focus on?

Leveraging civil and military synergies

The blurring line between civil and military will only increase with the ongoing technological revolution. In our company, at a time we rethink the way we design and build aircraft, integration of existing innovation from our defence business is an integrated





part of our strategic reflection. The other way, our defence & space business will benefit from innovations in the commercial realm, ultimately contributing to defining strategic autonomy for Europe. Our sector would benefit from an optimized governance and administrative support to optimize the use of all the EU programs and financial instruments specifically dedicated to the Aerospace, Defence & Security sector.

Levelling the playing field

The competitive landscape of aerospace & defence is hardening. Protectionism policies across the world arise at an unprecedented speed and the original "business as usual" approach which prevailed for our sector is no longer sustainable. European companies are gradually facing major superpowers and are not equipped to compete fairly. In such a complex geopolitical environment, the EU needs to continue promoting free trade and multilateralism. But it must also take decisive actions stemming unfair practices of third countries to defend European companies, with new and innovative trade instruments. Levelling the playing fields with great powers also requires the EU and Member States to re-think their diplomacy. FTA negotiations and bilateral external visits should be used to help key European companies with economic diplomacy (provided there is no intra-European competition) to break into international markets.

Supporting game changer Research & Development in strategic areas

R&I in Aerospace & defence are fundamental to drive the development of products that will secure the EU's high-technology intensity and military strength for the future and keep Europe competitive on the global market.

Large European Public-Private Partnerships, especially Clean Sky and SESAR Joint Technology Initiatives, have provided best practice collaborate tools to federate the whole European innovation chain around common objectives and deliver successful demonstrators of disruptive climate-friendly technologies. Now insufficient levels of investments in R&I in Europe and a lack of agility to win the innovation race endanger Europe's position as a global industrial champion and in the long run its mere strategic autonomy. In the light of rapidly evolving technologies with a huge impact on the economy and society as a, financial support to both sectorial and cross-cutting R&I should be a priority for the EU. With this support Airbus is committed to deliver safer, cleaner and affordable products to answer increasing needs contributing to European economy and society.

Investing in breakthrough innovation for the industrial internet to become reality

An extraordinary technological revolution has begun and will profoundly transform the European industry, regardless of the sector. Traditional leaders in Aerospace & Defence shall be at the forefront of this digital revolution, lead on new business models, and new mobility concepts; and drive the implementation of new transversal technologies (i.e. artificial intelligence, virtual reality, robots, etc.) into the sector. A "new golden age of industrial internet" will make the world a more competitive place for all of us, and for our supply chain, which needs to transform at the same speed. Hence all the challenges facing the industry must be addressed in a holistic manner and require a strong response from all stakeholders - public and private sector hand in hand in Europe, up to the challenges. We must build a full and precise view of policies and support measures to consider what should be done at the EU level, and to explore together the most critical industry applications of digital technologies, where we can create the highest added-value for the EU and keep European businesses ahead of the curve.

By acting in a coordinated way among the public and private sector, and focused way as a whole, Europe can use its existing assets to play a role in the area of traditional industries that improves Europe's economic weight, in line with European values. The more we stand together, the more competitive we will be. Europe has all it takes to be able to harness opportunities brought by its strong industrial base. All it needs is a wake-up call for its industrial ambition.

Changing tack



Gerben-Jan GERBRANDY *MEP* (ALDE Group)

urfers and sailors know: when you are going to change tack, you need to do it quickly – or you'll end up in deep water.

If you look at our economic adjustment to the realities of climate change, you see two things:

First, that our businesses and associated financial corporations were often slow to catch up with new challenges on the horizon, taking their cue from the political world. At the Paris Summit in 2017, global financial funds and institutions managing \$80 trillion of assets publicly supported the Task Force for Climate-related Disclosures. Before that, information on what climate change meant for companies, investors and insurers was at best inconsistent and incomplete.

Second, that when they do start to update their calculations and adjust strategies accordingly, the change in the market is remarkably quick to take hold. For instance, sun and wind produced just 6 percent of the world's electric supply in 2017, but they made up 45% of the growth in supply – and that figure keeps increasing rapidly. Same with cars: only three million out of a worldwide total of 800 million cars were electric in 2017, but that already accounted for 22 percent of the growth in sales.

Just goes to show: stationary figures are misleading – when things start to move, they move with increasing speed. So for companies and governments alike: it's duck or dive.

Certainly companies realise that, in future, they need to either operate fully sustainably, or will simply cease to exist. And yet, innovation alone is not going to solve the sustainability challenge, as some claim. Because the turnaround needed is drastic. Indeed, you could say this is both the *first* and the *last* generation who can turn things around. And while companies, NGO's, citizens, and often smart cities are in the lead, our economic and regulatory framework needs a drastic overhaul. And, contrary so societal needs and economic demands, this is all too slow to take off.

This, then, is all about politics – and a fundamental political question at that: can politics and policies take the lead and frame this necessary transition, or will we continue to lag behind and be formed by it?

It can definitely be done. I see four areas where progress is both necessary and feasible in the years to come:

We can start by what we control directly: the EU budget needs to prioritise green growth. Ring-fencing for climate action is a hot topic. Yet, for all the oneliners, work in progress points in the other direction. Conditions for cohesion and regional spending are insufficient to meet our own goals, and the reform of the Common Agricultural Policy is, if anything, two steps backwards. We need to put our money where our mouth is: public money is meant for public - hence green - goals only. We need sustainability proofing of all public funding.

Biodiversity is the next step: we need to restore nature's capacity to maintain itself. We need to catalyse all efforts made on climate



mitigation and adaption for nature. A robust international framework, with clear targets, financial commitments and capacity building to halt deforestation, pollution, biodiversity loss and destructive agriculture. In short: A Paris for nature.

Current taxation policies are unsuited to the sustainability transition – if anything, actively working against it. The Dutch air ticket tax and planned $\mathrm{CO_2}$ -tax are examples to remedy that effect, but progress is slow and disjointed across Europe. The shift in taxation has to come quicker, and be more consistent across EU member states. The taboo on taxation will prove untenable over the next few years. We need EU taxes based on the polluter-pays principle.

And governments in general can do much more than we often think: almost 15 percent of our economy is directly based on government spending. If we commit to sustainable products and services, that can make a huge difference. Buying green should be self-evident, for today's governments. We should set the example: 100 percent green public procurement.

Every day, we see new examples of hopeful projects and creative innovations. Companies and citizens are looking ahead — it's the politics that is slow to catch on. Over the years to come, we will have to change tack with the same speed and vigour.



The chemical industry on a new journey towards the Circular Economy



Daniele FERRARICEO of Versalis (Eni) and President of Cefic, the European Chemical Industry Council

eveloping a more sustainable economic and productive model requires the direct contribution of everyone, from individual citizens to associations, institutions, governments and, of course, industries. In particular, the chemical industry, which generates value in many strategic sectors of the economy - such as in the construction and medical sectors - can play a leading role in the transition towards circular economy. The chemical industry has the technological expertise to develop new circular solutions. It is also a driving force for innovation along the value chain, since it operates at the base of the major industrial chains.

The EU vision and the commitment of the chemical industry

By 2030, the world population is expected to increase by another billion¹. By the same year, the number of megacities counting more than 10 million citizens will rise to 43; these large cities will be particularly concentrated in developing countries². Hence, the increase in products, food and services will determine a rise in emissions and waste. Furthermore, the issue of plastics waste in the oceans is already at the center of public debate and requires urgent action. The European Union, placing itself at the forefront of the global transition towards a low-carbon and circular

economy, has recently launched a number of initiatives aimed at increasing plastics sustainability, such as the European Strategy for Plastics. The industry is showcasing its engagement by launching new voluntary initiatives, encouraging cooperation on a global level and across the value chain, and by supporting EU institutions with technical know-how so as to make sure that EU policies keep the pace with the most recent innovation and megatrends.

For example, in January 2018, PlasticsEurope³ announced its **Plastics2030 - Voluntary Commitment**, which focuses on increasing re-use and recycling⁴, preventing plastics leakage into the environment and accelerating resource efficiency. Furthermore, PlasticsEurope joined the global initiative *Operation Clean Sweep – Zero Pellet Loss*, a voluntary program, signed also by Versalis, to prevent the dispersion of plastic granules in the environment, involving the entire supply chain.

Such a complex issue needs powerful vertical industry chain alliances with concrete initiatives. For this reason, it was recently launched the **Alliance to help End Plastics Waste**, an international non-profit organization of companies including Versalis. With +25 members from the whole value chain, the Alliance aims at reducing and better managing plastic waste, with a commitment of 1.5bln \$ investments over the next 5 years.

Circular Economy at Versalis

In line with Eni's broader strategy, Versalis is developing a business model embedding the Circular Economy principles according to three pillars: life cycle and eco-design, diversification of raw materials and recycling of polymers.

Life Cycle Perspective and Eco-Design enable to enhance resource efficiency of products, over their entire life-cycle. A practical example is the recyclable synthetic turf developed by Versalis with partners of the value chain. Thanks to this industrial collaboration, the synthetic turf which is currently landfilled or incinerated at

its end-of-life can be recycled and used as a secondary raw material for other applications in the sports sector, where high quality standards are required. Sustainability of this product has been assessed as the players in the value chain obtained the **Product Environment Footprint** (PEF) certificate. Another example of eco-design is the recovery of industrial polyethylene packaging used in transporting Versalis' products and their recycling for the production of secondary raw materials suitable for new packaging. The project allows to design a new circular scheme in collaboration with supply chain operators.

Diversification of raw materials, to find the right balance between traditional sources, renewables and secondary raw materials. To give an example, Versalis has successfully tested the use of 20% post-consumer polystyrene products in its pilot plants in Mantua for the production of expandable polystyrene, used in the production of thermal insulation sheets, for a better energy efficiency of our buildings. Regarding chemistry from renewables, Versalis aims to create a completely integrated platform. Versalis recently acquired the "bio" activities of the Mossi & Ghisolfi group that, through the Proesa® technology for converting biomass into second-generation sugars, is able to produce "advanced" biofuels (obtained from non-food biomass) and, potentially, other chemical bio-intermediates.

Recycling of polymers through the development of innovative technologies carried on by internal R&I and partnerships. Currently, mechanical recycling is undoubtedly the technology in place, used on a large scale. However, to achieve the EU targets, innovative chemical recycling technologies are needed to really close the loop, bringing back the polymer to the virgin material. A research project is under development on a pilot scale for the chemical recycling of mixed post-consumer plastics deriving from separate collection of plastic waste, no longer separable. The project is carried out by merging chemical expertise for the feedstock pre-treatment and innovative refining technologies.

To conclude, circular economy is a strategic driver of Versalis business activities: we already embarked on this new journey towards sustainability goals also together with value chain partners, and we are ready to turn the challenges into growth opportunities for the society of today and especially that of tomorrow.

¹ World Population Prospects: The 2017 Revision, United Nations.

² World Urbanization Prospects: The 2018 Revision, United Nations.

³ PlasticsEurope is a leading pan-European association and represents plastics manufacturers active in the European plastics industry.

⁴ The European plastics manufacturers are committed to ensure high rates of re-use and recycling with the ambition to reach 60% for plastics packaging by 2030. This will lead to achieve our goal of 100% re-use, recycling and/or recovery of all plastics packaging in the EU-28, Norway and Switzerland by 2040.

Citeo is committed to achieving a sustainable Europe through circular economy



Jean HORNAINGeneral Director of Citeo



"Citeo's ambition is to build a more sustainable world thanks to the Circular Economy.

