



EUROPE'S ENERGY TRANSITION: EMBATTLED BUT NOT IN DANGER?

Club of Three Plenary Meeting
Berlin (Hotel de Rome), 6/7 October 2023

INTRODUCTION

The Club of Three held its Plenary meeting in Berlin in October 2023. It was the third consecutive time that its largest annual event was dedicated to the topic of climate and the energy transition, following two very successful Plenaries in London and Paris.

The Berlin Plenary was taking place under rather different circumstances from the previous year in Paris. The energy crisis had eased but there was still significant concern about the tough socio-economic conditions that Europe had to deal with, as well as a backlash in some countries against the implications of moving to net zero. It was unclear what this would mean for the energy

transition. Overseas, one of the major developments since the previous Club of Three Plenary was the negative effect that the US Inflation Reduction Act (IRA) was having on the development of clean energy technology in Europe. And at home, with higher energy prices, supply chain vulnerabilities, a cost of living crisis and a less competitive European industry, there was a growing realisation among businesses and politicians that implementing the energy transition was not going to be easy.

It is against this background that the Berlin Plenary, entitled “Europe’s energy transition: embattled but not in danger?”, was held.



Left: Bernard Spitz (Friday session)



Right: Norbert Röttgen and Sir Philip Lowe (speaking)

Some 40 senior figures from business, politics, the media and academia in France, Germany, the UK, and other European countries gathered at the Hotel de Rome in the central area of Mitte to discuss these challenges.

As customary for Club of Three meetings, the event was divided into three sessions over a Friday and a Saturday, each looking at current European decarbonisation efforts and energy systems through various lenses: socio-economic, geopolitical, and industrial.

The Friday dinner, held at the residence of the French ambassador, focused on Ukraine and European defence and security – a traditional Club of Three theme which had important implications for the energy transition. The keynote speaker for that evening was General Christian Freuding, Director of Planning and Command Staff and Head of the Ukraine Situation Center at the German Ministry of Defence.



Top left: Maria Sicilia Salvadores (Saturday sessions); **Top right:** Anne-Laure de Chammard (centre)
Bottom left: Hotel de Rome (Pall Court Ballroom); **Right:** Shahin Vallée (Friday dinner)

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FRIDAY 6 OCTOBER

**SESSION I – THE CHANGING GEOPOLITICAL, TRADE & MACROECONOMIC
LANDSCAPE: WHAT SORT OF TRANSITION CAN WE EXPECT NOW FOR EUROPE?**

Chair: Maria Sicilia Salvadores

Speakers: Hans Koeppel | Sir Philip Lowe | Holger Lösch

The first session on the Friday afternoon looked at the complicated international environment in which the energy transition now had to be delivered in Europe, with a specific focus on energy markets and other external pressures such as the impact of the US IRA, as well as the level of European preparedness ahead of the 2023-24 winter.

The energy crisis aggravated by Russia's invasion of Ukraine had put Europe in a state of emergency in 2022. One year on, were we finally out of the woods? The general feeling in Berlin was that the crisis had been well managed, and that Europe was now in a reasonably comfortable position. Blackouts had been avoided last winter, gas prices had fallen sharply, and gas reserves were up despite ending our energy dependency on Russia. Improvements had also been made to the energy infrastructure, notably in terms of liquid natural gas (LNG) terminals.

Furthermore, ongoing difficulties with the Chinese economy had meant that China's gas rebound since abandoning its zero-Covid policy had not been as significant as anticipated. This had lifted some of the pressure that Europe was under when accessing gas on the global market.

However, there was no reason for complacency. Russia's attempts to weaponise energy supplies had failed to produce results in part because of a warm winter, and it still had the capacity to disrupt markets. There was a concern that Russia

would successfully manipulate the oil market to raise petrol prices ahead of elections in Europe and the US next year.

In Germany, in order to ensure that gas reserves did not run down extensively during the incoming winter, the federal government had recently announced that coal-fired power installations would remain online until March 2024.

During the discussions, a participant from the UK warned that plans for the expansion of natural gas through the Southern Gas Corridor could not be taken for granted in light of regional tensions between Azerbaijan and Armenia. Azerbaijan had long been considered a reliable partner for Europe. The question now, in the wake of the exodus of Karabagh Armenians, was whether it would be regarded as a suitable partner. Problems concerning the cost of long distance transport across the Caspian, through the Caucasus and then onwards to Europe, also had potential adverse consequences for the delivery of green hydrogen under the EU's strategic partnership with Kazakhstan.

