The Russian invasion of Ukraine has pushed Europe to re-design its energy map at speed. Amid this unprecedented energy overhaul, the EU and the United States have flagged their commitment to reinforce their bilateral energy partnership, starting with short-term measures to boost US liquefied natural gas supplies to Europe to promptly replace part of Russian gas imports. This article develops five issues around which a stronger transatlantic energy and climate pact might be built.

The Russian invasion of Ukraine marks a historical turning point for the European Union’s security and energy policy. Long-held policy tenets are quickly being reversed, and a new European energy map is being redesigned at speed. Amid this unprecedented energy overhaul, the EU and the United States have flagged their commitment to reinforce their bilateral energy partnership, starting with short-term measures to boost US liquefied natural gas (LNG) supplies to Europe to promptly replace part of Russian gas imports.

With its new energy REPowerEU strategy, Europe intends to rapidly cut its reliance on Russian fossil energy not only by fostering substitution with alternative supplies, but also by accelerating its green transition to reduce its overall dependence on fossil fuels by 2030. This opens new possibilities for collaboration with the US on green tech cooperation, as well as on joint efforts to make global green energy and tech supply chains more resilient against potential disruptions and geopolitical weaponisation by Russia and especially China.

The Biden administration’s willingness to engage with the EU, and its acknowledgement of climate change as an urgent matter, are most helpful in managing this watershed moment in international relations. It is now high time to think further and adapt to the post-crisis reality of high geopolitical tensions and the green transition by developing a durable transatlantic energy and climate pact for the long term.

Expectations in Brussels for stronger cooperation in these fields were high at the start of the Biden presidency, and there have indeed been some promising results concerning trade and global climate diplomacy, such as the announcement of cooperation for the decarbonisation of steel and aluminum and the EU-US-led global methane pledge in Glasgow. However, progress regarding some of the joint initiatives announced at the EU-US summit in June 2021 (European Council, 2021), such as the Transatlantic Green Technology Alliance and the Trade and Technology Council (which features a working group on climate and green tech), has been modest up til now.

**Priorities for a transatlantic energy and climate pact**

A transatlantic energy and climate pact should structure the broad agenda in the field around five main objectives and inject it with renewed vigor. It should place cooperation on a more solid footing to make it last beyond the current crisis and should enhance visibility and global credibility.

**Get rid of Russian energy imports**

For reasons of security and of depriving the Kremlin of financial resources, the first priority for the EU-US pact must be to rapidly replace Russian fossil fuel imports into Europe, which account for a substantial share of inland consumption (Eurostat, 2022). The EU first moved to ban
Russian coal, which is the easiest given the flexible and ample global supply (Zachmann et al. 2022). On 31 May, it then decided to ban seaborne Russian oil, a measure that will cut EU imports of Russian oil by 90% starting in January 2023. Given Russia’s difficulties in completely re-routing these volumes to other areas, its oil production and total export will be reduced. To compensate for this loss of Russian oil in the global market, together with the US, Europe must engage with other oil producing countries to ensure adequate supply. The recent willingness that Saudi Arabia has shown to increase its oil production (Sheppard et al., 2022) illustrates how US-led diplomatic efforts can yield results at an important moment, as the EU just agreed on the embargo on Russian oil. If alternative global oil supplies are not enough to fully replace Russian oil, then obviously part of the solution must come from cutting demand for oil (IEA, 2022a), which also applies to other fossil fuels.

The biggest challenge is presented by natural gas. EU imports of Russian natural gas amounted to 155 billion cubic metres (bcm) in 2021. The European Commission has committed to rapidly phasing down these imports, and a Joint Taskforce on Energy Security was set up together with the White House to support this move (European Commission, 2022c). We see this as the first essential pillar of the transatlantic pact. The US is instrumental in cutting energy ties with Russia since it has become the largest global exporter of LNG, the most obvious short-term substitute for Russian gas imports (Disavino, 2021). EU imports of US LNG have seen a remarkable evolution, as they only started in 2016 but have surged to 44% of total European LNG imports in January 2022 (European Commission, 2022a).

Officials agreed to further boost LNG flows from the US to Europe by 15 bcm this year (Dalton, 2022). To address capacity constraints in the industry on both sides of the Atlantic, the Biden administration and the Commission have committed to accelerating permitting procedures for new LNG facilities, but to unlock the needed final investments decisions, these must pay off. The Commission therefore promised a stable demand for additional US LNG of 50 bcm per year until at least 2030 (European Commission, 2022c). This political agreement must be further substantiated with real contracts between firms, which is best coordinated through the new EU Energy Platform to get better prices on the international market and with US counterparts to provide investors with an overview of who will actually buy what.

