



# ADVANCING ENERGY AND CLIMATE AGENDAS IN TIME OF WAR: HOW DO WE MANAGE IT?

Plenary Meeting of the Club of Three  
Paris (Cercle National des Armées), 21-22 October 2022

## INTRODUCTION

The Franco-German-British leadership initiative, the Club of Three, held its annual Plenary meeting in Paris in October 2022. The meeting focused once again on the topics of energy and climate change, building on the 2021 Plenary held in London ahead of the UN COP26 summit.

Russia's invasion of Ukraine in February 2022 had brought a harsh geopolitical reality that had put energy security at the very top of the European policy agenda. In March, the European Commission had responded by announcing plans to end the EU's dependence on Russian oil and gas in its REPowerEU Communication. However,

Russia had dramatically hastened this radical policy shift by shutting down the Nord Stream 1 pipeline indefinitely in September.

Europe was now under serious pressure. Energy prices, which were already high before the war in Ukraine due to increased global demand post-Covid, were set to inflict severe pain on households and industry. It was clear that coping without Russian gas would not be easy and that Europe would have to significantly diversify its gas supplies with LNG imports, fast track renewables projects and better connect its energy networks. It would also have to accelerate hydrogen projects as well as maintaining its



**Left:** Ben Wilson (speaking), session III



**Right:** Isabel Hilton (speaking) during the first session

levels of nuclear production. This amounted to no less than an energy revolution.

Some 40 senior figures from business, politics, the media and academia in France, Germany, the UK and other European countries gathered at the Cercle National des Armées on 21 and 22 October to discuss these challenges.

The 2022 plenary was divided into three main sessions. The first one took place on

the Friday afternoon and addressed the issue of international climate talks post-Ukraine. It was followed by a discussion over dinner at the Maison des Centraliens dedicated to the Club of Three's traditional "Where are We Three?" theme. Plenary discussions resumed the following morning with two sessions on resource security, supply chains and global competition, and on European energy cooperation respectively.



**Top left:** Lord Turner (speaking via Zoom), first session; **Top right:** Louise Clarke-White and Victoire Newman  
**Bottom left:** François Le Goff and Katrin aus dem Siepen (German embassy), dinner; **Right:** Michael Maclay, final remarks

## MEETING PARTNERS

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**FRIDAY 21 OCTOBER**

**SESSION I – GLOBAL CLIMATE CO-OPERATION POST-UKRAINE: CAN WE  
KEEP UP THE PACE IN A MORE CONFRONTATIONAL WORLD?**

**Chair:** Isabel Hilton

**Speakers:** Stéphane Crouzat | Lord Turner | Friedbert Pflüger

The discussion began with an assessment of Europe's preparedness ahead of the winter, faced with the cessation of Russian gas supplies and prohibitive energy prices. One participant from Britain expressed confidence that Europe would be able to cope with this situation although the precise implications for the European economy and population were still unknown.

The good news was that Europe as a whole was entering the winter with very high gas storage levels, higher than they were in 2021/22, to a large part due to the fact that Russia had continued to supply gas until the summer.

Another advantage was that gas demand over the summer had been 15% below last year's levels during the same period. And in the industrial sector serious steps were being taken to reduce the use of gas. Renault for instance had reduced its consumption by 13% at all its sites in France and was aiming for a 17% reduction in 2023.

However, such efficiency gains were limited and further cuts would risk seriously damaging the competitiveness of the European industry, which is why efforts needed to concentrate on the commercial and residential building sectors.

It was estimated that reducing thermostats at home by one degree Celsius would save around 100 terawatt hours of electricity, while a 3-degree reduction would be

equivalent to about 20% of what Europe imported from Russia before the start of the war in Ukraine.

One of the German participants offered a sobering account of the great difficulties that Europe was facing going forward. There was a risk of de-industrialisation in Germany due to the reliance of its energy-intensive industry on cheap Russian gas until now. There were big lessons to draw from the war in Ukraine. For far too long, Germany had ignored the basic law of energy security: diversification. This applied to other critical areas too. It had prospered during the stable era of Pax Americana, outsourcing its security to the United States, its manufacturing to China and its energy supply to Russia. This was no longer sustainable.