To achieve this, we work with all stakeholders - companies, local authorities, recycling operators and industries, associations and citizens - on both the French and European scales"

European roadmap towards a Circular Economy

The European Union has recently shown an undeniable commitment in transitioning towards a Circular Economy. This was shown in its recently-adopted Circular Economy Package, and the announcement of the European Plastic's Strategy. At the World Economic Forum in Davos, the EU Commission was awarded the 2019 Circular Economy prize, adding to its diligence on the topic and providing it with international recognition from the highest experts. This, in turn,

demonstrates a penchant towards European legislation which meets citizens' demands; a fact most highlighted by the recent manifestations calling for climate protection across the Member States.

Following the European election, the next commission will, without any doubt, build on the circular economy momentum to go forward to fully close the loop and push further the transition towards Circular Economy. Circularity implies to rethink deeply the production and consumption of goods. EU policymakers will have to engage closely with a broad range of stakeholders representing the entire value chain. It's the only way to implement the new legislation efficiently.

Citeo, the French company in charge of the Extended Producer Responsibility for household packing and graphic papers, is delighted to be supporting the EU Commission in shifting the paradigm. By closely collaborating with all stakeholders, Citeo bridges brand owners with, packaging producers, recyclers, retailers, local authorities, etc. . Thanks to the mechanisms we have set up, 70% of household packaging and more than 55% of graphic papers are recycled in France. With this position, Citeo can be a real game changer for a circular growth.

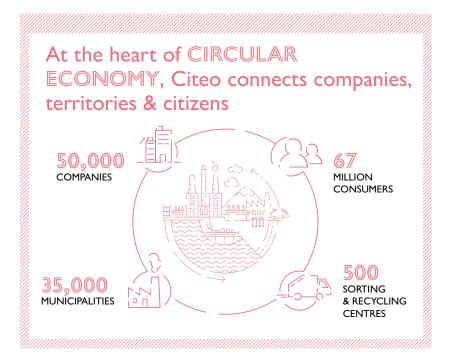
Citeo's role in the transition

In revising the Waste Framework Directive, the EU Commission took opportunity for a level-playing field for the Member States' waste management systems. This was channeled via ambitious yet achievable binding recycling targets. This is an opportunity for Citeo to enable greater recycling for household packaging through an efficient Extended Producer Responsibility (EPR) scheme. Through this mechanism, which stems from the polluter-pays principle, companies that place certain types of products on the market bear the majority of the costs associated with their end-of-life.

Nevertheless, these efforts will only result in a genuinely sustainable future if all stakeholders collaborate always more. With it's particular position, in the heart of the ecosystem, Citeo can play a key role of catalyst, developing appropriate solutions to achieve the new ambitious recycling targets and beyond.

This demands in particular that innovative recycling technologies and eco-design both be fostered and promoted. In this perspective, Citeo recently launched an international forum on new plastic solutions with Éco-Entreprises Québec on innovative recycling technologies at both side of Atlantic Sea which illustrated the global industrial dynamics around these new technologies.





The transition need to be complemented with adequate monitoring, in order to inform and improve the recycling performances, and citizen information. All this, in a common effort to push boundaries towards a more sustainable world both on the French and European level.

Towards a Circular plastics' approach

In striving for a Plastics' Stragtegy and, with the recently-adopted Single-Use of Plastics' Directive, the European Union is pushing both citizens and stakeholders to rethink how they use and manage the material.

Citeo, fully endorse the EU's vision for a plastics' Circular Economy – urging for the material to transform from waste to economically-, socially-, and environmentally-beneficial resource. As such, Citeo endeavours for improving the circularity of all type of packaging, while also ensuring its net environmental improvement over the product's life-cycle.

Improving the competitiveness of plastics recycling also means developing opportunities for recycled plastics. This can be achieved by influencing the demand, for example by stimulating markets for products already incorporating recycled plastic. It would be quite easy to encourage the use of recycled plastics by inserting specific clauses in public procurement. As such, Citeo actively participates in the Circular **Plastics' Alliance initiative** which aims to increase the demand for recycled plastic.

Citeo already works hand-in-hand with associations and brand owners for improving

recycling rates and decreasing the littering. We are engaged in several awareness-raising campaigns and actively supporting citizens initiatives that fight against marine litter.

Challenges Ahead

Citeo is already anticipating issues that need to be urgently tackle, especially **the fight against marine litter**.

Regarding the new disposal on litter clean-up as agreed in single use plastic directive, Citeo would suggest to clarify the role and responsibilities of each actor (citizen-consumer, municipalities and EPR organisation), the geographical scope and scale of clean-up activities limited to activities undertaken by public authorities. Citeo would also suggest to incentivise the measure by adapting costs according to littering and setting an evidence-based calculation.

To further develop integration of recycled plastics we call the EU Commission to develop legislation for the regulation of the interface between products, chemical substances and waste. We also believe that the EU Commission should ensure funding's for investments for the development and the modernisation of recycling infrastructures to help Member States reaching the targets and implementing legislation.

Citeo also tries to be ahead of the new challenges arising from the development of the rapidly growing part of the market of the e-commerce. E-commerce generates a lot of packaging that is handled by the municipal waste management service. But the question of who puts the product on the market remains unclear and many packages do not

contribute to their end-of-life through EPR mechanisms. Citeo calls to regulate this « empty space » which leads to an increasing freeriding effect.

In the field of ecommerce, another issue is the dismantling of the carton packaging which makes it harder to recycle. A logo to prevent consumers from dismantling those packaging would be very useful.

Citeo also call the EU Commission to address pending regulation to **ensure coherence for EPR fee modulation criteria**, to provide a clear definition for "recyclability" & reusability" and to agree on the methodology of the calculation of the recycling point to ensure the comparability of recycling rates between the EU's Member States.

In an integrated market, circularity of packaging is obviously a European concern. The power of 500 million consumers could be increased tenfold if they have access to the same information. That's why a debate should be launch on the introduction of a paneuropean logo for packaging recycling. Citeo suggests that such logo should symbolise the recyclability of packaging rather the actual collection instructions.

Citeo remains committed to achieve a sustainable future through Circular economy by contribution to maximising the resource efficiency of packaging and graphic papers.

Citeo recommendations for the next European Commission

- Continuing dialogue with stakeholders of the european circular economy agenda;
- Guaranteeing financial help and european projects to improve the end of life for packaging and graphic papers;
- Supporting innovation for the development of new materials to reach the collection and recycling targets set by the European Union
- Supporting Member States transposing the circular economy package and the single use plastics directive into national law;
- Clarifying of technical pending issues (e.g guidelines on EPR fees ecomodulation, recycling rates calculation methodology, collection and sorting);
- > Ensuring the circularity of packaging via efficient product design, new recycling solutions and prevention of littering.

Making Europe a Global Leader in Driving Sustainability



David BERMANHead of Group Public Affairs
Veolia

s a leading global economy, the European Union must play a major role in mitigating climate change and showing the path to the rest of the world. Europe must rapidly shift towards a decarbonised, sustainable and circular economy also to secure its industrial competitive advantage. In these times of institutional change, EU policy-makers will have renewed opportunity to safeguard our children's future.

According to a study by Roland Berger (2019)¹, the environmental and energy sectors cover one third of global greenhouse gas emissions (GHG), equivalent to nearly 20Gt CO₂. The study shows that more than half of it could be potentially avoided if **solutions that are today technologically mature** were to be deployed on a large scale. This however would require stronger regulatory support and adequate public policies.

1/ Accelerating the energy transition

As highlighted by the UN intergovernmental Panel on Climate Change², carbon pricing is an effective instrument in the fight against climate change. Putting an adequate

price tag on pollution and **reducing the costs of depollution** would massively lower overall GHG emissions.

Setting the right price on pollution

In addition to the existing EU Emissions Trading Scheme (EU ETS), the European Union should act in a way to encourage and assist Member States in implementing a **carbon price floor**. According to the High Commission on Carbon Prices, the level needed to drive significant change is estimated at \$40-80/t by 2020 and \$50-100/t by 2030³.

Furthermore, the creation of a **border carbon tax** for products manufactured outside the EU and without any CO₂ emission limitation could also be considered to preserve the competitiveness of the EU economy and **provide incentive towards decarbonisation** in the rest of the world.

Revenues collected through these mechanisms should be allocated to remediation activities, such as energy efficiency projects, but also carbon capture, storage and utilisation, combined with bioenergy.

• Energy efficiency first

Combining carbon pricing together with energy efficiency measures is the most effective way to decarbonise our European economy. Implementing the "Energy Efficiency First" principle, which consists in **prioritising energy savings** activities over energy production projects, would be a powerful way to meet climate goals at the least cost possible, while guaranteeing energy security. According to a model scenario of the International Energy Agency⁴, 76% of GHG emissions reductions required in the EU can be achieved through energy efficiency measures.

Favour decentralised energy

Europe should furthermore **prioritise** local energy production loops as a substitute to imported hydrocarbons. **District heating and cooling networks** (particularly efficient when coupled with cogeneration) allow both

for energy **storage** and the use of **renewable** energy sources, including local biomass, lost heat and non-recyclable waste.

2/ Completing the switch to a circular economy

Increasing demand for water, energy or raw materials; dependence on third countries for supply; positive impact on CO₂ emissions; and creation of new business opportunities: Europe more than ever needs to complete its transition!

□ Turning Europe's waste into valuable and competitive resources

If the production of **Solid Recovered Fuel** out of non-recyclable, non-hazardous waste as an alternative to fossil fuel clearly needs public policy support, so does the production of secondary raw materials!

Securing supply of secondary raw materials implies to invest in better collection systems and highly efficient sorting facilities. Quality recycling requires quality input materials, so products need to be designed for recycling. Where Extended Producer Responsibility (EPR) schemes have been set up, an ecomodulation of fees can encourage better ecodesign and recyclability. Two aspects should be considered to increase the demand side of the market: boosting the competitiveness of recycled materials and fostering the inclusion of recycled content in products. In this regard, the recently adopted Single-Use Plastics Directive sets a welcomed precedent.



Veolia is producing recycled plastic in Vroomshoop, Netherlands

¹_Press Day - Climate: What Now? (Veolia, 2019)

² IPCC's Fifth Assessment Report (IPCC, 2014)

^{3 &}lt;u>Carbon Pricing Leadership Coalition (World Bank, 2017)</u>

⁴ Energy, Climate Change & Environment: 2016 Insights (IEA, 2016)

Green Public Procurement also has great potential in terms of creating more demand for recycled materials. As for competitiveness, the price gap between virgin and recycled materials should be reduced via combined fiscal and economic instruments.

Optimising water use and reuse

Circular economy principles can also be applied to the water sector. Freshwater is a scarce resource therefore reusing water can help lower the pressure on resources. Today, agriculture accounts for almost 70% of annual water withdrawals globally, followed by the industry with 20% and citizens with 10%5. Growing population combined with climate change are rapidly accelerating the disruption of the hydrologic cycle and thus creating important issues of water scarcity. Europe must become smarter with the way it uses its water resources and shift towards a circular water management model by reusing and recycling treated wastewater. Water is too precious to be used only once.

Reusing treated wastewater for beneficial purposes other than the initial use, such as irrigation, cooling systems, boilers, process water, cleaning or aquifer recharge could help address water scarcity. For this reason, Veolia is strongly in favour of a regulatory framework that encourages water reuse and water recycling through quality requirements and common criteria that protect the environment and public health across the EU. The proposal for a regulation on water reuse for agricultural irrigation sends a positive first signal.

