

# Prospects and challenges faced by the green transition

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## 1. Russia's invasion and war in Ukraine: indirect consequences

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### 1.1 Alleviating short run pain and overcoming dangerous dependencies might hinder efforts on the climate transition

An official condemned Russia's brutal invasion and war in Ukraine. The indirect consequences of it have included increasing food prices, food insecurity, and damage to energy security. It is natural to focus on this short run pain, and it has been suggested that this might hinder the efforts on the climate transition. This situation demonstrates how difficult it is when the world relies on fossil fuels supplied by a small number of countries. It demonstrates the importance of the transition to clean energy and a decarbonised future. If anything, it will accelerate those efforts.

A Central Bank official emphasised that the current geopolitical situation makes it necessary to consider both the long-term rational approach to the transition and the economic reality in the short-term. European corporates are suffering from high energy prices, geopolitical shifts and supply chain interruptions. This makes the much-needed big move towards decarbonisation temporarily much harder, but more pressing. At the same time, private households and corporates will also need support over the winter months. The invasion demonstrates how vulnerable Europe is. Europe has made itself dependent on the import of fossil fuels and it is paying the price. The only solution is energy independence. This is not about sovereignty or complete independence but reducing Europe's vulnerabilities. The only way to do this is to speed up the transition to renewables.

An official considered the current situation to be an important crossroads for Europe. Europe must reflect on the challenges this poses, but the relative price shift is also an opportunity. It is important to use this as an incentive to move decisively towards net zero and accelerate the transition.

### 1.2 Europe has reacted with REPowerEU, a fast forward of the EU Green Deal

A policymaker agreed that the impact of Russia's brutal aggression against Ukraine is felt in Europe through energy. Europe has reacted to this in a united way. The European Commission immediately launched REPowerEU, which is a fast forward of the EU Green Deal. The four pillars of REPowerEU are: the reduction of energy consumption; the diversification of energy inputs; the acceleration of the clean energy transition; and smart investment and reforms. REPowerEU has already had a tangible effect in terms of stockages. In previous discussions, 90% seemed an unrealistic target, but Europe has nearly reached this goal through the four pillars of REPowerEU. The combination of

ideas and technical support has allowed member states to do this. The Commission is providing technical support to 17 member states on REPowerEU. It will become part of the national plans for recovery and resilience (NRRs).

## 2. Monitoring corporates and managing short term energy constraints

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An industry representative advised that carbon neutrality is a universal priority, but the pathway to carbon neutrality differs by country and by region. In the meantime, capital flows globally. On a global basis, corporate carbon reduction activities are down. In this context, it is important to ensure that corporates can raise funds. The first risk is that the corporate transition does not progress in line with the pathway. To avert this, bankers and investors need to properly assess and monitor the ability of corporate clients to transition. The second key risk is excessive short termism, which will prevent companies from servicing existing assets such as power plants. A uniform taxonomy will bring clarity to the status of the transition. The different measurements and standards used today create many environmental, social and governance (ESG) ratings. A common language for ratings would create a consistent approach for both companies and investors, which is particularly important for global players. In the meantime, national discretion should be allowed on top of the standards, like the specificities admitted under the Basel Capital Accord. The Basel Committee on Banking Supervision (BCBS) is concluding its principles for climate related risks, but these are at an early stage.

A Central Bank official agreed that there is a question about the need for a global baseline of standards. In April, Janet Yellen suggested that there is a need to ensure that business in the G7 is incompatible with protectionist measures and compatible with global baseline standards.

An official agreed on the importance of reducing the costs of collecting, disclosing and consuming data. This will help guard against climate related financial risks. Governments are engaging through the Financial Stability Board (FSB) on encouraging the adoption of International Sustainability Standards Board (ISSB) standards. Governments are trying to encourage countries to adopt mandatory disclosure rules based on those standards, for example. However, it is important to acknowledge that different countries have different national needs and tools at their disposal. The United States, for example, has fiscal, tax and environmental regulatory capabilities. Europe, however, might focus on financial regulation. Regulators and supervisors across the world should do everything possible to ensure their approaches are harmonised and reduce the burden of disclosures.

An industry representative suggested that the Japanese financial industry is catching up with Europe very quickly, which means standardisation is essential. From the industry's perspective, there is no doubt about accelerating the transition. However, in response to rising energy prices and interest rates, the credit market is shrinking. There is a potential risk around credit shrinking at the margin between green and brown. It is important to monitor whether companies are raising sufficient funds for the transition.

A Central Bank official suggested that there is a willingness to develop European rules, but finance has a strong global dimension. There is a question around how the European effort will combine with the efforts being made in other parts of the world. A policymaker emphasised that one of the reasons European Commission officials attend Eurofi regularly is because they cannot facilitate the transition alone; without the financial sector, no transition is possible. A Central Bank official noted that the transition would also not be possible without member states.