New populist winds had been blowing in Germany since the start of the war. On the left, Sahra Wagenknecht of Die Linke had gained rapid popularity with her anti-sanctions stance. A worrying number of German SMEs were closing down and very large corporations like BASF were also experiencing deep problems. These huge socio-economic difficulties had forced Germany to act unilaterally and adopt a EUR 200bn energy support package without consulting its EU partners and at risk of distorting the EU's internal market.



The implications of this war for the energy transition were negative in the short term but rather positive in the medium term. More coal was going to be used in order to compensate for cuts to gas supplies. Germany, Austria, the Netherlands and others had announced that coal-fired power plants would restart production. The decision to phase out nuclear power production in Germany in particular had made this switch to coal even more inevitable.

However, by 2030, one of the participants anticipated that European gas demand would be much lower and that electricity from renewables would be a lot higher than it would otherwise have been.

There was also greater consensus on the need to keep existing nuclear power plants operating for as long as possible, including within the environmental community. Finland's Green Party for instance had adopted a pro-nuclear stance earlier this year. Overall, it was therefore more likely that the EU would meet its 55% GHG emission reduction target by 2030.

Outside of Europe, there were also signs of rapid change. In the US, the adoption of the Inflation Reduction Act was deemed a major boost for the energy transition. In other parts of the world, the highly volatile oil and gas prices had helped to build a strong economic case for various forms of zero carbon technologies including green hydrogen.

In China, the pace of renewables deployment was impressive and had further accelerated in 2022. At the end of last year, the country had about 630 gigawatts of installed wind and solar power capacity. President Xi Jinping had set a target of 1100 gigawatts by 2030 and at the present growth rate, this goal was likely to be largely exceeded. Paradoxically, China was building more coal-fired power plants in order to meet the

demand of its manufacturing sector post-Covid. But on a more positive note its GHG emissions were expected to peak earlier, by around 2027.

Collectively, the world was facing a colossal challenge to limit warming to 1.5 degree Celsius. In order to have a fighting chance, no more than 500 gigatonnes of GHG could be emitted into the atmosphere and unfortunately some of this carbon allowance had already been used since 2020, before emissions in countries like China had even peaked. China would then have just 30 years to reach carbon neutrality, half the time that the EU had given itself to get to this position.



**Top:** Ambassador Stéphane Crouzat (speaking) and Friedbert Pflüger, first session

**Bottom:** Bernard Spitz (speaking) and John Roberts

In 2021, the International Energy Agency (IEA) had made clear that all fossil fuel exploration had to stop, which in the present context was going to be nearly impossible to achieve. For Russia, oil and gas revenues were vital to prop up its war effort and ailing economy. The US was also sitting on very valuable reserves. Demand from Europe had sharply increased and a new Trump Administration in 2025 would certainly aim to support maximum exploitation of these resources.

The probability of significant progress as part of the COP process was very low. According to one of the French participants, Russia was now a non-entity in the international climate negotiations. And China was pushing back on agreed language in Glasgow, interpreted by some as a consequence of intensifying US-China relations over Taiwan. As a result, no communiqué could be adopted at the meeting of G20 energy and climate ministers in Bali at the end of August.

It remained to be seen what COP27 in Egypt would actually deliver. Progress on the issues of finance and adaptation would be considered as a good achievement. If at the end of COP26 in Glasgow chances of limiting warming to 1.5 degree Celsius were left hanging by a thread, one of the British participants noted that that thread was now getting increasingly thinner.