In parallel to an optimal water use, adequate measures should be taken to **treat** heavy pollutants at source in the first place. Tackling pollution in the water cycle also requires the EU to further investigate how to reduce pollution coming from hospitals, industrial facilities and large cities tapping into more efficient wastewater treatment technologies.

Concerning **sewage sludge** and organic materials, all recycling and reuse options should be encouraged including **recovery into fertiliser**, **compost** and biomass as long as it meets strict health and environment standards.

3/ Dedicating innovation and data management to the right purpose

Thanks to the exponential volume of data, artificial intelligence (AI) can develop prediction as well as prescription tools.

Implementing technologies powered by Al increases performance. Veolia, the first company to monitor and optimise water, energy and waste flows in real-time⁶, is today a major Internet of Things (IoT) operator with more than 10 million connected devices.

Digitalisation driving sustainability

The use of data collected throughout the water network allows for the **detection of leaks** or the **prediction of consumption** or **infrastructure maintenance**. For sanitation, the monitoring of effluent quality from upstream to downstream of the treatment plant enables to optimise its operation. Moreover, connected interfaces allow our **technicians working on the ground to react quicker** to alerts.

In waste management, Veolia uses AI technology to help increase the efficiency and reduce the costs of waste sorting. A smart waste sorting robot has a recognition capability and can sort multiple fractions simultaneously in one spot, reducing complex pre-processing. Not only is AI modernising manufacturing but it also unlocks the potential of the circular economy.



A Veolia waste sorting robot powered by AI in Amiens, France

Also, the development of Al must be as inclusive as possible so no one is left behind. Human-centred Al does not overlook employees. Veolia is dedicated to upgrade e-skills among its employees. As the first publicly traded company to switch to cloud-based internet services, we trained more than 300 people with a special focus on those from the ditched data centres.

Building smart and resilient cities

Cities should identify a set of underlying principles to ensure adequate **public accountability and transparency** as they adopt new technologies. While cities will become smarter in water, energy, public transport or waste management, by the same token, they will also become more resilient to global challenges

including climate change, urbanisation or air pollution, with solutions to fight heat-islands in cities. Today, digital solutions exist to keep track of performance indicators in real-time and from anywhere but this requires organisational change.



Veolia Hubgrade hypervision centre in Bilbao, Spain

Smart networks combining electricity, gas, wastewater, drinking water and telecom networks will provide cumulative benefits for greater security and flexibility to manage fluctuating demands and to better integrate new decentralised means of production. Overall, new technologies can help optimise the efficiency of city operations and services to its citizens and make local administrations more interactive and responsive. Europe has a key role to play in funding R&I, promoting public-private partnerships and breaking down barriers to develop and scale up smart cities across the continent.

VEOLIA'S PURPOSE

Veolia group is the global leader in optimised resource management. With nearly 171,000 employees worldwide, the Group designs and provides water, waste and energy management solutions that contribute to the sustainable development of communities and industries. In 2018, the group supplied 95 million people with drinking water and 63 million people with wastewater service, produced nearly 56 million megawatt hours of energy and converted 49 million metric tons of waste into new materials and energy.

Veolia's purpose is to contribute to human progress to achieve a better and more sustainable future for all.⁷

⁶ FACTS Report, 2017, "Artificial Intelligence and Robotics in the City"

The circular economy is key to Europe's future





Jocelyn BLÉRIOT
Institutions & Governments Lead, Ellen
MacArthur Foundation

irst mentioned in the European Resource Efficiency Platform's 2012 manifesto¹, the circular economy model became a prominent feature of the European agenda over the past few years. Capitalising on the progress achieved and raising the level of ambition must be a priority for the upcoming Commission.

Underpinned by a strong business rationale and representing a considerable competitiveness opportunity, the circular economy framework has attracted significant private sector support. The reason it resonated particularly well in the European context is inherently linked to the continent's constraints in terms of raw materials and space. As the world's largest net importer of resources, the European union is indeed particularly sensitive to raw materials price volatility and as such has a strong vested interest in developing strategies that protect its manufacturing base from supply shocks. Coincidentally, Europe's ambitions in the field of waste management - notably at play in the concerted effort to gradually reduce landfilling - tend to be enabled by longer product life cycles and higher reuse rates... And while it would be reductive to consider circularity through the lens of recycling alone, one can only admit that such an amalgamation remains pervasive.

Putting the focus on upstream factors such as careful material choices, circular design strategies, and business models favouring access over ownership (where applicable) opens up important innovation opportunities - especially for a continent that can rely on a solid R&D sector and forward-looking companies. The bar is high, since tweaking the existing linear "take, make and waste" model inherited from the industrial revolution will be sufficient neither to address the rising negative impacts, nor to capture all the benefits offered by the circular economy. This model does indeed manifest itself very visibly in the field of materials management - the Commission's plastics strategy being a very good example - but it is worth reminding all stakeholders that its potential reaches beyond offering net financial savings and reducing waste levels.

Looking at the built environment, mobility, and food in the context of Europe, the Ellen MacArthur Foundation has demonstrated that the circular economy would have significant beneficial impacts on the environment, since carbon dioxide emissions would drop 48% by 2030, relative to 2012 levels2. This is a compelling figure, which makes a strong case for an accelerated transition with a view to redefine the notion of economic progress. Heavy industry might be an obvious starting point due to its inherent material and energy intensity, but circularity can also be harnessed to re-invent the food system, to attain a regenerative model based on the optimisation of nutrient loops. It makes business sense, through the valorisation of agricultural by-products for high-value molecular extraction, energy production and dramatically reduced needs for expensive and soil-damaging chemical fertilisers.

With a significant body of research highlighting the circular economy's credibility, one could potentially argue that there is 'proof of concept', so what is required now is proper scale. This will not come without significant involvement of the financial sector, in order to support emerging circular ventures as well as to shed light on the inherent risks associated with the linear model (future compliance costs, stranded assets etc). Shareholders and fund managers, notably those handling long-term products such as pension funds, need to be at the heart of the discussion: merely increasing the amounts allocated to traditional Corporate Social Responsibility initiatives, even with an added "circular" label, will not be sufficient - a proper rethink of the system is necessary, as well as careful consideration being given to avoiding linear lock-ins, such as outdated collection and processing infrastructure.

Efforts remain to be made across a variety of fields such as materials science, education, design and infrastructure investment, but the early signs of a transition are firmly in place, on the back of strong private and public sector involvement. Europe has taken an early lead on the global stage when it comes to circular economy, and the Memorandum of Understanding signed with China last July³ is a testament to the Union's willingness to accelerate the transition. Member states have picked up on the idea, developing national roadmaps and in certain cases going above EU recommendations. It is now particularly important for the Union to restate its commitment to circularity, and to ensure an efficient handover process with the next Commission.

^{1 &}lt;a href="http://europa.eu/rapid/press-release">http://europa.eu/rapid/press-release MEMO-12-989 en.htm The EREP was conceived and convened by Commissioner for the Environment Janez Potočnik, as a multi-stakeholder initiative

² https://www.ellenmacarthurfoundation.org/ news/circular-economy-would-increase-europeancompetitiveness-and-deliver-better-societaloutcomes-new-study-reveals

How do you couple the long-term climate change and industrialization?



Miroslav POCHEMEP (S&D Group)

limate change is one of greatest threats that humankind has ever faced. According to the Special Report on Global Warming of 1.5°C from the Intergovernmental Panel on Climate Change (IPCC)¹, warming of the climate system is unequivocal. The Special Report issued in October 2018 demonstrates, based on scientific evidence, that human-induced global warming has already reached 1°C above pre-industrial levels and is increasing at approximately 0.2°C per decade. Without taking an immediate international climate action, global average temperature increase could reach 2°C soon after 2060 and continue rising afterwards.

Industrialization has always played a pivotal role in the economic development of any nation. With industrialization come opportunities as well as challenges. The challenges include higher temperatures, more extreme weather conditions, negative effects on the European economy, and political stability. Due to these challenges, industrialization must take into account climate change and its consequences. This, of course, raises the question of

1 Global Warming of 1.5°C, an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

how to couple the long-term climate change and industrialization effectively.

First of all, it is necessary to launch policies supporting the transition to a net-zero emissions economy which also stimulate industrial competitiveness. The Clean Energy For All Europeans Package is an inspiring example of how to turn climate ambition and promises into action. This includes new ambitious rules on the EU energy market design, renewables, energy efficiency, risk-preparedness, specific measures for the building sector, the governance of the Energy Union and enhanced rules for the Agency for the Cooperation of Energy Regulators. In addition, it aims to combat climate change in line with the Paris Agreement and maintain the EU's global leadership on climate action. What is also equally important is that the new set of rules not only facilitate the transition towards a net-zero emissions economy, but also helps the industry to be modern, more competitive and prosperous as a key player in reducing greenhouse gas emissions.

In the coming years, the next Commission is very likely to propose new policies to assure that Europe is on track towards reaching its 2030 energy and climate targets while supporting industries. I strongly believe that the Commission should further focus on strengthening the European emissions trading scheme (ETS). The results of the ETS reforms have not met our expectations despite the boost from recent reforms. Low carbon prices and the fact that parallel policies such as energy efficiency, RES support, nuclear support, coal phase outs reduce the prospects for a sufficient carbon price, only prove that the current ETS lacks efficiency. The EU ETS price is clearly insufficient in the short term as it does not provide a strong and credible enough signal for decarbonisation in the medium to long term. One solution to this might be to introduce a carbon floor price on emissions. This mechanism would protect investors against sudden ETS price drops, encourage businesses and industries to make more low-carbon investments and speed up the transition to a net-zero emissions economy. For inspiration, since April 2013, British electricity generation has already been subject to a minimum carbon price and the Dutch government is planning to introduce a similar price floor, beginning at €18 in 2020 and rising to €43 by 2030.

It is also crucial to put in place a functioning framework of supporting measures to ensure a smooth transition for industries to a net-zero emissions economy. As promised in the Communication from the Commission on the Clean Energy For All Europeans², in 2018 the European Commission has created a Clean Energy Industrial Forum in order to discuss with relevant stakeholders as to how to optimize the benefits of the clean energy transition and to ensure a smooth clean energy transition for European industries, regions and cities

Furthermore, a successful response to climate change and the modernisation of the EU's economy require vast investments in research, industrial innovation and deployment and other areas if we want to compete on the global scene. Horizon Europe, the world's biggest research and development programme for 2021-2027, is the case. It represents a unique opportunity for research and innovation in Europe, which will certainly foster industrial competitiveness while addressing climate or clean energy transition issues.

The EU has set a global example in terms of climate action and industrialization. The EU has clearly sent a signal to the rest of the world that it is possible to tackle climate change, grow the economy and promote industrial competitiveness simultaneously. We are on the right track to deliver on the Paris climate agreement while modernising and decarbonising the EU's economy. However, what is needed now is proper implementation and enforcement as the Member States must fulfil their targets and promises. This can only be achieved if there is understanding, cooperation and action at all levels such as consumers, SMEs, industries, corporations, local authorities or national governments. Collective and fair action by all is the only way to achieve ambitious actions. **

² The Commission Communication 'Clean Energy For All Europeans', COM (2016) 860 final.

A deeper dialogue between European Institutions and European industries is more than ever needed



Arnaud CHAPERON
Senior Vice President European Public
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n 27 March 2019 the European Council, in its conclusions, invited the European Commission to present by the end of 2019 a long-term vision for the industrial future of the EU, along with concrete measures to implement it. At last!