On several occasions, participants insisted on the need to inject a degree of realism in the current debate about the energy transition. Other major themes that dominated the discussions were affordability, pragmatism, and public acceptability of net-zero plans, and even more importantly the trajectory chosen by governments to get there. The European industry in particular

was confronted with real difficulties as it had to implement the energy transition in a radically new and very tough global context in terms of trade and geopolitics. The Covid pandemic had significantly disrupted supply chains and the war in Ukraine had further revealed the vulnerability of the system that underpinned world trade. As a result, serious questions were now being raised over whether the 2030 climate goal set by the EU in its 2021 'Fit for 55' legislative package could be achieved.

One participant from Germany pointed out that too much emphasis had been placed on target-setting rather than on delivery. What industry desperately needed was business models that worked, a better way to incentivise green investment, and what one participant called a “simplification shock” in the EU regulatory field. It was hoped that the European Commission would pay more attention to these demands during its next 2024-2029 legislative term.



Top: Hans Koeppel (speaking); Friday session



Bottom: Holger Lösch

LIST OF PARTICIPANTS

Majdi **ABED** *TotalEnergies* | Rowan **BARNETT** *Google.org* | Anne-Laure **DE CHAMMARD** *Siemens Energy* | Pascal **CHALVON DEMERSAY** *Solvay* | Andrew **FRASER** *Mitsubishi Corporation International (Europe) Plc* | Uwe **HANNECK** *German Industry UK* | August **HANNING** *Pluteos* | Rebecca **HARDING** *British Foreign Policy Group* | Matt **HINDE** *National Grid* | Hans **KOEPEL** *German Foreign Office* | Christof **KUTSCHER** *Bergos AG* | François **LE GOFF** *Club of Three* | Stéphane **LEVY** *Equinor* | Holger **LÖSCH** *Bundesverband der Deutschen Industrie (BDI)* | Sir Philip **LOWE** *Oxera Consulting* | Michael **MACLAY** *Club of Three* | Margarita **MATHIOPOULOS** *ASPID Technology UK* | Anne-Elisabeth **MOUTET** *The Telegraph* | Wilfrid **PETRIE** *Tourville Invest* | Friedbert **PFLÜGER** *Clean Energy Forum Foundation* | Nicolas **PIAU** *Tilt Capital* | Andris **PIEBALGS** *European University Institute* | Frank **RADTKE** *GEPA Group* | Sarah **RAINE** *International Institute for Strategic Studies* | John **ROBERTS** *Atlantic Council's Global Energy Centre* | Norbert **RÖTTGEN** *Bundestag* | Artur **RUNGE-METZGER** *Mercator Research Institute on Global Commons and Climate Change* | Laura **SANDYS** *Green Alliance* | Ambassador (Ret.) Michael **SCHAEFER** | Bernd **SCHÄFER** *EIT RawMaterials* | Maria **SICILIA SALVADORES** *Enagás SA* | Bernard **SPITZ** *MEDEF* | Eric **STAB** *ENGIE* | Ana **STANIC** *E&A Law* | Keith **STEPHENS** *National Grid* | Claire **THIRRIOT-KWANT** *French Embassy Berlin* | Natalie **TOMS** *British Embassy Berlin* | Shahin **VALLÉE** *DGAP* | Peter **WATKINS** *Chatham House* | John Mark **WILLIAMS** *Institute of Leadership and Management* | Marc **WEISSGERBER** *E3G GmbH*

Taking a more pragmatic approach to achieving climate goals especially important as the adoption of the US IRA had put the European industry under severe pressure. The brilliance of the IRA was its simplicity: incentives through tax breaks. With only very limited competence over tax matters, the EU was struggling to remain as attractive to investors in clean energy technology.

However, a German government official indicated that the risks related to clean tech development in Europe were now receding slightly. The main problem for Europe was the lower cost of energy in America which gave its industry a strong competitive advantage. This was not going to go away.

In order to navigate through these very tough times, it was imperative for Europe to carefully balance the three key elements of the so-called energy trilemma: sustainability, reliability and affordability. More efforts were also required in the area of energy efficiency which had so far not drawn a huge amount of political interest.