Frank Demaille (speaking) and Britta Sandberg, Friday afternoon session

## LIST OF PLENARY PARTICIPANTS

Marie-Hélène **BÉRARD** *MHB SAS* | Tom **BURKE** *E3G* | Rowan **BARNETT** *Google.org* | Louise **CLARKE-WHITE** *National Grid* | Philippe **COQ** *Airbus* | Ambassador **Stéphane CROUZAT** *French Ministry for Foreign Affairs* | Franck **DEMAILLE** *ENGIE* | Gilles **DE MARGERIE** *France Stratégie* | Victoire **DE MARGERIE** *Rondol Industrie* | Andrew **FRASER** *Mitsubishi Corporation* | Tim **GOULD** *International Energy Agency* | Uwe **HANNECK** *German Industry UK* | August **HANNING** *Pluteos* | Isabel **HILTON** *China Dialogue* | Matt **HINDE** *National Grid* | Armand **LAFERRÈRE** *Orano* | François **LE GOFF** *Club of Three* | Michael **MACLAY** *Club of Three* | Margarita **MATHIOPOULOS** *ASPID Technology Ltd* | Anne-Elisabeth **MOUTET** *The Telegraph* | Victoire **NEWMAN** *Gragus Ltd* | Wolfgang **NIEDERMARK** *BDI* | Wilfrid **PETRIE** *Tourville Invest* | Friedbert **PFLÜGER** *Strategic Minds* | Nicolas **PIAU** *Tilt Capital* | Andris **PIEBALGS** *European University Institute* | John **ROBERTS** *Atlantic Council's Global Energy Centre* | Norbert **RÖTTGEN** *Bundestag* | Maria **SICILIA SALVADORES** *Enagás SA* | Ambassador (Ret.) Michael **SCHAEFER** | Britta **SANDBERG** *Spiegel* | Bernard **SPITZ** *MEDEF* | Philip **STEPHENS** *Financial Times* | Lord **TURNER** *Energy Transitions Commission* | John Mark **WILLIAMS** *Institute of Leadership & Management* | Ben **WILSON** *National Grid*

## FRIDAY DINNER: WHERE ARE WE THREE?

The discussion that followed in the Salon Empire of the Maison des Centraliens reverted to the Club of Three's traditional "Where are we Three?" theme, with a focus on the European response to the energy crisis and war in Ukraine.

Concerns and frustrations over the poor state of relations between France and Germany dominated the conversations. There had been crises before, and the special relationship between the two countries had never been easy or straightforward. This relationship needed constant care and attention, which was in very short supply at present in both Paris and Berlin. The cancellation of the annual summit of French and German ministers in Fontainebleau, officially because of scheduling issues, was deeply disappointing. More than ever, France and Germany had to put their differences aside in order to effectively tackle the multiple crises that were hitting Europe.

Several decisions by the German coalition government were seen in France as inconsiderate. In the defence field, the announcement that Germany would purchase Israel's Arrow 3 anti-ballistic missile defence system and F-35 fighter jets from the US as part of its rearmament programme had been difficult to process. Equally, the German EUR 200bn support package and Chancellor Scholz's planned visit to Beijing with a business delegation were deplored as clear signs of a new 'Germany First' approach.

There was acknowledgement on the German side that mistakes had been made. The coalition government was responsible for communication failures and it had also not behaved in a European way, showing little understanding towards other EU Member

States. One of the participants explained that the EU's largest state had undergone fundamental changes since the start of the war in Ukraine. Until February 2022, arms exports would have been inconceivable. The German pacifist mentality that had prevailed after WWII was disappearing and military capability and readiness was now an essential element of foreign policy. All of this had shifted in the space of just a couple of months, if not less.

The Ukraine war and energy crisis had created the potential for a 'European moment' that unfortunately had not materialised. Chancellor Scholz did not seem interested in seizing this opportunity, one of the participants argued. On defence, this war had shown that even faced with the most profound challenge since WWII, Europe was still inclined to largely rely on the US for its security. American aid to Ukraine had been five times higher than combined European support.

In Britain, support for Ukraine was not going to change under a new Conservative government following the resignation of Liz Truss as Prime Minister. Her economic experimentation with vast tax cuts and deregulation to take advantage of the freedoms opened up by Brexit had ended in failure. According to one of the British participants, it was likely that the transfer of power would result in Rishi Sunak becoming Prime Minister, though Boris Johnson was planning a comeback and another senior Tory MP, Penny Mordaunt, was set to enter the leadership race. In truth, whoever won the premiership, he or she would preside over a deeply divided party and would have relatively little room for manoeuvre.

The possibility of an early general election could not be excluded. The Labour party under the leadership of Keir Starmer was enjoying a significant lead in the polls. But

Starmer had made it clear that he would not seek to bring the UK back into the Single Market. Re-joining the EU was a toxic issue and political suicide. A Starmer government would however, a British participant noted, be ready to cooperate with the EU where it could – on Galileo, Euratom and other European programmes – and be willing to fix the Northern Ireland Protocol. More generally, his government would be interested in what France and Germany had to say.