European industry faces multiple challenges: the digital revolution, climate issues and the energy transition, an increasingly demanding and complex European regulatory landscape, increased global competition in a challenging geopolitical environment (America first, Made in China 2025 ...), where multilateralism and its governance are being undermined. European industry, representing currently just under 15% of the European GDP (18.4% in Germany, only 9.8% in France) has declined by nearly 5 points of GDP in two decades. It remains a vital engine for the European economy, in terms of employment, societal integration, exports, quality of products, and technical expertise to define tomorrow's global standards, aligned with climate issues. It has no choice but to anticipate changes and to adapt. Managing these evolutions requires a clear and acceptable strategy shared at all levels of companies, but also of its stakeholders. Change is needed, but how fast? If we move too fast, we may fall into the danger zone, if too slow we could end up staying in our comfort zone with a growing risk of weakening: only the right tempo can ensure progress, competitiveness and acceptability.

The legislator sometimes has difficulties to imagine all the levers of transformation and the constraints faced by companies to find the right tempo. Lawmakers have their own political agenda & time horizon. They also face pressure from civil society, social media, and are challenged by some NGOs, often guided by ideological aspirations, legitimate in their goals but driven by immediacy and disconnected from consistent and reality-proofed pathways. Unfortunately NGOs are hardly ever driven by proponents of much needed pragmatic solutions through built in dialogue. European institutions, mastering the difficult art of compromise, are increasingly biased by this wave of aspirations. This puts at risk European industry, which evolves in a global world and cannot at the same time transform itself, absorb more and more regulatory constraints and face external competitors who do not obey the same rules. Politicians are often poised to oppose the "old industry" for the benefit of "the industry of the future", increasing the risk of a global negative perception of the industry. Instead, it is required to transform the existing industries, while investing massively in the technologies of the future in Europe: in a nutshell we have to find the way to marry the old world with the technologies of the future.

The European Council's request for an industrial strategy is therefore highly welcome and requires a global approach since everything is interrelated: climate issues and EU leadership in climate action, industrial policy, standards and regulations, European internal market defense instruments and a level playing field, state aid mechanisms, European values, social issues and purchasing power.

A combination of solutions for an acceptable pathway for the transition:

The European rules on vehicles emissions standards for 2025 and 2030 require manufacturers to rush towards electricity, leading to massive demand growth for batteries (more than 30% of the cost of a vehicle) while the European battery industry is lagging far behind Asia. Consequently, Member States subsidize electric cars, while diesel engine factories start to ramp down and China builds more and more battery giga-factories, dominating sourcing of rare earths like cobalt in Congo,

and aims to impose its standards. With this approach unfortunately overall CO₂ emissions over the life cycle are sub-optimal. The optimal pathway would combine a mix of solutions adapted to each situation: all electric for fleets, trucks and buses operating in urban areas, rechargeable hybrid vehicles (PHEV1), sustainable biofuels, new-generation combustion engines at 2 liters/100 km, gas-fueled longhaul trucking (...). No anathema, just the right alchemy that, globally, in an economically & socially acceptable way, addresses the challenges of climate and air quality, industrial challenges (jobs, competitiveness, purchasing power), and the large diversity of situations of European citizens. Consider PHEV: instead of dimensioning the battery to the longest possible range, the target is to adapt the battery size for daily home-office commuting to reach an optimum TCO² per km and a lower CO₂ emissions per km (on a life cycle basis at global scale). The hybrid solution in one car is smart, providing autonomy for multiple uses, ecofriendly on the life cycle and moreover enable industry to adapt while developing and scaling up solid state technologies for the battery of the future. Think of the sub-optimal path of moving a 750 kg battery which is used at only 20% of its capacity most of the time. Hybridity is a smart way to speed up the transition. Instead of banning diesel cars, it would be smarter to request adequate hybridity post 2025.

Gas is part of the solution and a transition catalyst for quick wins to reduce CO₂ emissions:

Regarding gas, all experts agree that natural gas is part of the solution to accompany the progressive phase-out of coal while reducing C02 emissions and complement the intermittency of renewables. Gas infrastructures are largely in place and largely amortized in the EU and the ramp-up of LNG imports ensures a diversity of competitive, secure and flexible supply sources to compensate the decline of indigenous production (Groningen in Netherlands ...) and provides a good balance with imports of gas via pipeline from the North Sea, Russia and North Africa. Long-term solutions to reduce the carbon footprint of

¹ PHEV: Plug in Hybrid Electric Vehicle

² TCO: Total cost of ownership

gas such as bio-methane, hydrogen, CCUS, must be further developed, but once again, there is no one-size-fits-all solution since each of them has its own constraints, specificities and economics and cannot be massively scaled-up, at least for several decades. Their sustainability has to be looked upon on the overall life cycle. The value chain of the gas industry has to be considered with a long term prospective: 2040/2050 are within the next investment cycle. Gas fuels all sectors of European economic through its multiple uses. The gas price (and the electricity one partially pegged to it), is a key component of the competitiveness of the European energy-intensive industry. It is therefore a paradox that gas suffers, within the Institutions in Brussels, from its "just-another-fossil-fuel" image, while it is indeed part of the solution for the energy transition for several decades.

Strengthening the European Institutions & Industry dialogue:

In these times of profound change, the dialogue between the Institutions and the industry is, despite numerous high-level roundtables & events, lacking deepness, efficiency and mutual trust. The vision of the industrial future of the EU must be a coconstruction between European institutions, Member States and companies from major industrial sectors. The framework for dialogue needs to be enlarged beyond European professional associations and lobbyists, while spreading deeper into the industry, breaking the silos to explore solutions globally. The recent approach of the European Commission on value chains, and on energy intensive industries to reinforce cooperation at all levels with cross-sectorial solutions is crucial. The ambitions on the Horizon Europe program to speed up technological innovations, policies for the creation of startups and especially their global scale-up, as well as initiatives on the training of young Europeans for the jobs of the future will be decisive. Europe's competitiveness also depends on a more inclusive European policy at all geographical levels, local, national, regional & Europe with a focus on the development of industrial hubs to further optimize the level of cooperation (products flow, CO₂ emissions, CCS, environment protection, recycling and waste management). Companies have today a high sense of societal and environmental responsibility and recent surveys show that more than 70 % of citizens trust companies, which is very encouraging.

Carbon pricing and its border adjustment mechanism: <u>adjusting</u> <u>VAT with an "added carbon</u> content"

A European industrial strategy aligned with the Paris agreement cannot be conceived without addressing the question of the carbon pricing and a border adjustment mechanism to ensure a level playing field between European industry and its competitors in a global market. EU would be naive to only consider its direct CO, emissions. It is becoming increasingly necessary to take into account the "imported carbon", one way or another and, in the absence of a global taxation system, to impose a carbon adjustment mechanism at borders. How to build these mechanisms while respecting multilateral world governance? Is a carbon tax at the EU borders compliant with the WTO? Probably not. So let's be inventive and use the VAT pathway. Who remembers today the inventor of the VAT in 1954, Maurice Lauré, a Frenchman who was inspired by the idea of a German businessman, Wilhelm von Siemens, who in the 1920s suggested to tax the "extra" value of a production? The VAT was established in France by a law voted on April 10, 1954. Since then it has not ceased to spread and to be adjusted. So let's adjust it to the added carbon content on a scale consistent with the ambitions of the Paris Agreement, with a redistribution/correction mechanism to make it acceptable to the less

well off. The VAT mechanism which applies to the internal market (domestic production as well as imports) is compliant with the WTO. It is well established, already implemented throughout Europe and therefore simple to integrate, including in complex value chains. To make this carbon adjustment mechanism robust and consistent internationally, a conventional avoidance system of carbon double-taxation could be designed.

Such approach could be further explored. It has several merits with regard to climate challenges:

- It strengthens the competitiveness and level playing field of European industries in their transformation phase.
- It strengthens the European industry transformation towards a net zero carbon economy mid-century in Europe.
- It provides additional resources to national budgets offsetting the decline in fossil tax revenues and allowing redistribution.

The battle of standards:

The deep transformation of the European economy emphasizes the challenges to win the technology race and consequently to impose our industrial standards, mastering quality standards including the carbon value, with even more emphasis on Ecolabels & Ecodesigns processes. For example, losing the battle on future battery standards would not only put the European car industry at risk, but would at the same time also limit the ambition of reducing CO_2 emissions at a global scale.

In summary, let us deepen the dialogue between the institutions, industry and civil society, without anathema and Manichaeism, but with the common objective of building together concrete solutions for a path that is acceptable to all and respects climate commitments made in the Paris Agreement.



Climate change: Europe needs to take charge



Morten HELVEG PETERSEN *MEP* (ALDE Group)

e are in the midst of losing the battle to climate change. Despite finalizing the largest and most comprehensive energy package ever, we are still nowhere near solving the most important problem of our time. Our kids are demonstrating in the streets all over Europe and the rest of the world, in Brussels, Copenhagen, Berlin. They have one message: There is no Planet B. You can't argue with that, and who would even want to? The time is now, we have to do so much more, small steps no longer suffice. Let's get going!

Russian reliance

We have not done enough to reduce our fossil fuel import from Russia, which is still the EU's main supplier of energy. On the contrary, we have purchased massive amounts of coal, oil and gas with one hand and imposed historically strict sanctions with the other. Considering the Russian economy's reliance on energy exports, the most effective sanctions

would in fact be to reduce and ultimately phase out import of Russian energy.

Instead, several Member States even want to increase the Russian gas supply by establishing a new pipeline, *Nord Stream 2*. I oppose this because it would only enhance our reliance and undermine our green energy transition, as such a project requires decades of gas transit to cover the costs of establishment.

Supporting Nord Stream 2 is not only wrong and inconsistent, it is also immoral: during the past five years, Mr. Putin's government has taken an undemocratic, corrupt and violent turn, which European taxpayers should not keep funding by importing Russian energy.

Every breath we take

Solving climate change entails an electrification of our heating and cooling sector, as well as the transport sector, both of which are currently fossil fuel based. Doing so requires significant investments and regulatory changes at European level.

However, if we get this right, we can also address one of the largest health issues in Europe: Air pollution causes 400.000 premature deaths every year. That is an unacceptable figure and more than 10 times the number of deaths caused by traffic accidents. From a health perspective, subsidizing coal power plants is thus worse than subsidizing cars without seatbelts and we should stop doing so as quickly as possible.

With the Electricity Market Design, we have begun this process, but several Member States have succeeded in postponing this phase out, despite my best efforts in Parliament.

The electrification of our transport sector also holds a huge opportunity for our European industry. Around the globe, urban areas are increasingly banning combustion engine cars. Cars thus no longer compete only on horsepower, design and price, but on CO₂-emissions as well. If European champions seize this opportunity, new markets are opening

around the world, where air pollution is an even larger problem.

Green competitiveness

Up until recently, investing in renewable energy was a matter of faith, rather than economics. But the costs of renewable energy are dropping rapidly year by year, especially those of solar power and offshore wind, and thus green investments are now good investments.

So today, combatting climate change is good for business. Considering the rapidly falling costs of renewable energy, government budgets would in fact benefit from a green energy transition, rather than seeing it as an expense.

We see the same pattern across the world, when looking at the investments made by pension funds - even the Norwegian *Government Pension Fund Global* has announced a change of direction towards renewables.

No EU funds without climate action

Despite all the economic and political reasons to go green, several Member States are dragging their feet, trying to water down and postpone any attempt to tighten the rules governing the green energy transition. When the rules are then finally made, they fail to implement them properly, leading to increased levels of CO₂-emissions, energy consumption and air pollution.

It is simply unacceptable.