One of the participants from Britain noted that the majority of politicians understood and adhered to net-zero objectives but were increasingly concerned about the economic pain that embarking on the energy transition was going to involve for their constituents.

In Germany, the automotive industry had succeeded in pushing back national and EU deadlines for the phasing out of internal combustion engines, and in the UK, Rishi Sunak's government was dialling down local charges and target dates that appeared to put a burden on parts of the population.

It seemed that all the changes that could be done at a reasonable cost had already taken place, and that what lay ahead were much bigger changes involving much bigger sacrifices. According to one participant, too much was currently expected of consumers.

Industry could finance itself over 15- to 20-year contracts through Feed-in Tariffs (FiT) or Contract for Difference (CfD) while consumers had to self-finance up front. This imbalance had to be properly corrected. And rather than forcing change upon them, consumers had to be offered options that they felt comfortable with.



Top: Laura Sandys (Friday session)

Bottom: Nicolas Piau

FRIDAY DINNER

During dinner at the residence of the French Ambassador, General Christian Freuding outlined what Germany's *Zeitenwende* of February 2022 meant for the country going forward in terms of defence and security. It was a profound change in its strategic culture which signalled an end to the so-called peace dividend. Germany was now ready to assume a position of military leadership in Europe. It first had to enhance its combat readiness. As a result, Germany was going to reach the NATO target of 2% of GDP for defence spending in 2024 with the help of a €100bn fund set up to modernise its armed forces. This meant purchasing the best equipment that was available on the market at the present time, including F-35 fighter jets.

There were three main categories of risk however that could undermine *Zeitenwende*. Firstly, recruiting military personnel was a major challenge. Secondly, defence spending had to be further increased. Thirdly, this mindset change in Germany needed to be sustained in the long run.

France, Germany, and the UK had a key role to play in further developing a common strategic culture in Europe. This was facilitated by years of Franco-German, UK-German and Franco-British cooperation in the defence field, which was going to increase in years to come. The recent reaffirmation of a Franco-German commitment to develop the Main Ground Combat System (MGCS) following previous setbacks and delays was seen as a positive step forward. But was this going to be enough to face the threat posed by Russia and the prospect of a US disengagement in Europe in the long term? Europe needed to move with speed and scale.

One French participant said that the *Zeitenwende* had initially raised a great deal of enthusiasm in France, as it was seen as a sign that Germany was moving towards the idea of strategic autonomy. One year on however, there was a deep sense of disappointment in Paris with some of the decisions Germany had made in areas such as the European Sky Shield and the Future Combat Air System (FCAS).

The view from London was more positive. The *Zeitenwende* was seen as the right direction of travel. The UK was facing similar issues with recruitment, and so was France. The war started by Ukraine was going to be a long conflict and therefore Europeans would need to think long and hard about how to bolster their defence capabilities and provide credible deterrents in future.



Top: General Christian Freuding (speaking), French embassy

Bottom: Welcome remarks by French Minister-Counsellor Emmanuel Cohet

SATURDAY 7 OCTOBER

**SESSION II – RESOURCE SECURITY, SUPPLY CHAINS AND GLOBAL COMPETITION:
ARE WE SUCCEEDING IN OUR QUEST FOR GREATER AUTONOMY?**

Chair: Ana Stanič

Speakers: Andris Piebalgs | Rebecca Harding | Bernd Schäfer

Since Russia's invasion of Ukraine, and specifically the attack on the Nord Stream 2 pipeline, the security of European energy supplies had become a major concern with wider implications for the energy transition plans and climate goals. For several years already, cyber-attacks on critical infrastructure such as grids and pipelines had been part of grey-zone tactics used by Russia in its confrontation with the West. Whoever was behind it, the Nord Stream 2 incident had shown that acts of traditional sabotage were now also a real possibility and that small-scale operations could inflict huge damage.

Could plans to develop an extensive offshore power grid in the North Sea be at risk? According to one of the participants, grids posed a particular risk due to their limited resilience. However, he was of the opinion that although a major attack on European

energy infrastructure could not be excluded, it was not highly likely at this stage.

The EU had taken steps to improve its legal framework for the protection of critical infrastructure with the adoption of the Critical Entities Resilience (CER) Directive and NIS 2 Directive on cybersecurity. But most of the measures in these new EU laws were not expected to bring results before mid-2026 at the earliest.