The first new actual LNG contract was signed in May by Engie from France and a Texan producer for 2.4 bcm per year for the next 15 years (Jacobs and White, 2022). Still, there might be worries among industry participants, especially importers in Europe, that their investments are not viable because the EU intends to reduce the use of LNG after 2030, for the sake of its greenhouse gas emission targets (US exporters could redirect flows to Asia after that, where LNG demand is expected to continue to increase as coal is being phased out). Part of the answer for investors could be to make newly built European gas pipelines heading inland ready to transport hydrogen in the future, which would make current investments worthwhile (Wang et al., 2020). However, “hydrogen-proofing” might be technically less feasible for import and regasification infrastructure. If this is the case, public resources will unavoidably be needed to make the necessary investments.

For this element of the transatlantic energy and climate pact, it is especially important to look beyond the EU and the US. This is because, on the one hand, LNG will also have to be imported from other places like Qatar in order to fully replace Russian gas in Europe. On the other hand, strategic independence from Russia must also be achieved by those countries that are immediately threatened by it (Ukraine, Moldova, Georgia) as well as by countries in the Western Balkans that seek to join the EU or have joined NATO. The Partnership for Transatlantic Energy and Climate Cooperation is likely the most suitable forum to extend cooperation to these countries.

Avoid new dependencies and vulnerabilities

Faced with the double urgency of war and climate change, the European Commission has launched a new package of proposals, dubbed “REPowerEU”, which would further raise the EU’s ambitions in renewable energy and energy efficiency (European Commission, 2022e). In the US, President Biden has also considerably increased his country’s climate ambitions. The problem is that China, another systemic rival and potential security threat to both transatlantic partners, has become increasingly dominant in green tech over the past decade (Grünberg, 2022; Ladislaw and Tsafos, 2020), notably in the manufacturing of wind turbines, solar photovoltaics (PV) and electric vehicles but also in requesting new patents and setting standards (IEA, 2022b). Moreover, critical raw resources needed for these technologies are in short supply in Europe, and even in the US (IEA, 2021). In contrast, Russia and China have large reserves of lithium, silicon, nickel, graphite, zinc and copper (ESGS, 2022).

In order to avoid creating new vulnerability to geopolitical blackmailing, as well as to reap the economic benefits of the green transition, the EU and the US must work together and with mutual partners to set up more diversified global green tech value chains. This is the second objective of our pact.
Securing green tech value chains involves, on the one hand, ensuring global access to critical raw resources from as many different players as possible (such as Australia, Chile and the Democratic Republic of the Congo) as well as recycling to retain raw materials (Rizos and Righetti, 2022). It also means creating infrastructure in partner countries for the production, distribution and export of renewable energy, for example through “green hydrogen corridors” advanced in the REPowerEU proposals. Coordination between the EU’s Global Gateway initiative and similar US infrastructure financing initiatives can be most useful in this regard.

On the other hand, the transatlantic economies must also regain a firmer foothold in the final production of green technologies. This does not mean that we should start clawing back market share in solar PV manufacturing by subsidising uncompetitive firms. It does mean that western countries must reflect on how to build stronger positions for their industries in newly diversified green tech value chains and to maximally exploit comparative advantages.

**Accelerate development and deployment of new technologies**

Regaining a foothold in today’s green tech value chains requires gaining a competitive edge through innovation. Moreover, reaching net zero greenhouse gas emissions by 2050 demands that we further develop and quickly deploy technologies that are only just emerging, such as green hydrogen systems, sustainable aviation fuels, floating offshore wind turbines, next generation electricity storage and carbon capture methods (IEA, n.d.).

Both matters require an industrial policy response. This has the potential to create friction between trading partners, particularly since in some areas economic competition between Europe and the US will prevail (e.g. solar panels and wind turbines). Some realism could help when there is competition: It is arguably preferable if either Europe or the US becomes a dominant player in a certain technology rather than China. In other areas, such as disruptive technologies, there might be mutual benefits in cooperation.

One point where cooperation could be mutually beneficial is the definition of common technical guidelines, for example for electric vehicle charging infrastructure, because it would allow the industry to scale up and reduce costs faster on both sides of the Atlantic without necessarily handing either side an edge. This specific example is already being addressed by the Trade and Technology Council (European Commission, 2022b).