Our response to these challenges must be just as consequential, as the challenge of climate change. My suggestion is to enhance the EU's climate action and connect the Clean Energy Package to the Multiannual Financial Framework; EU's long-term budget. We need to introduce climate conditionality: if a Member State fails to deliver on the agreed targets for CO₂-emission cuts, renewable energy and energy efficiency, the Commission should ultimately withhold funds.

Remember, there is no Planet B!

Coal once brought Europe together. Now, it's the turn of clean energy.



Dr. BERTRAND PICCARDInitiator and Chairman of the Solar Impulse Foundation

he European project was built upon the premise of safeguarding peace by creating the European Coal and Steel Community. Coming as it did in the aftermath of WWII, Robert Schuman's plan was truly visionary. As he himself declared, "World peace cannot be safeguarded without the making of creative efforts proportionate to the dangers which threaten it". Some seventy years on, peace is taken for granted but Europe faces an uncertain future, with the shadow of economic recession looming and some questioning its very existence - we need once again ambitious and innovative actions in order to revive the European project. But the time of fossil fuel is over. We must now embark on a renewable energy and clean industrial revolution, commensurate to the gravity of the climate crisis.

The European project is increasingly at risk; widening gaps are appearing between liberals and nationalists, between those who advocate a more open Europe, and others who fear that opening Europe further will leave them even further behind.

These deep-rooted differences emerged clearly during the course of the most recent European Council in Brussels, a meeting which proved to be utterly disappointing, and which highlighted the growing chasm between Eastern and Western Europe. The latter sought to achieve a clear mention of a carbon

neutrality goal by 2050, which the Eastern European countries fiercely opposed.

Protection of our environment cannot be held hostage to political games. It should be our common ground. Whether individual countries disagree on immigration, taxes or political systems... I believe there is one overriding goal that should bring all European politicians and political parties together: the need to achieve carbon neutrality, thereby providing prosperity for all of Europe and its peoples.

Investing massively in clean technologies, advocating clean air initiatives, putting a sensible price on carbon across the continent, setting ambitious renewable energy targets - these will kickstart an era of unprecedented economic growth.

We must replace old housing with carbonneutral buildings, internal combustion engines with electric vehicles, energy-hungry heating, ventilation, and air conditioning with efficient systems. All of which must be supported by a backbone of renewable energy. In doing so, we can launch the new European clean industrial revolution, which represents the biggest economic opportunity of the century, creating jobs and increasing purchasing power across society.

We must recognize that the next age of economic development will not be based on a model of quantitative growth, which transformed our lives over the past century but led to a dead end. We must shift to qualitative growth, based on a circular economy and the replacement of old, inefficient, energy-consuming, carbon-emitting systems with new, clean, energy-efficient, smart and carbon-neutral devices, technologies and infrastructure.

Furthermore, clean technological solutions have become cheaper today than dirty ones, as much in Eastern as in Western Europe. I can say this with utmost confidence, having created the first label to assess the economic profitability of clean technologies: the Solar Impulse Efficient Solution Label. Over one hundred solutions have already been granted this label, and hundreds more are in our pipeline. These are clean solutions that address every aspects

of industrial processes and human life: new materials, housing, mobility, food, heating.

That's why every party should be focusing not on the "if" but on the "how" of achieving carbon neutrality. In the past decades, politicians have found it difficult to enact the regulations that will actually make the necessary changes due to lack of support from their major constituency groups. But now is the time for new opportunity, for new momentum -a moment to be seized - as politicians are being granted permission by voters to take the necessary steps: the scientific community has made the point very clearly, young voters have taken to the streets to ask for more action, and even the business community now believes that climate neutrality will create new opportunities for Europe and is therefore asking for a clear path going forward.

The biggest risk would be to stand still and do nothing. Economically and socially, the danger of not achieving the Paris Agreement targets and of not taking urgent action to reduce pollution is appalling. Extreme weather events have taken the lives of 115,000 people across Europe and have cost nearly half a trillion euros since 1980; air pollution is the single biggest environmental health risk in Europe, killing approximately 800,000 Europeans per year, shortening their lifespan and contributing to serious illnesses. How could politicians possibly expect to get reelected on this basis?

I do believe the European political landscape should be diverse, thus demonstrating the vitality of our democracies. Political parties must offer different visions for our continent, and let the voters decide on the future of Europe. I am not addressing you today to tell you who is right or who is wrong. As a matter of fact, being Swiss, I will rather maintain my country's long-standing tradition of neutrality. What I do believe - and believe passionately - is that achieving prosperity through carbon neutrality is not a matter of political opinion. It should be every party's common ground and absolute priority.

Europe needs to shape its digital future, for the good of its citizens and the economy



Stéphane RICHARDChairman and Chief Executive Officer of Orange

he European Union is facing many challenges today. It needs to spur economic growth and restore competitiveness. At home, it has to regain its citizens' trust and overcome political differences, abroad it needs to reinforce its sovereignty and reaffirm its standing in the world. At Orange, we believe digitalisation can help transform these challenges into opportunities.

New technologies are disrupting our lives. No one is being spared by the ongoing revolution in e-commerce, the internet of things, artificial intelligence, smart transport or e-health. They will continue to modify the way in which we communicate, work and live. They can also contribute to fighting climate change. This, however, does not mean the digital tide should be passively received and accepted as it comes: as with all phenomena, it needs to be mastered, governed and shaped into the force for good we ultimately want it to be.

Europe as a whole needs to stand up to the disruption brought about by new technologies, as a provider and not only as a user, and produce a collective, human-centric approach hinged on the European values of freedom, pluralism and the protection of privacy. For the EU to reap the benefits of digitalisation, it has to make sure that all citizens and organisations gain from it. Inclusivity is a prerequisite for enabling long-lasting, digitally-driven growth. This is why, at Orange, we have

developed a "HumanInside" philosophy, a way of shaping our innovative services revolving around individuals and society, by making sure that they benefit everyone.

We know that having a vision is not enough. Concrete actions ought to be taken as well.

First: each and every citizens have to be empowered to flourish in a digital society.

This places education at the centre of any future-oriented agenda being developed either by policy makers, public or private entities. Everyone, from pupils to teachers, from the unemployed to business owners and pensioners, should have the opportunity to embrace the new knowledge that comes with the digital society. With this in mind, we have developed specific programs aimed at honing digital skills. Our SuperCoder initiative, for instance, sees our employees teaching children the fundamentals of coding; the Cyberdefense Academy trains much-needed cybersecurity experts.

Second: in order to compete on a global scale with the mighty economies of China and the US, Europe has to revamp its industrial power and re-equip its industry for the digital age. A twenty-first century industrial strategy that is fit for purpose will be structured around the newly emerging data economy. The EU has to ensure pioneering innovation in its territory, building on the protection of citizens' personal data. By doing so, the EU can set worldwide golden standards, such as the General Data Protection Regulation. Developing a trustworthy AI can be another opportunity for the EU to drive innovation that people can support and to fix the terms of the global debate.

But we do not accept that AI investments are six times higher in the US and three times higher in Asia than in Europe, or that European platforms only represent 4% of a market dominated by American and Asian players. The EU has to become a more attractive place for investments and innovation. To do so, several tools can be combined: a stronger harmonisation of the single market, a supportive approach on European firms' ambition, from startups to larger companies, to become global leaders, a fairer and more balanced

digital taxation, the development of an EU-wide cloud strategy, a more positive stance on the development of innovative services, notably via enhanced cooperation between companies, and a competition policy fit for the digital era, focusing on innovation and market dynamics.

Third: cybersecurity is now paramount to protect our democracy and economy. We welcome that the EU has already started to look into this, but more will be required, notably through the definition of cybersecurity certification schemes, or by defining the security criteria that digital network components should comply with. Harmonisation is here again essential. Through Orange Cyberdefense, we are strongly committed to ensuring the best level of security possible to

Fourth: research and development are a strong European asset. But we have to improve the incentives and the means to step from research outcomes to market innovation. We also have to preserve standardisation and open innovation, increasing end users choice, and to ensure that the EU actors are predominantly active in standardisation bodies.

our customers.

And finally, network infrastructures, which are wired into Orange's DNA, are underpinning the ongoing digital revolution. There won't be a vibrant digital economy in the EU without a wide availability of state-of-the-art networks and technologies, like Fiber to the Home, 4G and soon 5G. All public policies in this field should aim at supporting private investments, through smart regulation and new solutions that incentivise long-term projects and easier coverage, especially when allocating spectrum frequencies.

Europe has the means to succeed. This requires citizens, businesses, civil society, all of us, to stand together, and the EU to demonstrate its political will to do so.

Europe's digital future



Pilar DEL CASTILLOMEP (EPP Group)

he run up to the European elections is one of the most adequate times to analyse the EU's state of play, look ahead, and prepare for the challenges and opportunities to come. From this perspective, in my view, it is necessary and urgent that the European Union concentrates on paramount issues for Europeans, those where decision making at European level represents true added value. Consequently, there is a need to focus

We live in a global World that requires a global perspective. Hence the European project will only advance to the extent we are capable of working together and adopting the necessary integrated policies, this is clearly the case of areas such as security and defence, Banking Union, immigration policy or Climate Change. However, these are not the only fields where EU response is needed; we must also endeavour to enhance the Single Market of which the Digital Single Market constitutes its greatest accelerator. Sixty years after the Treaty of Rome we are witnessing the formation of a new World which is defined by the digital transformation. Europe will only be able to successfully overcome all the challenges that this process brings about if it is capable of completing the Digital Single Market.

Beyond any doubt the European Union provides unique and extraordinary conditions to seize all the opportunities of the Digital Transformation. With a GDP of 16.5 trillion Euros, representing 22.8% of global GDP,

more than 500 million consumers and an outstanding global competitive position in manufacturing, a sector that represents the major share of investment in EU R&D (62.3%) and 80% of total EU exports, the EU has the necessary assets and economies of scale for developments such as cloud computing, Big Data, data-driven science, robotics, artificial intelligence, the Internet of Things and of course 5G.

These strengths will prove of outmost importance in an Era where the growth of machine-to-machine communications is exploding beyond the charts, transforming the physical world in in a type of information system through sensors and actuators embedded in physical objects and linked via the Internet Protocol.

No doubt, that this Parliament has been aware of the importance of the digital transformation, and that action has been taken in many fields. In that sense network security, e-identification, e-commerce, end of roaming charges, geoblocking, copyright, Cloud computing, free flow of data and the adopted regulatory treatment that ensures predictability, reward risk-taking and long term investment in very high capacity networks and support the rapid development of 5G communications, are very clear examples.

The next Parliament and Commission must continue the work towards making of Europe a leader of the digital transformation, at least with the same ambition. We still have, to say the least, many challenges ahead. For example, today, due to still very significant regulatory fragmentation, Europe's industry cannot yet fully seize all the benefits of these technological developments.

We must also be aware that the digital transformation will inevitably bring about profound changes in all aspects of our daily lives but also regarding new business models, labour relationships and skills. There will be consequently a need for Europe's population and specially its workforce to undergo a reskilling process. With Artificial intelligence (AI) development exploding beyond the charts, the EU should, amongst other actions: support businesseducation partnerships to attract and keep more AI talent in Europe, establish dedicated training schemes for professionals, support digital skills and competences in science,

technology, engineering, mathematics (STEM), entrepreneurship and creativity, encourage Members States to modernise their education systems and elaborate a set of AI ethics guidelines.