NATO could be a very important ally to minimise the risks to energy infrastructure. In early 2023, the EU and NATO had agreed to set up a joint task force to protect critical infrastructure and NATO had also created a new Critical Undersea Infrastructure Coordination Cell at its headquarters in Brussels.

From an investment point of view, the fact that the European energy infrastructure was



Left: Andris Piebalgs **Right:** Ana Stanič



now at risk was a worrying prospect. Project finance had until now been a fairly straightforward activity. Financiers could handle many different types of risks but one category of risk they could not absorb was terrorism and acts of sabotage. A participant from France asked whether there could be a public funding mechanism for energy infrastructure projects similar to the one available under the Vienna Convention on nuclear damage.

Another participant made the point that regulation in Europe was currently militating against long term investment in the energy transition and also the development of robust supply chains because the rules tended to be primarily geared towards the support of large scale projects. Liquidity ratios were preventing banks from incentivising smaller businesses within the supply chain where the gaps were and regulation was failing.

Standardisation was also extremely important. Without it, scaling up the energy transition was going to be difficult. Industry was presently overwhelmed by large volumes of codes and standards that they had to comply with. Greater visibility on net-zero plans beyond 2030 was also necessary.

Security around the supply of critical materials for the energy transition was another key theme during this session and one that had also been under particular scrutiny during the 2022 Plenary in Paris. There was growing rivalry globally over access to rare earths. Europe was at a disadvantage compared to other competitors. Only 3% of the critical materials used in Europe to build wind turbines and other types of clean technology come from domestic sources.

To address this situation, the EU had adopted a series of new laws including the

European Chips Act, a Delegated Act on Hydrogen, and the Batteries Regulation. The main challenge now was to turn these Acts into action.

Re-starting European mining and the recycling of mineral-rich products and equipment were two major elements of the EU's strategy. One participant noted that there was a misperception that Europe was poor in resources. Some 100 investment cases in Europe were currently being evaluated by the European Raw Materials Alliance. Europe's main problem is that it was poor in exploration and too rich in regulation, the participant added.

It was going to take some time before European demand for these materials could be properly supplied by domestic mining. Although countries like Poland and Hungary were growing their exports of lithium, it would take 30 years for them to catch up with China at the present rate of production. This was also true for the recycling of waste electrical and electronic equipment (WEEE). Exploiting so-called 'urban mines' was going to require very significant investment in the circular economy.



Rebecca Harding (speaking), Saturday sessions

Europe's best bet right now was to continue to diversify its supplies of critical materials from overseas, and over the past year the EU had signed strategic partnerships with Namibia and Kazakhstan. Europe had to rethink its relations with the Global South if it wanted to secure supplies in the long run as it no longer had the leverage that it had enjoyed in the past. The war in Ukraine had shown that BRICS countries and others in the Global South were increasingly keen and able to assert their own national interests and that these were not necessarily aligned with those of the West. Friend-shoring would therefore not be sufficient. If it wanted to compete globally with other resource-hungry

economies, Europe had to build partnerships that appeared less one-sided and conditional.

Moreover, more attention needed to be paid to the seabed, particularly in the Arctic region. The melting of the ice cap was opening up access to new resources, which was going to cause geopolitical tensions in an area that was until now relatively stable despite competing territorial claims between Russia, Canada, the US and other neighbouring countries. Long before its invasion of Ukraine, Russia had begun significantly to step up its activities in the region, including militarily.



Top left: Matt Hinde; **Top right:** Bernd Schäfer (speaking)

Bottom left: Peter Watkins (speaking); **Right:** Artur Runge-Metzger (speaking)

SATURDAY 7 OCTOBER

SESSION III – BUILDING A STRONG AND COHERENT GREEN INDUSTRIAL BASE IN EUROPE: DO WE HAVE THE VISION AND WILL?

Chair: Laura Sandys

Speakers: Keith Stephens | Anne-Laure de Chammard | Friedbert Pflüger

The final session was dedicated to industrial policy and what was required to build a European industrial base that could deliver the energy transition. The first observation made was that European countries often lacked a “vue d’ensemble” or overall strategy when it came to industrial policy. In the UK, for instance, wind farms were being built but not the road network that led to them. Energy storage was also largely underdeveloped. The architecture of the new system needed to be built in a much more integrated way.