The transatlantic pact should identify those areas where cooperation is possible and facilitate the creation of markets for new technologies once they leave the development stage, among others by supporting business-to-business contacts, as is currently being done directly in the margins of EU-US Energy Council meetings. Support could also come through initiatives such as the First Movers Coalition (US Department of State, 2021). The currently dormant Green Technology Alliance could become a forum for accelerating the development of technologies that are not yet ready to be scaled up, such as carbon capture.

**Avoid new trade frictions between EU and US**

When large economies like the US and the EU decide to pursue deep decarbonisation, it is bound to have significant extraterritorial implications for trade partners. To avoid unnecessary trade barriers and irritations that could hinder bilateral cooperation in other fields, it is imperative that a number of items are addressed ex ante, such as the use of subsidies and rules on green public procurement. The most important issue is the proposed carbon border taxes on both sides.

The EU is currently debating a proposal for a Carbon Border Adjustment Mechanism (CBAM), which would levy a tax on certain imported goods based on the amount of GHG emissions caused by their production (European Commission, 2021a). The aim is to create a “level playing field” for EU sectors subject to domestic carbon prices by de facto subjecting imports to the same carbon prices, if no such price is payed in the country of origin (mandatory CBAM certificates would cost the same as EU Emissions Trading System permits, any carbon prices paid in the country of origin would be deducted). This should also create incentives for partner countries and foreign firms to decarbonise their production. While this system covers only a limited range of carbon-intensive goods (i.e. cement, aluminum, fertilisers, electricity, iron and steel), it could serve as a blueprint for further developments.

In the US, which does not have a federal carbon price and would therefore be subject to the CBAM, this proposal has been met with reservation. A similar proposal has been launched by Democrats (Coons, 2021), which would tax imports depending on whether or not their origin country has climate policies that are deemed “at least as ambitious” as those of the US. The required tax amount depends on an artificial carbon price that reflects the costs of compliance to relevant US regulation. There are, however, important questions about the methodological and legal feasibility of these proposals, suggesting that a system based on explicit carbon prices is a better way forward (Leonelli, 2022).

Suspicion in Washington about the EU CBAM’s impact on bilateral trade is not entirely warranted. While it is true that
a focus on carbon prices alone would ignore the fact that emission abatement can also be achieved through other means such as regulation, the use of "embedded emissions" in the calculation of the CBAM amount should acknowledge that US industries have also made progress in reducing their carbon footprints. Article 7 of the current EU proposal says that embedded emissions in goods other than electricity shall be determined based either on the actual emissions – to be calculated in accordance with methods set out in the text itself – or, when that is impossible, by reference to default values also specified in the text. Consequently, goods with low or zero carbon content will pay low or zero CBAM.

Still, close cooperation with the US and other partners is needed, firstly because embedded emissions should be calculated in an internationally agreed manner to avoid disputes. The work on carbon footprinting in the Trade and Technology Council is a welcome start. More importantly, the EU and the US might want to cooperate to create an international climate club, an idea recently backed by Germany in the context of the G7. Such a club of countries would commit to stronger climate ambition and agree to coordinate policies, while taking some comparable measures such as similar explicit carbon prices and jointly introducing carbon border taxes on imports from third countries. The larger such a club would be, the greater the incentive for other countries to decarbonise and join it. A limited version of this has already been proposed under the Global Arrangement on Sustainable Steel and Aluminium (European Commission, 2021b).

Quickly setting up such a club and allowing for membership of countries that take serious climate action without the use of explicit carbon prices, like the US, would require a flexible approach, for example in the form of green certificates. These would testify that a certain firm’s products satisfy the standards of the club (for instance thanks to offsetting actions) and grant exemption from the carbon border tariff.

**Act as tandem in international climate diplomacy**

Finally, even the joint efforts of the EU and the US cannot achieve a global transition without calling on the international community to do its part too, since both economies together only account for about one-fifth of global greenhouse gas emissions. This will require more than confronting third countries with a joint carbon border tax.

Washington and Brussels agreed at the 2021 bilateral summit to set up a bilateral High-Level Climate Action Group (European Commission, 2022d), which has developed into a forum to coordinate global climate diplomacy. Discussions are ongoing in preparation for COP27 in Egypt later this year, where both partners will seek to advance implementation of the promises made in Glasgow, such as the Global Methane Pledge. They should further join forces to make countries that failed to increase their climate ambitions last time come forward with new proposals, especially wealthy countries like Australia.