Under the Tories, relations with the EU were unlikely to change. The UK was on a trajectory of wide-ranging disengagement

with the EU. In a one of the latest developments, the British government had confirmed that it would stop funding and no longer participate in the European University Institute (EUI) in Florence. However, the European Political Community (EPC) provided a promising new framework for engagement. A French participant was dismissive of EPC's chances of providing a useful new institutional structure, and President Macron's proposal aroused less interest among continental speakers than amongst the British who were keen to find non-EU ways of collaborating with their European partners.



**Top left:** François Heisbourg (dinner); **Top right:** Philip Stephens, Gilles de Margerie and Matt Hinde  
**Bottom left:** Tom Burke and Sophie-Caroline de Margerie; **Bottom right:** Norbert Röttgen



**SATURDAY 22 OCTOBER**

**SESSION II – RESOURCE SECURITY, SUPPLY CHAINS AND GLOBAL COMPETITION:  
HOW CAN WE MAKE THE GREEN ECONOMY RESILIENT AND  
SUSTAINABLE?**

**Chair:** Norbert Röttgen

**Speakers:** Victoire de Margerie | Wolfgang Niedermark | Tim Gould

During the second Plenary session on the Saturday morning, it was pointed out that Europe needed to act decisively to secure stable and sustainable supply chains for zero-carbon technologies. The mistakes made with gas supplies and the over-reliance on Russia should not be repeated with critical materials. There was still time to act but European decision-makers would have to show determination and leadership.

The difficulty was that, unlike fossil fuels, these critical materials were concentrated in very specific parts of the world, and particularly conflict areas and countries with authoritarian regimes. Around 80% of global polysilicon production was currently located in the Chinese region of Xinjiang where religious minorities were being severely persecuted, while large parts of the aluminium production and also battery-grade

nickel came from Russia. Another critical material, cobalt, was mainly produced in the Democratic Republic of Congo (67%), and demand was predicted to significantly increase by 2040.

As a result, there was now much debate in Europe and the United States about reducing these dependencies through so-called “re-shoring” or “friend-shoring”. The US Inflation Reduction Act included many incentives in support of re-shoring and local production for instance. Another recent piece of US legislation, the CHIPS and Science Act, paved the way for very large investments to strengthen semiconductor manufacturing in America.

However, one participant warned that re-shoring would need to be carefully handled. Doing it too rapidly or too massively would



**Left:** Victoire de Margerie and Norbert Röttgen, session II (Saturday morning)



**Right:** Marie Hélène Bérard



risk bringing the cost of the energy transition up. In any case, diversifying clean energy supply chains would not be a quick process. Within the IEA, the view was that this process would play out over decades, not years.

In Europe, there was no appetite for following in the footsteps of America with an aggressive decoupling from China, particularly in Germany. The German business community was keen to strike a balance between cooperation, competition and respect for European values, however difficult this might be. It had acknowledged the joint statement of the Russian Federation and China issued in February 2022, which declared that the world had entered a “new era of globalisation” with a profound transformation of the global governance architecture, and had accepted this. Instead of talking about decoupling, the Federation of German Industries (BDI) had embraced the notion of a new globalisation era, which it interpreted as the end of global convergence. The old system was not dead yet and the new one not yet born.

In order to find a path through these murky waters, the BDI was advocating the concept of “responsible co-existence”: cooperating where possible while being firm on values. It remained to be seen however how far Germany and other European countries would be willing to go in defending values in the event of a confrontation with an ever more assertive China under President Xi Jinping’s third term. For some German multinational companies, the aim was above all to keep a presence in the Chinese market. It was crucial to involve them in European strategies vis-à-vis China but the reality at present was that little interest had been shown in them.

There were four ways in which Europe could reduce its dependence on critical materials.

Firstly, industry could reduce the amount of these materials needed for the production of clean energy technologies. Significant steps had already been taken in this area. One of the French participants noted that the amount of cobalt used to make EV batteries had already been halved, in part due to technology developed in California.