From a research and innovation perspective, experience from successful public policies for high tech areas shows that, in addition to traditional research actions, there is a need to support rapidly developing technology fields. More specifically Europe must focus on reinforcing capacities in high performance computing, artificial intelligence and cybersecurity. It must no longer be acceptable that while the EU currently consumes one third of high performance computing resources worldwide it provides only around 5%, pushing EU scientists and engineers to turn massively to computing resources outside Europe.

Lastly, as it can be no other way, the Union needs to continue to drive the cybersecurity agenda by supporting cybersecurity across the entire value chain, from research to the deployment and uptake of key technologies, as well as supporting public-private partnerships that are able to stimulate the competitiveness and innovation capacities of the industry, thereby guaranteeing the supply of cybersecurity products and services. Accordingly, as the latest development with regards third country vendors has shown, cybersecurity requires essential policies, and global cooperation. Europe cannot go about it alone, it is very important to work together with international partners and create initiatives by building a mutual and international consensual regarding an open, interoperable, secure and reliable cyberspace.

At the end of the day, the EU has this legislative term adopted much needed and breakthrough legislation and it counts with the most ambitious public research programme in the World. Nevertheless, Europe's Digital Future will greatly depend on the EU maintaining its efforts and digital ambition, a precondition if we are to take the European economy to the next level of growth and competitiveness.

Europeans deserve a stronger Digital Europe



Cecilia BONEFELD-DAHLDirector-General of DIGITALEUROPE

ack in February, DIGITALEUROPE rewarded three <u>"Future Unicorns"</u> for being the most innovative, fastest growing and most likely to succeed among digital SMEs in Europe. Ironically, the chance of any of them fulfilling their unicorn potential on our continent is meager. More likely, they will nourish and grow in more lucrative markets elsewhere.

DIGITALEUROPE released its Call to Action for A Stronger Digital Europe and reached out to all European leaders in Brussels and in Member States. We set a clear vision framed in seven focus areas that will enable Europe to position itself as the global digital power center, with the goal to stimulate the digital growth environment in Europe.

The future of Europe is D-I-G-I-T-A-L

Our vision towards 2025 is a Europe where digital technologies, innovation and artificial intelligence can provide Europe's people with competitive jobs, better health and improved public services. Our Call to Action for A Stronger Digital Europe outlines 7 focus areas where Europe can take leadership in the digital age:

- Digital Single Market To generate growth and remain competitive in the global digital era, Europe must consolidate its Single Market and address fragmentation.
- Inclusion Fears of technological developments should be transformed into

- opportunities by equipping Europeans with the right set of digital skills.
- **Green growth** Europe must leverage digital technologies to build a sustainable, low-carbon, and resource-efficient economy and society.
- Innovation Europe must invest in the take-up of digital technologies by supporting the creation of ecosystems around technologies like AI, Internet of Things and 5G.
- Trust Government and industry must cooperate globally to strengthen cybersecurity and protect citizens' privacy while enabling data flows.
- > Agile & mission-based policy Europe must encourage multi-stakeholder dialogue and favour actions that promote innovation and inclusive growth instead of winding into long policy-making process.
- Leadership Tomorrow's leaders must build on Europe's shared values to develop a joint vision and deliver on common goals at global level.

These seven words at are not just a fancy anagram spelled out of their initial letters. More importantly, when combined they provide the answer to the key question that current and future European leaders should be asking themselves before anything else: How do we build a stronger digital Europe? As leaders in politics as well as in business, we need to ask ourselves: "What do we want and how do we get there?

That's exactly why our Call to Action also includes 22 success indicators that we will review on a yearly basis to monitor the development of Europe's digital transformation.

Unicorns and Digital Growth as the providers of future welfare

For instance, what can be added to the anagram is the word *growth*. If reluctant to seek pole position in the global battle of digital growth, Europe risks losing more than just a single race. Neither our core European values, our European level of welfare, nor our independence come for free!

A highly visual indicator of growth is the number of high-value (market value of over one billion dollars), fast growing corporations, the so-called unicorns. Europe is home to 50 of them - or merely 11 percent of the world's

unicorns, and without the United Kingdom that figure would only be 5%.

That is why we set out a goal for Europe's future share of unicorns, and a common strategy to achieve this goal: by 2025, 25% of global *unicorns* should be based in Europe.

That is also why the most promising, innovative and fastest growing of them were rewarded at our yearly flagship event - the Master of Digital 2019 – in February. They were MaasGlobal, a full-fledged mobility-as-a-Service operator from Finland; Teslasuit, a UK-based producer of smart clothing for virtual reality; and Umbraco, from Denmark, who has developed one of the world's fastest growing CMS system.

All three of them are highly promising Europe-based SMEs. They are modern, digital, scalable, innovative and highly likely to succeed fast. Sadly, they are also most likely to fulfill their potentials as unicorns outside of Europe, as two out of three potential unicorns leave Europe already during their two or three first phases of growth.

Europe's Single Market must enable scale

This is partly due to the combined scarcity of talent and capital. However, we shouldn't neglect that a very common cause for unicorns to flee Europe, is the vast amount of hassle implied in acting on the European market. Unicorns need large homogenous markets where they can grow swiftly and conquer the lead position before the competition moves in and take over their ideas and their market shares.

For growth companies like Maas Global, Teslasuit and Umbraco to remain on European soil, it requires a far more ambitious market integration than the current one. Basically, you can say that there are two types of countries in Europe: The ones that have realized that they are small, and the ones that have not yet realized that they are small. It is about time that the latter realise that in the global market, little ones only get to play in the little league.

The DIGITALEUROPE Call to Action for "A Stronger Digital Europe" is available online: https://www.digitaleurope.org/policies/strongerdigitaleurope/ Please send any feedback you may have at SecretaryGeneral@digitaleurope.org. •

Digital Single Market was not built in a day



Eva KAILIMEP (S&D Group)

he European Union is often criticized for its performance in regulating technology. For an American company based in Silicon Valley, the very idea of a new round of European regulations is, to say the least worrisome. And yet, over the last months, we have more and more instances of CEOs of big tech requesting regulation. That is for two main reasons. Firstly a set of comprehensive rules and principles offers the necessary legal certainty that any business would need, in order to develop in the EU. Secondly, quite simply, the EU has done quite a good job in creating the conditions for a European Digital Single Market to function.

Critics of the EU tend to forget that the state of the DSM in 2019 is largely a product of the last 4-5 years when the European Commission and the European Parliament rolled up their sleeves and started working on taking down barriers and putting safeguards in place. A big part of what is already in place in the European Union and affects largely the global regulatory evolutions has come into fruition because of our work in the European Parliament. For example, the abolishment of roaming charges, the implementation of GDPR, the Copyright and the audiovisual reforms, the ban on geoblocking and online discrimination, the first set of rule for business and platform relations, a comprehensive set of rules that protect consumers online, a cybersecurity framework. These have been fundamental

reforms that are already in place and affecting the lives of millions of citizens and influencing other regulators to follow the same direction.

However, our work looks further than the current challenges that we face. We have also been trying to address emerging disrupting technologies. The EU has started multiple initiatives unlocking innovation and implementing new solutions to problems. In that framework, I had the chance to work extensively on blockchain and DLT technologies. The EU has an important role to play in cultivating this technology and we aspire to make it the leading player in the field of blockchain. With our work, we have facilitated the strong entrepreneurial interest in blockchain, by ensuring legal certainty and by abiding by three fundamental principles:

- 1. Technology neutrality
- 2. Business model neutrality
- 3. Innovation-friendly approach

Moreover, the EU is championing the creation of an ethical framework for the functioning of Al. As the draftsperson for the European Parliament text addressing artificial intelligence, robotics, and automation we have stressed the importance of the human intervention in key decisions and most importantly create a safety net that will allow for the ones left behind by the rapid changes to catch up.

For the creation of a well functioning Digital Single Market, there is also the need to heavily invest in innovative ideas and in infrastructure. And this is where the EU has put its money where its mouth is. For the last years, there have been quite some very interesting ideas popping out of EU funding and quite some remarkable scientific discoveries made because of it, with most recent and impressive the first photo of a black hole, a project that has received EU funding. In the negotiations for the new Multiannual Financial Framework, the budget of the EU for the next years, we have been adamant about the need to spend more on disruptive technologies and science. And we actually managed to deliver; we have secured more than a trillion euros in funding, through different funding tools and platforms, in order to enhance the capacities of the EU and enable it to compete on a global scale.

And this has been our goal. The EU needed to step up its game and create the conditions for a thriving Digital Single Market. During the last five years, despite the stereotypes about Brussels bureaucracy, we have proved that we are willing to take the extra step and lay the groundwork for a society that is fueled by growth while respecting and safeguarding the privacy, the wellbeing and the rights of our citizens.



The future of health in the European Union



Cristian-Silviu BUŞOI *MEP (EPP Group)*

ealth challenge such as antimicrobial resistance that may cause more deaths than cancer by 2050, air pollution that is accountable for almost a half of million premature deaths annually, or mental health burden that reached 4% of EU's GDP; are the unprecedented challenges that European Union is facing and which question the sustainability of Member States health systems progressively. There is an ongoing need for more, for example for additional prevention, as more than a million Europeans die prematurely each year of diseases that could be avoided through better policymaking.

More complexity in dealing with Union's health issues is brought in by the fact that, according to the Treaty, organizing the health system and providing healthcare continues to be a competence of the Member States. On one hand this secures the authenticity of how Member States deal with their diverse nature of healthcare systems, but this privilege comes also with shortcomings that lead to significant discrepancies in the quality of treatments across the EU, interoperability issues between national health systems and considerable obstacles for patients accessing healthcare, particularly for the most vulnerable ones.

Despite the fact that more Europeans require more action in the field of Health from the Union level, it seemed that health was no longer a priority within the future Multiannual

Financial Framework. Take for example the health component and health budget from the original proposals from the Commission as regards Horizon Europe and the Health Strand within European Social Fund Plus (ESF+): reduced budget, no separate instrument for health. From my point of view, undermining our main health policy instrument will not solve many issues.

As regards to the Health Program, the European Commission indeed aimed to simplify fund programming and reduce unnecessary bureaucracy, but it also reduced the budget of the fourth EU Health Program (2021-2027) and merge it with four other programs, under the ESF+, measures that were not perceived positively by our citizens, who overwhelmingly demand more EU intervention in health.

What we need is to reinforce the EU Health Program and make it fit the purpose better, as it has already provided health policies of considerable added value with limited resources. Major health challenges can be effectively and efficiently addressed only through enhanced collaboration at the EU level.

The Parliament has endorsed my efforts as ENVI committee's rapporteur to preserve EU Health Program's well-functioning through maintaining the same budgetary allocation as in the previous program. Merely a stable Health Program can deliver required policy support to Member States, especially in the transition from disease-centered to peoplecentered health systems, placing thus persons in the center of healthcare, rather than diseases. The program draws attention to mental health issues, which currently requires more political prioritization and pooling of resources, for the reason that mental problems are a resilient, widespread and considerable generator of discrimination, with severe socioeconomic repercussions. Finally, I consider it of vital importance to be successful in strengthening health systems by supporting the digital transformation of health and upholding national reforms to make health systems more effective, accessible and resilient. The European Semester can play a crucial role in this matter, as it is now empowered to recommend Member States reforms towards



improved accessibility and sustainability of health systems.