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### 3. Seizing the opportunities in the transition will require a sound and functioning financial system

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A Central Bank official considered there to be opportunity in the transition. The Commission has estimated that Europe needs \$520 billion, 3.7% of GDP. In 2019 in additional investment to meet the green transition goals. Much more must be done to develop the depth and breadth of the capital markets, to clean balance sheets, to ensure portfolios are understood and to ensure supervisory policy and execution is calibrated to deliver a strong banking system. Policymakers must create a Capital Markets Union (CMU) and provide a functioning framework for securitisation. Supervisors should not mandate what should happen in the energy transition; rather, supervisors should focus on strength, safety, and soundness of the banking system.

Another Central Bank official noted that the European approach is more focused on regulation and enhancing corporate sustainability reporting. Europe has made good progress. At the same time, there are no internationally aligned agreements. The taxonomy and the disclosure regime are relevant examples here. It is extremely important that corporates are not overburdened and that investors can compare international standards. More harmonization is therefore needed, without lowering standards or risking greenwashing.

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### 4. Europe has led on the climate challenge, but further global coordination is necessary

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A policymaker emphasised the importance of moving the financial sector. On a positive note, Europe is leading in this area. The United Nations Climate Change Conference (COP) in Paris was very clear. Europe led on this issue due to a variety of geopolitics factors, and its leadership led to

the creation of the NGFS and an international platform. A Central Bank official noted that Europe was not alone in this work. The policymaker agreed, adding that Europe did lead this effort. The Americans joined this effort five years later, for example. The taxonomy is an instructive example. While shortcuts were taken on the taxonomy to make it usable and operable, it was important to do this. The leadership of the last few years was not wasted. It is pleasing to hear people talk about using the European taxonomy. Thankfully, politics changed. By changing the effort, the work on the transition became global.

While great efforts have been made, however, they may not be enough. Much more is needed in all three areas of environmental, social and governance (ESG) risk. More is needed in the 'E' areas, such as biodiversity. Equally, the war in Ukraine has highlighted the importance of the 'S' and the 'G'. Two days ago, the European Commission launched a flagship idea for regulating ESG risk. There were 160 participants from European regulatory and supervisory authorities. Supervisors clearly feel they must deliver on this. With leadership comes an inevitable responsibility. The only question is whether Europe will manage.

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### 5. The high price of fossil energy could accelerate the transition, but there is a need to address the challenges faced by low income households

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An official noted that the NGFS published a note about the challenges to the transition posed by the war. The war is a tragedy, but one of its effects has been to produce a dramatic shift in relative prices. Fossil energy prices went up significantly. This means Europe is at a crossroads. There are two different paths to follow. One is to rely more on fossil energy, and the other is to use higher fossil energy prices as an opportunity to accelerate the transition. In the short term there might be a need to temporarily increase the carbon intensity of Europe's energy systems, but it is critically important not to make this a permanent change. There are very severe challenges for low income households and there is a need to use the difference in relative prices to accelerate investment. It is possible to cushion the impact of higher energy prices and create incentives to invest in renewable energy. Finance will also be essential in this transition. In particular, private funding will speed up the replacement of fossil energy with renewables.

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### 6. There are risks of dependencies on raw materials in renewables related technologies

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A Central Bank official agreed that there is an obvious connection between the war's effects on the supply chain, food prices and energy and what needs to be done on climate change. What is not so obvious is the impact on macroeconomic stability, however. There is an opportunity

in front of the private sector and the public sector to meet very substantial needs and to make the right decisions. Europe should not fail to recognise the effect of dependency on citizens and households and its effects on the macroeconomic situation. When future decisions are made, it is important that we identify any potential dependencies. As an example, electric cars require six times the number of minerals to create them than combustion engine cars. It is important to understand and manage the risks that other dependencies may create.

## 7. There is an opportunity to leverage the EU's competencies and technological research capacity

A Central Bank official emphasised that sustainable sources of energy can give Europe more independence, but that will also involve mastering new technology. Another Central Bank official suggested that technology and knowledge are not the main issues. The economics demonstrates the need to develop technology, but the decrease in the cost of renewable energy shows that the essential technology exists. Europe has the competencies; now it needs to steer substantial financial flows into the right technologies. This also makes sense from an ecological perspective. This summer's drought has been the worst of the last 500 years and it has caused many different problems. There is more than enough evidence that the transition has to be done quickly and decisively.

A Central Bank official observed that the country with the largest number of patents in the green sector is the US. It would be much better if Europe financed innovation as well as creating rules. The rules are indispensable, and European policymakers can be proud of them, but without investment and innovation Europe will not be a leader. There is a need to finance the young people who have good ideas. It is important that European start ups do not simply relocate elsewhere.

A policymaker noted that one of the biggest obstacles to renewables in Europe is bureaucracy, in respect of licencing, permitting and so on. However, member states have realised this. This is one of the key elements of REPowerEU.

## 8. There is a need for increased momentum, strong policy incentives and continued monitoring

### 8.1 A systematic definition of corporate transition pathways would enable even carbon intensive corporates to access finance

A Central Bank official highlighted that private and public money is available for promising ideas. There is a concern around financing the transition in the carbon intensive economy, which cannot be left behind for a successful transition of the whole economy. The steel, coal and oil companies need to be brought on the pathway to net zero. It

is important to give those companies a chance; otherwise, the world will be unable to make the transition. The UK, for example, has asked listed companies to have a clear and credible transition plan by 2023. It is extremely important for these firms to be able to access finance regardless their carbon intensity. Decarbonisation will be capital-intensive, but necessary.