Secondly, substitution materials needed to be developed fast. There were already promising alternatives such as lithium-sulphur and sodium-ion batteries, and these chemistries were abundant in Europe. However, the EU was not currently subsidising these new technologies. The most advanced sulphur-based alternative was currently being developed by a start-up in Texas with the support of Breakthrough Energy Ventures, a Bill Gates venture fund. Sodium-based batteries were mainly being developed in France and Switzerland, again thanks to private finance. Governments and big industry absolutely needed to get behind these technologies in order to move to commercial production.

Thirdly, new recycling chains had to be put in place. Europe had large materials and recycling companies like Umicore in Belgium but they were not always using the most modern technology. One of the best technologies for recycling critical materials was currently being developed in the US, again in Texas with finance from a UK-based fund and the backing of the US Department of Energy.

Last but not least, mining would have to re-start in Europe. There could not be stable and resilient supply chains for clean energy technologies without it. Today, there were not enough batteries in use to operate recycling plants. Europe was still about 8 years away from commercial recycling capacity and even then mining would still be

required to cope with soaring demand as the energy transition got properly underway.

Public acceptance was a major issue. Mining in Europe still had a very bad reputation and the coal mining disasters of the 19th and 20th centuries were deeply ingrained in the public mind. This was in sharp contrast with the reality of mining today. New technology had made it possible to re-start mining in California, a US state that was traditionally against it. Thanks to the dry tailings process, lithium mining now only required 5% of the water used 10 years before. And a technology developed for nickel mining in Australia required 5-10% of the energy previously used.

Mining projects were very capital intensive however. One of the participants was of the opinion that they would struggle to get off the ground without an inclusion in the EU taxonomy rules for sustainable activities.



**Top:** Tim Gould (speaking) and Wolfgang Niedermark

**Bottom:** Tom Burke

**SATURDAY 22 OCTOBER**

**SESSION III – BEYOND POLITICS: UNLEASHING THE POTENTIAL OF EUROPEAN COOPERATION TO TACKLE ENERGY SECURITY & CLIMATE CHANGE**

**Chair:** Nicolas Piau

**Speakers:** Andris Piebalgs | Ben Wilson | María Sicilia Salvadores

European solidarity was being seriously tested by the war in Ukraine and its consequences for Europe's energy supplies. There had been a resurgence of nationalistic tendencies among some countries, one of the most vivid examples being the German energy relief package. Moreover, EU member states were lagging behind on the implementation of joint support mechanisms. Five years after the adoption of the EU regulation on the security of gas supplies, only six bilateral solidarity agreements had been adopted, mostly between Baltic states. Such deals had also been signed between Germany and Denmark and between Italy and Slovenia. Under these deals, neighbouring countries committed to help each other in the event of a severe gas crisis. One participant added that, in the Baltics, the political logic that each country should have its own LNG terminal in order to

guarantee its security of supply risked pushing gas prices up if these efforts were not coordinated.

The European Commission had taken a number of steps that could change this dynamic, notably EU plans on the joint procurement of gas. Joint purchasing would ensure that EU countries could have access to gas supplies at a relatively affordable price. It would also help bridge the gap left by the absence of Russian gas – estimated by about 100 billion cubic metres – at the start of the next filling season ahead of Winter 2023/24. Proposals to help reduce EU gas demand by 15% this winter were also welcome by participants.

These proposals reflected a new energy orthodoxy which saw the EU thinking more strategically and ahead of time when it came to energy supplies. In the past, it had too



**Left:** Andris Piebalgs (speaking via Zoom), session III



**Right:** Nicolas Piau



heavily relied on markets to correct supply imbalances. The foresight that the EU was now showing in this area was a positive step although some participants felt that it was still not strategic enough and that a comprehensive plan was needed to deal with the next winter season, which posed an even greater challenge.

Some regions of Europe, such as the North Sea, had the potential to make a very large contribution to its energy security thanks to extensive network of interconnectors. There were currently five interconnectors linking the UK to France, Belgium, the Netherlands and Norway, and a sixth interconnector between the UK and Denmark, Viking Link, was being built. These interconnectors were going to play a very important role this winter. The one linking the UK to France, which was traditionally used to export excess French nuclear power to the UK, was now exporting electricity to France since nuclear production had dropped due to maintenance work at a number of French installations. Gas interconnectors had also been exporting to the EU at full capacity since the start of the war in Ukraine. The UK had large LNG import capacity, which meant that LNG from various part of the world was currently flowing to the rest of Europe via Britain. This was a good display of European solidarity.