On the other hand, our society expects breakthrough innovation to deliver accelerated solutions to major challenges in health. In my capacity of ENVI committee's rapporteur for Horizon Europe, the 9th research and innovation program, I advocated together with fellow rapporteurs from ITRE committee, to raise the budgetary line dedicated to research and innovation in health from 7,7 billion as proposed by European Commission to 9,12 Billion. Only a robust research program can deal with the complexity of current health issues, which are interlinked and necessitate cross-sectorial, multidisciplinary and transnational collaboration. On these grounds, I emphasize the strong potential of the novel concept of missions. A few, simple, well-funded missions with a high societal impact will serve to bring all relevant actors in research, industry, and academia around a common purpose. Moreover I proposed in my report a first mission to be "the eradication of pediatric cancer by 2040" and this has been the trigger for the negotiating team to agree in March this year upon "tackling cancer" to be one of the 5 missions under Horizon Europe. Innovative solutions in the field of pediatric oncology are crucial for Europe's future generation considering that every year 35 000 new cases of cancer on young people are registered within the EU. Given that research and innovation are severely fragmented in this field and national actions alone have not been achieving sufficient results by themselves, this mission could bring a tremendous EU added value in the years ahead.

Research and innovation projects under Horizon Europe are designed to develop close connections between discovery, clinical, environmental, epidemiological, social and economic research, aiming to deliver new solutions and ensure the uptake of results in clinical practice as well as in health care systems. I stress that Horizon Europe's health objectives are designed to contribute proportionally to EU's policy objectives, such as the European One Health Action Plan against antimicrobial resistance (AMR), the EU Directive on cross-border healthcare, EU Pillar of Social Rights (which stands up for a universal right to timely access, affordable, preventive and curative health care) and EU Digital Single Market. The program will also uphold the EU's commitment to the Paris Agreement and the United Nation's 2030 Agenda for Sustainable Development SDG 3, "Good health and well-being for people" and SDG13 - "Climate action," underlining that 35% of Horizon Europe budget will contribute to climate objectives.

As a final point, health in the European Union is in urgent need to achieve improved cost-effectiveness. Health expenditure reaches already 10% of EU's GDP, cumulated by the fact that in health the cost of non-action is dramatically higher than the cost of action. A feasible solution has been proposed through Health Technology Assessment (HTA), an evidence-based process aiming to determine the added therapeutic value of new health technologies in comparison with existing ones. As IMCO committee's rapporteur on this file, I continue to highlight the necessity to reach consensus within the Council of ministers. Our patients and specialists need to be sure if a new health technology delivers improvements or not, while at the same time, competent national authorities need to allocate budgetary resources for health based on precise evidence obtained jointly at the EU level. If adopted, HTA will increase the level of human health protection drastically, but as well the performance of the single market.

To conclude, the future of health in the European Union should bring political will, breakthrough innovation and evidencebased implementation closely together, not excluding one another. 🌼



Europe needs a renewed industrial strategy



Elizabeth KUIPER

Executive Director Public Affairs, EFPIA European Federation of Pharmaceutical
Industries and Associations

e are approaching a crucial period for the European Union. As voters begin to tune in to the European elections in May this year, and EU capitals turn their attention to the next European Commission, now is the time to think hard about the future

Let's begin by looking back. At this point in the political cycle five years ago, European economies were still feeling the effects of the Global Financial Crisis. Austerity was biting hard and citizens were crying out for jobs, social stability and reasons for optimism. It had been a tough few years.

In hindsight, the EU rose to the occasion then, only to lose momentum in the years that followed. In the context of the Europe 2020 strategy, it stepped up its drive for 'smart, sustainable and inclusive growth'. For industry, including the pharmaceutical sector, a series of subsequent actions created a sense that a serious industrial strategy – with sector-specific initiatives – was coming into view.

A hint of optimism

The Commission's Staff Working Document, 'Pharmaceutical Industry: A Strategic Sector for the European Economy', was published in June 2014. It highlighted the contribution of the sector to growth and to Europe's global competitiveness.

Later that summer, the medicines industry was among five key industries name-checked by Jean-Claude Juncker as he sought the approval of the European Parliament. His subsequent confirmation as Commission President, promised to usher in a period of political support for Europe's pharmaceutical engine.

It wasn't to be. The European Commission ultimately moved away from developing a sector-specific industrial strategy. Instead, the dominant narrative was that all industries face a shared set of challenges, and policy measures should tackle these in the round. This would, the logic went, improve growth and job creation in all sectors.

Despite the intuitive appeal of this line of thinking, it does not reflect Europe's reality. Europe has its strengths – which include biopharmaceuticals companies. Building on these strengths is the best chance of creating sustainable prosperity. It is always wiser to seek a leadership role in areas of high value and global significance where we already have a solid foundation.

Of course, it hasn't all been doom and gloom. Europe has notched up some success stories over the past five years. The Horizon 2020 programme has demonstrated Europe's commitment to innovation, even in the face of an unfavourable budgetary climate. The Innovative Medicines Initiative 2 and the Joint Technology Initiatives have proven the value of large-scale public-private partnerships (PPPs).

Playing to our strengths

At the same time, the industry continued to grow. Pharmaceuticals are a major European industry, notwithstanding considerable global competition. Medicines and vaccines create jobs, drive exports and help to keep our ageing population in good health.

Consider the numbers: With a **trade surplus** of €79.7 billion in 2017, the EU research-based pharmaceutical sector is considered to be the high-tech sector contributing the most to the EU trade balance. The industry employs 115,000 people in R&D alone and 750,000 in total; pharma companies invested more than €35 billion in R&D across Europe in 2017 and

plans to sustain these R&D investment levels in Europe over the next five years.

Europe is also the second largest pharmaceutical market in the world and accounts for 22% of world pharmaceutical sales. Pharma is an area of strategic economic and social value where the EU can truly claim to be a global player. For example, more than 80% of vaccine doses produced by companies leading in research and development are produced in Europe.

Today's challenges

As Brussels and Strasbourg prepare to welcome a newly-elected group of MEPs and a fresh crop of Commissioners, the world looks very different to the one that welcomed Presidents Juncker, Tusk and Tajani five years ago.

Some of the challenges faced then – rising global competition, unfavourable demographics, sluggish growth – a still with us. Indeed, Europe has grown a little older while global players, notably China, have become stronger and more assertive. China also has something Europe needs now more than ever: a plan.

There are also new, unforeseen issues such as populism. This has disrupted geopolitics and Member State elections. It may also be a feature of the next European Parliament. This could undermine the EU's singular role in bringing countries together to make all its members more attractive to investment. However, citizens voting for populists want essentially the same things as everyone else – stability, secure jobs, and a sustainable future. A European industry strategy should be a top priority for MEPs of all political stripes.

Responding to megatrends

Whatever the shape of the EU's new political leadership, they will need to hit the ground running. There is no time to waste. The world is changing fast around us, particularly in fields such as artificial intelligence, digitalisation and big data. This evolution includes the assessment and benchmark of EU Health Systems using patient-relevant outcomes, with the support of digital solutions and a European Harmonised distributed health data network. This in order to improve patient access in Europe by setting up a future European clinical

assessment system, in line with the European Commission's HTA proposal, that accelerates the process through harmonization of clinical data requirements and removal of duplicative assessments.

Some of these are the solutions to the health, social and demographic challenges we face. For example, remote monitoring of diabetes patients using sensor technologies will be essential to coping with the rise of chronic illness; collecting and analysing health outcomes data promises to deliver health system efficiencies, better health and less variation; personalised cell therapies will change cancer care; while robotics and the connected factors are reshaping advanced manufacturing.

Not only can these technologies keep us healthy and more productive, they will unlock better value for health spending and provide a source of jobs and growth.

Making it happen

The EU has a hard-earned global reputation for innovation and R&D. It is also one of the best places in the world for clinical research and a leader in the field of PPPs. This is worth protecting. To do this, industry is investing heavily in innovation. For their part, elected decision-makers must ensure that health is a priority for the allocation of public research funds.

Attracting research is about more than funding. Europe's success to date has relied upon collaborative efforts between public authorities, regulatory bodies, universities, hospitals, research organisations, patient organisations, and industry. By developing the workforce and attracting jobs, this feeds industrial progress and economic growth.

We can do more. By supporting the uptake of innovation by health systems, Europe can be a magnet for investment. And by maintaining and developing its world-class intellectual property system, incentivising R&D in areas of unmet need, and supporting smaller companies, policymakers will ensure Europe retains its seat at the top table of medical innovation.

IP and regulatory excellence can also be important tools in Europe's trade agenda, helping to raise standards around the world, and solidifying our reputation for leadership.

Industry4Europe

As we look to 2020 and beyond, leadership is essential to Europe's industrial future. An ambitious industry strategy is needed if the EU is to compete with other regions, including China, India and the US. Our global partners

and competitors have already put industry at the very top of their political agenda.

EFPIA has joined a large and unprecedented coalition bringing together 147 European federations from all industrial sectors to sign a Manifesto calling on leaders to put industry at the core of the EU's future. Industry4Europe believes Europe should remain a hub for smart, innovative and sustainable industry that benefits all Europeans and future generations.

Specifically, we urge the next European Commission to shortlist industry as a top priority of its 5-year Work Programme and appoint a dedicated Vice-President for Industry. We ask heads of State and Government to require the next European Commission to swiftly present an ambitious long-term EU industrial strategy, include clear indicators and governance structures.

Reason to hope

We believe that at this crucial time, there are already signs that EU leaders are prepared to seize the moment. Last December the 6th ministerial conference of the Friends of Industry – an initiative backed by 18 Member States – published a joint statement with several promising elements that could be widely adopted.

In February this year, Germany announced a renewed industrial strategy, receiving public support from France, while in March the Council Conclusions from the Romanian Presidency invited the Commission to set out a long-term vision for Europe's industrial future.

However, history reminds us that momentum can be lost. This time, Europe needs a clear and ambitious industrial vision for our future. Failure is not an option.





An industry vision for a renewed Europe





Malte LOHANOrgalim Director General

rgalim is the foremost voice of Europe's technology industries at EU level, representing companies that innovate across physical and digital technology to create solutions for a prosperous, sustainable future. In this interview Director General Malte Lohan discusses Orgalim's vision for Europe – as presented in the recently published '2030: an industry vision for a renewed Europe' – and how the right kind of industrial strategy can make it a reality.

As the 'Future of Europe' debate ramps up ahead of the EU elections, where does industry fit into the picture?

For us at Orgalim, industry is at the very heart of this debate. Our vision for 2030 is one of a renewed Europe – where innovation drives competitiveness and technology responds to citizens' needs, improving quality of life while enabling the transition to a carbon-neutral, more sustainable society. The technology companies we represent are key to driving this change.

That's a high ambition – how well equipped are Europe's technology industries to deliver on that promise?

Ours is a diverse and dynamic industry, spanning the mechanical engineering, electrical engineering, electronics and metal technology sectors. Companies range from large globally active corporations to SMEs with strong regional roots. Together they form Europe's largest

manufacturing branch – directly employing 11 million people, generating turnover of over €2,000 billion and producing one-third of the EU's manufactured exports.

As concerns grow regarding the EU's competitiveness vis-à-vis China and others, we shouldn't forget how strong our industrial ecosystem is today. European tech firms are world-leading in innovation and using digitalisation to transform sectors like energy, mobility and healthcare. The challenge for the future will be to get the framework right at EU level so we can build on these strengths.

Speaking of the EU framework, talk of industrial policy has reappeared in political circles in recent months – what do you make of the renewed interest?

It's good to see industry back in the spotlight, as joined-up political thinking is essential to safeguard Europe's competitiveness. We have been calling for this for some time. But politicisation can cut both ways, and we get wary when industrial policy is reduced to creating European champions to compete with Chinese state-funded giants, or artificially protecting certain sectors against foreign takeovers. We do not believe the state is the better entrepreneur. This kind of interventionist approach is a far cry from what we in the technology industries are advocating.