An industry representative stated that how best to use carbon is a very good question. There must be a clear pathway and an appropriate time horizon. The key risks are excessive short termism and too much division between green and brown, both of which do not make sense.

### 8.2 This Schumpeterian creative destruction process will require global coordination

A Central Bank official noted that there are questions about the effective impact of what is currently being done. The politicians need to deliver.

An official noted that this was linked to the importance of supply. The Inflation Reduction Act and the Infrastructure Act will help the US achieve its climate goals. Credible estimates suggest it will close two thirds of the gap between the current trajectory and the 2030 emissions targets. This shorter horizon is sensible. It is important not to plan too far into the future without thinking about the path to get there. The legislation takes a number of steps on the supply and the demand side. On the supply side, it establishes regional hubs for demonstration projects on clean hydrogen, direct air capture and several other technologies. This will push down the cost curve, building on earlier government support in bringing down wind energy generation costs. There is also significant support on the demand side. The legislation subsidises electric vehicles and should spur on purchases of battery storage and clean power generation.

An official stated that the transition is a challenge of engineering; it is a Schumpeterian creative destruction process in which innovation plays a big role. The tragedy of the war has only accelerated the need for the transition. Everyone realises that the transition will require a coordinated effort globally and locally. There is a limited carbon budget, and many policies will need to be engineered to address needs on the demand side, on the supply side and on the regulatory front. Most importantly, no more time can be wasted. There might be a need for short term compromise, but it is important to be pragmatic. There is a need to make extreme and urgent efforts to use the power of finance to make sure there is diversification, investment in renewables and carbon capture and that new modes of transportation, new modes of consumption and that new production processes are available to everyone. This is what the Schumpeterian revolution is about. Equally, there is a need for coordination. Some countries and regions are showing the world a good example in this regard.

An official emphasised the importance of focusing on a broad definition of innovation. Of course, there is conventional innovation. Climate tech has raised a steady stream of funding in an environment where other forms of venture capital have not been available. Beyond the conventional idea of innovation, there is also managerial innovation. Additionally, there is policy innovation. Governments have been working on international

coordination around public private partnerships in developing clean energy infrastructure in emerging and developing countries, the Just Energy Transition Partnership programmes. Finally, international cooperation would help bring the public authorities in different countries as close to interoperability as possible and enable a mutual exchange of knowledge. It is extremely important to cooperate globally. Climate change is a classic example of an issue with cross border spill overs which requires coordination to make progress.

### **8.3 The ECB's stress testing demonstrates that earlier is better in terms of transition strategies**

A Central Bank official agreed that Europe has taken a giant leap forward compared to the rest of the world on supervision of climate risk. The ECB ran a top down economy wide stress test, the results of which were made available to the market. It followed this with a climate risk stress test, which included a bottom up bank by bank exercise. The learning that emerged from this for both supervisors and market participants was enormous. It showed that the early adoption of transition strategies will be far less costly in the medium to long run for banks' balance sheets. Every bank that assessed their management of transition risk concluded that, without mitigating policies, there would be enormous effects on their portfolios in terms of supervisory metrics such as probabilities of default. Something very subtle yet very profound has happened: the discussion and management on climate risk in the industry has become a question of risk management, board strategy and balance sheet management inside the banks, not something that is the focus of solely policy parts of the bank. This has already had an enormous impact in terms of moving the banks towards managing climate risk.

### **8.4 Increasing global awareness remains an essential priority**

A Central Bank official noted that people in Europe are beginning to ask what they should change. In the US, there seems to be more of this sentiment in some parts of the country than others. There are questions, however, about who European policymakers should work with to create global convergence.

### **8.5 It is important to maintain high carbon prices and protect vulnerable groups in society**

A Central Bank official stated that it is important not to dilute the steering effect of high fossil energy prices. A policymaker suggested that it is also important to protect the poor. The middle and upper classes should be incentivised to move out of fossil fuel. An official agreed with these comments, noting that the shift in relative prices is an important incentive but it is also vital to take care of the most vulnerable groups in society.

### **8.6 Achieving effective coordination at the global level remains challenging**

A Central Bank official stated that there is currently implicit carbon pricing due to factors and reasons beyond Europe's control. Being a leader involves convincing others. The key element for reducing CO2 is to continue to discuss this issue with China and India. There is a tragedy happening that is a violation of the most important principles invented to

organise international relations. This is not a minor country or a local war; it is a violation of all of the principles of the rules based order. The votes on Russia at the UN illustrate that there is a significant amount of work to do with many countries in the world. Leadership is about making sure that the important countries are on board and that there is a fair path for the transition not only within Europe between rich and poor but also worldwide. People often say that Europe has the leadership on this issue. The idea that Europe should be in charge of and pay for the transition is widespread. Hopefully, public authorities across the world can manage to find a way to tackle this issue.