The North Sea was on course to become Europe's renewable energy powerhouse. The UK was already the world's second largest installed offshore wind capacity after China, with around 12 gigawatts, and it aimed to increase this capacity to 50 GW by 2030 and 75 GW by 2050. These targets were all the more achievable now that the energy trilemma between decarbonisation, affordability and reliability was gone, one of the participants from industry pointed out. Renewable energy was cheaper than fossil fuels and grid operators were now solving

the problem of intermittence.

The next generation multi-purpose interconnectors which could pick up wind power along the way and connect offshore energy hubs represented a major step towards an integrated North Sea grid. Until now, offshore wind and interconnectors operated alongside each other.

These developments would require cooperation between neighbouring countries and unfortunately the UK has been excluded from the main intergovernmental body, the North Seas Energy Cooperation (NSEC) mechanism, following Brexit. However, the announcement at the EPC Summit in Prague that there could be a path for the UK to rejoin the NSEC was welcome by industry and outgoing Prime Minister Liz Truss had to be credited for this.

Other regions like the Iberian Peninsula also had an important contribution to make in terms of energy security but it was currently poorly connected to Europe. And this was despite Spain having a third of the EU's total regasification capacity. The lack of infrastructure in place to link the country to the rest of Europe meant that only small amounts of gas were being exported. The MidCat pipeline project, which could have been an important element of Germany's energy security, had been under deliberation for years only to be eventually scrapped over regulatory and funding issues. One participant from industry deplored the lack of support that this project had received from France and the European Commission. The new underwater 'BarMar' pipeline that had been agreed between Spain, France and Portugal was a welcome step although it would not come on stream in time to solve the current energy crisis.

In the long run, BarMar was going to be critical to the supply of green hydrogen to

Europe. The Mediterranean corridor was one of three main routes through which imports of green hydrogen from third countries would flow. In total, about EUR 35-50bn would be required to develop storage and pipelines for the fuel in Spain. One of the main obstacles to the rapid development of such infrastructure was complex planning rules, according to a participant. Post-Covid supply chain bottlenecks were another factor. The participant called for the use of exceptional measures under Article 122 of the Treaty on the Functioning of the European Union, which she noted the European Commission was increasingly resorting to, as well as 'helicopter money'. Without these, the EU goal of consuming 20 million tonnes of hydrogen and ammonia by 2030 would be difficult to attain. Waiting for the hydrogen market to grow organically was not an option.

## CONCLUSION

Although it was entering the winter season relatively well prepared in terms of storage levels, the end of cheap and readily available Russian gas supplies was going to require important infrastructure changes in Europe going forward. Much still needed to be done to properly connect regions such as the Iberian Peninsula to the rest of the continent. Other regions like the North Sea were currently better suited to make a significant contribution to the energy security of Europe due to its already existing network of interconnectors. The announcement in Prague that there could be a path for the UK to re-join the NSEC cooperation mechanism was a positive step.

European unity and solidarity had been seriously tested by the war in Ukraine. Germany's unilateral EUR 200bn support package had been strongly criticised by its

European partners. The country appeared isolated in the EU and its relationship with France was at an all-time low. This in part reflected the fundamental changes that it had undergone since the start of the war.

On the other hand, proposals put forward by the European Commission in response to the energy crisis showed that the EU was beginning to think more strategically and to anticipate when it came to energy supplies. This change of outlook was essential in order to cope with the 2023/24 winter season which posed an even greater challenge in the complete absence of Russian gas.

Equally, Europe could not afford to repeat the same mistakes by continuing to be overly reliant on some countries for critical materials in the clean energy sector. The development of alternative chemistries for EV batteries was not sufficiently being supported. Recycling was also key and, more crucially, mining needed to re-start on the continent.

The implications of the war for the energy transition were deemed to be negative in the short term but rather positive in the medium term. By 2030, European gas demand was likely to be much lower and electricity from renewables a lot higher than it would otherwise have been. But there was less optimism regarding international climate talks. The probability of significant progress as part of the COP27 in Egypt was very low. Chances of limiting warming to 1.5 degree Celsius were increasingly drifting away.