Convincing emerging and developing countries to wean themselves off coal will be more challenging but must also be a priority. Coordinating activities under the Global Gateway and similar initiatives is a way to allow such countries to benefit economically from the global green transition while providing an alternative for China’s Belt and Road Initiative. It is, however, not enough to set them firmly on the track towards climate neutrality, or to finally fulfil the promise of $100 billion of annual climate financing by developed countries. Triangular partnerships such as the $8.5 billion Just Transition Partnership concluded between transatlantic partners and South Africa should therefore serve as a template for direct financial and technical assistance and be extended to other partners like India, Indonesia, Vietnam, etc.

**Concluding remarks**

The five objectives listed in this article are all highly relevant for transatlantic security and prosperity and grounded in healthy self-interest. Despite the political divisions around climate change that exist in a number of countries, we are optimistic that a pact built on these elements, especially the first four, can lead to a long-term and fruitful cooperation. Still, the past few years have shown that serious economic disruptions and security threats can materialise very quickly, and that our climates are changing faster than expected. Progress on all fronts should therefore be made as quickly as possible.

**References**

Coons, C. (2021, 19 July), Sen. Coons, Rep. Peters introduce legislation to support U.S. workers and international climate cooperation, Press Releases.

Dalton, M., G. Legorano and C. Eaton (2022, 25 March), U.S. to Boost Gas Deliveries to Europe Amid Scramble for New Supplies, Wall Street Journal.

Disavino, S. (2021, 21 December), U.S. to be world’s biggest LNG exporter in 2022, Reuters.

European Commission (2021a, 14 July), Carbon Border Adjustment Mechanism: Questions and Answers.

European Commission (2021b, 31 October), Questions and Answers: EU-US negotiations on trade on steel and aluminium.

European Commission (2022a), EU-US LNG Trade: US liquefied natural gas (LNG) has the potential to help match EU gas needs, https://energy.ec.europa.eu/system/files/2022-02/EU-US_LNG_2022_2.pdf (18 July 2022).
European Commission (2022b, 16 May), EU-US Trade and Technology Council: strengthening our renewed partnership in turbulent times, Press release.

European Commission (2022c, 25 March), Joint Statement between the European Commission and the United States on European Energy Security, Statement.

European Commission (2022d, 6 April), Joint Statement by Executive Vice-President Timmermans and US Special Presidential Envoy for Climate Kerry following the 6th EU-US High-Level Climate Action Group, Statement.

European Commission (2022e, 18 May), REPowerEU: A plan to rapidly reduce dependence on Russian fossil fuels and fast forward the green transition, Press Release.

European Council (2021, 15 June), EU-US summit statement: “Towards a renewed Transatlantic partnership”, Statements and remarks.

Eurostat (2022), Shedding light on energy in the EU: From where do we import energy?, 2022 Interactive Edition.

Grünberg, N. (2022), Green-tech rivalry will complicate US-China climate cooperation, Merics short analysis.

IEA (2021), The Role of Critical Minerals in Clean Energy Transitions, Part of World Energy Outlook, Flagship report.

IEA (2022a), A 10-Point Plan to Cut Oil Use, Fuel report.

IEA (2022b), Tracking Clean Energy Innovation: Focus on China, Report.

IEA (n.d.), Tracking Clean Energy Progress, https://www.iea.org/topics/tracking-clean-energy-progress (18 July 2022).

Jacobs, J. and S. White (2022, 2 May), French utility Engie buys US natural gas as Europe looks beyond Russia, Financial Times.

Ladislaw, S. and N. Tsafos (2020, 2 October), Beijing Is Winning the Clean Energy Race, Foreign Policy.

Leonelli, G. C. (2022), Practical obstacles and structural legal constraints in the adoption of ‘defensive’ policies: comparing the EU Carbon Border Adjustment Mechanism and the US Proposal for a Border Carbon Adjustment, Legal Studies.

Rizos, V. and E. Righetti (2022), Low-carbon technologies and Russian imports, CEPS Policy Insight, 2022-17.

Sheppard, D., S. Al-Atrush and D. Brower (2022, 2 June), Saudi Arabia ready to pump more oil if Russian output sinks under ban, Financial Times.

US Department of State (2021, 4 November), Launching the First Movers Coalition at the 2021 UN Climate Change Conference, Office of the Spokesperson, Fact sheet.

USGS (2022), Mineral commodity summaries 2022, Report.

Wang, A., K. van der Leun, D. Peters and M. Buseman (2020), European Hydrogen Backbone, Guidehouse.

Zachmann, G., S. Tagliapietra, B. McWilliams and G. Sgaravatti (2022, 17 March), Can Europe manage if Russian oil and coal are cut off?, Bruegel blog.