Participants were also reminded not to sideline the European population. People could veto net-zero plans. New industrial strategies had to therefore deliver results for local communities and governments had to demonstrate that there was a clear

decarbonisation dividend at the end of this journey in terms of growth and jobs.

An industry representative noted that jobs, skills, and training were actually a major issue in the energy transition sector. This seemed to be a problem across the board as a parallel was made with the recruitment challenge highlighted by General Freuding for the military. This had to become an urgent priority for Europe, requiring close cooperation between governments and industry, and a long-term vision.

Planning reform was another necessity. As one participant put it, there could not be an energy transition without energy transmission. Right now, around 300 gigawatts of new clean energy projects were waiting to join the grid in the UK, and France and Spain were in a similar situation.



Left: Friedbert Pflüger (speaking), final session



Right: Anne-Laure de Chammard and Keith Stephens

In Britain, it typically took ten years to build a new power transmission line, seven of which were spent on the planning process. UK plans to reform the planning system were seen by industry as a very positive step.

The example to follow in terms of strategic thinking and forward-looking plans was the Netherlands. In April, a consortium led by Dutch grid TenneT had signed contracts worth €30bn for 14 offshore grid connection systems in the North Sea. This was to-date the largest tender for award for energy transition infrastructure and it had been done without having assigned specific projects.

The North Sea had the potential to become a renewable energy powerhouse for Europe. Every GW of electricity produced by offshore wind in the North Sea resulted in a significant reduction in LNG imports from North America and the Middle East. At the political level, good progress had been made in relations between the UK and EU. The Windsor Framework agreed in February had significantly enhanced Britain's ability to cooperate with its European partners on energy in the North Sea.

However, 45% of the technologies needed to achieve net-zero objectives by 2015 were still not commercially available or simply did not exist. In order to develop these technologies quickly and be in a position to roll them out at scale, industry had to be heavily subsidised in the way that China had done it with its PV sector and the UK for offshore wind.

The Normand'Hy 200 MW electrolyser project led by Air Liquide and Siemens Energy and supported by the French state, was a good example of cooperation between governments and industry to develop large-scale hydrogen production in Europe.

But there were also many examples of policy initiatives that were unhelpful and

problematic. The European Commission's proposed blanket ban on PFAS (per- and polyfluoroalkyl substances) for instance risked disrupting the energy transition at a time when industry needed support. PFAS was used in wind turbines and electrolyzers. The strategic consequences of this ban were largely under-estimated, one of the participants noted.

One of the German participants believed that the current European Commission had been too ideological and prescriptive in its approach to policymaking. The ban on combustion engines by 2035 had shut the door on the development of synthetic fuels as an alternative.

Given the problems with supply chain saturation, the move from a "just in time" to a "just in case" model, and global competition for critical materials, had it been wise to go all in with electric cars in what appeared to be a very short period of time? The success of electric cars depended on Europe's ability to secure robust and sustainable supply chains and on a rapid drop in manufacturing costs. All low-carbon options had to be pursued in order to minimise the risk of moving from one dependency (fossil fuels) to another (technology and critical materials).

CONCLUSION

The 2023 Plenary highlighted the difficult economic and geopolitical environment in which Europe was having to deliver the energy transition and the implications in terms of the security of supply for both energy and critical materials.

During the sessions, there were calls for more pragmatism in achieving net-zero goals but without abandoning our ambitions. Much more should be done at the policy level to facilitate this transition, notably by simplifying

overly complicated rules. Useful lessons could be drawn from the success of the US IRA in this regard.

There were concerns that Europe might miss its 2030 targets if it continued to be too prescriptive in its approach to policymaking. Technologies should not be pitched against each other. We needed them all, and we needed to use them in a more blended way.

Mining exploration and new framework conditions for the production of green technology were urgently required to maintain a strong green industrial base in Europe otherwise this production would soon move to China in the same way as Europe lost its PV industry over a decade ago.

Above all, the energy transition desperately needed to be seen as a major opportunity rather than a challenge. Crucially, governments and industry had to bring European citizens with them on that journey and show the benefits of the decarbonisation dividend much more clearly as there were growing signs of hesitation on the costs of climate and energy goals across Europe.



Concluding remarks: Club of Three Chairman Michael Maclay, Saturday sessions