What does the 'right' kind of industrial strategy look like in that case?

Well for starters, you have to begin with the right question. We need to change perspective: instead of asking 'what can Europe do for industry?', we should be asking 'what can industry do for Europe?'. By putting industry and technology at the heart of solving the challenges we face – climate change, demographic shifts, urbanisation, mobility – we will not only boost our competitiveness, we can shape a future that's good for all Europeans.

And what concrete steps would it take to make this a reality by 2030?

Essentially it's about putting innovation at the heart of Europe's future. Our roadmap to 2030 outlines three strategic imperatives at EU level to make it happen.

First, we must embrace innovation-led transformation. European technology companies are already driving digitalisation in industry and

beyond; we can do so much more with the right policies in place – from investment in Al, to cyber-security and the data framework. 5G is the perfect example of where EU-level action can make a big difference fast: digital infrastructure is the foundation of technology transformation but we need to act together to boost investment.

The second imperative is to enable European industry's global leadership. This means massively investing in R&I, recommitting to the Internal Market and flying the flag for open, rules-based global trade. Free, competitive markets are a core European value: I am convinced that a level playing field at home and abroad will prove the EU's best defence against pressure from countries such as China.

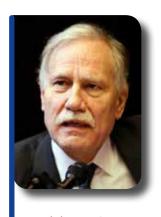
Finally, we must transform societal challenges into drivers of prosperity. For Europe's technology industries, a big part of our business is designing solutions to these challenges: from the renewable energy systems and smart grids essential for a carbon-neutral future, to the healthcare, mobility and building tech that will shape tomorrow's smart cities. Fighting climate change is a major opportunity, as our firms are world-leading in developing the technologies to help deliver on the Paris goals – giving the EU the chance to set the bar for the rest of the world.

What's next – where will you be focusing your attention in the coming months?

With a new Parliament and Commission on the horizon, this is a crucial moment. Orgalim stands ready to work with policymakers to harness the potential of Europe's technology industries to deliver prosperity, jobs and answers to citizens' challenges.

In addition to our ongoing advocacy work across the policy spectrum, we are promoting our vision for 2030 widely in meetings with key current and future political stakeholders in the EU institutions. And we will continue to collaborate with partners from other industries and civil society, reinforcing our role as a platform for meaningful, forward-thinking dialogue on the right industrial policy framework. Events such as our roundtable with the European Forum for Manufacturing in the European Parliament in September and Orgalim's annual conference in November will provide an opportunity to strengthen this engagement. Together, we can show that EU-level collaboration can deliver for Europe, its citizens and its industry towards 2030 and beyond. **

Europe: gear up!



Dominique RIQUET *MEP (ALDE Group)*

lobalisation, Brexit, rise of populisms, environmental change... News shows us every day a growing truth on the old continent: this century's stakes are inherently European. European, because they no longer can be understood with a sole national grid. European, as they demand a collective response from every Member State.

With the European elections coming, this assessment compels us to challenge our views. Realising how weak we are individually is the first step leading to become collectively strong, the sole viable starting point for tomorrow's policies. Europe is part of our day-to-day life. Globalisation has shaken up the traditional logic of Nation-States, in first place sovereignty, and has made issues increasingly more multidimensional, cross-topical and cross-national; leaving the Westphalian states in a difficult situation, poorly equipped to face and respond to these changes.

Some see it as a crisis, the end of the old world: I hear them. But let's not forget that there is no need to be scared: the European Union has always proceeded and taken steps further with crisis. Born from the ashes of the deadliest conflicts in the history of humanity, it has gradually strengthened cooperation among Nations to address the challenges of our time. The latest example is undoubtedly the Banking Union, a direct result of the 2007 financial crisis. When wisely managed,

crisis have been the fuel, the driving force of European integration. And it is this energy to convert crises into opportunities that the Union imperatively needs for its future and its citizens.

The paradigm shift is real: the EU should no longer be considered as an achievement, but the starting point of our shared ambitions and the framework for joint actions. In that regard, the European institutions deserve, as such, to be reformed. A stronger Parliament negotiating on an equal footing with the Council, with a real decision-making power over the budget and legislative initiative (essential prerogatives of any Parliament, for that matter), the end of the unanimity rule in the Council, the election of the President of the European Commission by direct universal suffrage would all be factors likely to make the EU closer to its citizens and more effective.

An overhaul of the institutional mechanics would provide the Union with the opportunity to be better prepared for the challenges ahead. These are two sides of the same coin: renovating the European House to better withstand the winds of globalisation. And these winds are numerous. Climate change in the first place: it can only be addressed at the Union level both to implement ambitious policies on its territory, and to become a front runner on the international scene. The same goes for topics such as migration, taxation, digital, defence, terrorism and cybersecurity, social issues... So much remains to be built.

European industrial policy is a striking example of these challenges. The Union, as everyone knows, has two major levers of intervention: regulation and budget. If European competition rules were beneficial to citizens in the second half of the twentieth century, they no longer correspond to the reality of the world, and may even hinder our global competitiveness.

Facing an intensified international competition and the emergence of global giants, Europe must arm itself. We need to encourage the emergence of European champions, like Airbus, to establish reciprocity in market access, and even to set up a "European preference" in our strategic sectors. Our competitors have already put such instruments in

place. Why not us? The issue of environmental dumping of some trading partners, with lower environmental standards, must also be addressed. At the same time, it is essential that the European budget supports these transitions by investing massively, especially in infrastructures and innovation. Batteries for tomorrow's mobility, space, artificial intelligence - to just name a few - will be the leading sectors of the world economy. Hard to invest though, with a European budget equivalent to 1% of its GDP. Nevertheless, Europe remains highly innovative, contrary to what can be heard (the European Patent Offices files half of patents in the world). But the fragmentation of the single market prevents our start-ups from reaching a critical size on global markets and are too often bought by our foreign competitors. In short, time for Europeans to gear up has come.

Finally, there is one aspect everyone needs to keep in mind: the Europe of values. It is easily forgotten, but Europe is one of the last and rare regions in the world that guarantees its citizens democracy, human rights, rule of law and peace. This should never be taken for granted but rather to be continuously reaffirmed and protected. It is indispensable that the Union preserves and strengthens this common base – not an easy task, even within its own borders – because this is where the European identity really lies.

WeEuropeans:

A unique insight into Europeans' expectations

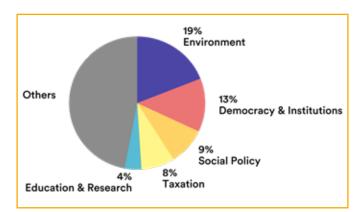


rom February 4th to March 15th, WeEuropeans launched the largest online public consultation ever carried out in Europe to give a voice to citizens' worries and hear their proposals. More than 38 million Europeans have been reached; nearly 2 million of them participated. More than 30,000 proposals were submitted. This consultation gives a unique insight into Europeans' expectations.

The results in the 27 countries show 5 core themes that are here ranked according to the results of the consultation:

- **>** Environment
- Democracy & Institutions
- Social policy
- Taxation
- > Education & research

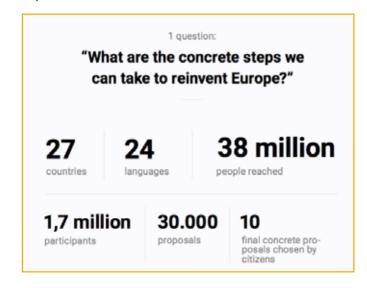
Immigration does not appear as a main concern. Among the 270 most-approved proposals from all countries, only 4% cover this topic.



The consultation had 2 stages. During the national consultations, each European citizen had the possibility to propose and to vote on proposals coming from his/her country. The top 10 proposals of each country were translated in all 24 languages. During the European round, each European citizen had the possibility to vote on these 270 proposals coming from all member States. The results of that vote are the 10 most supported proposals at the European level and presented below.

Those 10 proposals constitute the Citizens' Agenda, which was presented to European political parties and civil society organizations. They are now asked to take a stance on each proposal before the 2019 European elections. All results and stances taken by political parties will be displayed on WeEuropeans' website.

Despite rumours and negative rhetoric, citizens deeply care about Europe. They impressively responded to the consultation, defining the themes they care about and providing specific ideas to solve some of the Union's problems. Answering these concerns is the condition to reviving the European project. A new, citizencentred, phase is needed. It is now time for a civic and democratic leap forward.



The Citizen's Agenda: 10 proposals for Europe.

The Citizen's Agenda: 10 proposals for Europe

We should set up a European-wide recycling programme. Raw materials should be reused and not destroyed!

93% Agree Hove it ♥ 37% Realistic 21%

We should ban those who have committed crimes (e.g. tax evasion) from working in public sectors or running for elected positions in Europe.

92% Agree 1 love it ♥ 40% Realistic 18%

We should protect all forests with good management and we need to rebuild deciduous forest. We need to plant five trees for each one felled. 92% Agree
Hove it ♥ 40%
Realistic 17%

We should stop tax breaks for multinational corporations. Taxes should be paid in the country where the profits are generated.

89% Agree
1 love it ♥ 34%
Realistic 20%

We should invest in education and research.

91% Agree
I love it ♥ 29%
Realistic 23%

We should protect workers' rights in all EU countries.

91% Agree
I love it ♥ 35%
Realistic 20%

We should coordinate the chemical restrictions, especially in the food industry.

87% Agree
I love it ♥ 30%
Realistic 24%

We should support renewable energy projects in cities.

89% Agree
I love it ♥ 35%
Realistic 19%

We should have clear and transparent information about all the projects and agreements in the European Union.

90% Agree I love it ♥ 32% Realistic 22%

We should ensure that every EU citizen can get medical care in any EU country with a European Health Card.

87% Agree I love it ♥ 28% Realistic 22%

You can discover the full Citizens' Agenda here

SOLARIMPULSE FOUNDATION



Protection of the environment would become a reality only if it was perceived as economically viable and requiring no financial or behavioral sacrifices. Today, efficient solutions exist that can boost economic growth, while at the same time reducing our impact on the planet."

PROFITABLE SOLUTIONS TO

TACKLE CLIMATE CHANGE.

Dr. Bertrand Piccard, Initiator and Chairman of the Solar Impulse Foundation

PROFITABLE SOLUTIONS TO PROTECT THE ENVIRONMENT

Solar Impulse demonstrated how clean technologies and renewable energy can achieve the impossible. It's now time to take the adventure further, for the benefit of both people and the planet. By collecting and selecting clean, efficient and profitable solutions and bringing them to decision-makers, encouraging them to adopt more ambitious environmental targets and energy policies.

A MODERN LEGAL FRAMEWORK TO BOOST CLEAN ECONOMIC GROWTH

Our society has regulations for education, hygiene, health, taxes, security etc., but not for preventing the waste of energy and natural resources. The current legal structure does not properly consider the efficiency and profitability of modern technologies. Nothing will ever happen if we do not pull innovative products and new processes to market by creating a need for them. This will only be possible if we modernize our legal framework, in order to encourage the replacement of old polluting devices with clean and energy efficient technologies.





a combination of expertise and computing power.

At Eni's Green Data Center, HPC4 is fully operational. It is one of the world's most powerful supercomputers, capable of performing up to 22.4 million billion mathematical operations per second when combined with existing operational systems. Thanks to the skills of our people and Eni's proprietary algorithms, it makes our day-to-day activities safer, faster and more efficient.

The energy to see and the energy to do.

