



EUROPE'S MOMENT?

THE WAY AHEAD FOR SECURE ENERGY IN THE EU AND THE UK

European policy makers are living through seismic shifts, and energy is at the centre of these changes. Geopolitical tensions, shifting trade dynamics, and economic reorientation are playing out, with Europe caught between pressure on its eastern border and uncertain protection from across the Atlantic. Weaponization of energy and global trade is increasingly real and apparent. The open seas for energy trade are no longer taken for granted. Amid concerns of geopolitical threats and economic resilience, the energy transition seems to take a back seat.

We argue there is a clear path forward for the energy transition that supports both

competitiveness and security. It is ambitious and requires closer integration, capital mobilization and deliberate policy. Europe is at a crossroad: today is the moment to choose decisively to build a reliable energy supply. This allows us to phase down and out of fossil fuels and decouple our economies in an orderly fashion from the price volatility and geopolitical dependencies of oil and gas.

Once Europe commits to this path, capital will follow. Regulatory direction is increasingly seen as “market-making” by investors. This started with decarbonization, but in the new context security will be pivotal. This puts a premium on investments that support

geopolitical resilience. Electrification will be the main beneficiary of this security premium, as it combines positive business cases with energy independence. This can set off a positive spiral that brings capital to a Europe marked by both low security risk and low political risk.

This is not an easy path, but we must live up to the occasion to safeguard our security, our values and our economic wellbeing. As the EU announced its Clean Industrial Deal and the UK Climate Change Committee announced

its 2040 pathway, we want to bring forward five observations on what matters for leaders in Europe's fast-moving debate with a new emphasis on security and resilience.

1. THE EU DIRECTION IS NOT UNDER DEBATE: SHIFTING TO A RENEWABLE ENERGY SYSTEM IS NECESSARY, EXACERBATED BY TODAY'S GEOPOLITICAL CONTEXT

Populist rhetoric, sloganeer politics and media outcries may make it seem like the Green Deal is at risk. However, the majority of policymakers, companies and citizens still aim to achieve the Green Deal, but in a more practical and inclusive way. Signals from the US add further urgency to the shift to an affordable and locally reliable energy system.

- The EU is a fossil resource-poor continent and imported 63% of its primary energy in 2022 – the highest level since 1990.¹ This implies a significant disadvantage to China whose domestic resources cover 80% of energy use,² and to the US which is a net exporter.³ This gap will further increase as these regions use their fossil fuel reserves or build out cleantech faster. As access to cheap energy is crucial for global competitiveness, this is a critical juncture for the European economic model and future prosperity.

- Scaling renewables will lower energy costs and strengthen our energy independence. Solar panels and wind turbines keep running once installed, while fossil fuels are burnt upon use. Our research on North-West Europe shows that the total system cost for renewable power is lower than fossil fuels, including storage and grid. The cost per marginal unit of power goes down until you reach ~80% variable wind



“MOST POLICYMAKERS AND COMPANIES STILL AIM TO ACHIEVE THE GREEN DEAL, BUT IN A MORE PRACTICAL AND INCLUSIVE WAY”

and solar in the mix. Only beyond ~80% the marginal cost goes up again, but the overall system stays cheaper. Steep learning curves in storage and adapting to variable supply with flexible demand will improve the economics further. Already today, demand side flexibility is helping to integrate renewables into power systems and saving money on energy bills.

- Electrification will become the main driver of end-use energy. Electricity will be the cheapest and most efficient energy source for key applications. Many critical technologies already have positive business cases in many countries, e.g., electric vehicles, industrial and home heat pumps, thermal storage, etc. As we add more renewables, costs go down further and more electrification becomes “in the money”. In addition, lower demand for natural gas and ETS allowances will even decrease the energy bills for those who have not electrified yet.

- The transition can be faster and cheaper with a more closely-knit European power market through deeper physical and market integration. National transitions are far costlier than a European transition. In addition, integration also increases the resilience against unforeseen disruptions. Hydropower from the Nordics, solar from Iberia, wind from the North Sea and nuclear from France perform better when connected. This requires upgrades in our power infrastructure, including to meet the EU target of at least 15% interconnection by 2030. Linked carbon prices through ETS would foster closer integration of the UK and EU power markets.

Putting the emphasis on rapid electrification with renewable generation will lower energy

bills, will increase European competitiveness and will support energy independence. Decarbonization is a very beneficial externality, but does not even have to be the core driver.

2. THE ENERGY TRANSITION IS NOT COMPETING WITH EUROPE'S OTHER OBJECTIVES, BUT COMPLEMENTS AND ENABLES THEM

For most European ambitions, the energy transition is a critical enabler, not a competitor for money and resources. It can lower energy bills for households and support industrial competitiveness. The EU Competitiveness Compass rightly emphasizes dual green and digital transitions to sustain the next wave of economic growth. This also holds for other goals.

Security and defense need reliable energy: we need energy for our military forces, critical infrastructure and supply chains to withstand long-term hostility. Only local resources can break the chokeholds of gas from Russia and oil from the Middle East via Suez. New fossil suppliers such as LNG from the US imply new dependencies and even higher costs than today. It is true that cleantech requires new technology imports and critical raw materials. Balanced trade relations, diversity of supply across equipment and critical raw materials, material substitution and circularity will be needed to avoid past mistakes.

The Green Deal was envisioned with social equity in mind, but national implementation often missed chances to be more inclusive. The debate is too often framed as an out-of-touch elite that is wasting taxpayer money.

An opportunity was lost to share Green Deal benefits more widely and equitably. A better story is possible that builds on more inclusive policies. Renewables are already saving us billions in fossil fuel imports. The CCC expects savings of £1,400 per household on travel and housing bills, but less affluent households need support with the upfront investments. ETS receipts can be used for this purpose. This will accelerate the transition, reduce energy poverty and lower the cost of living.

The change in the economics of energy systems also brings unexpected co-benefits. A fossil system relies on expensive import payments: “pay as you go” energy. A renewable system is built on upfront investment into long-lived assets with lower operational costs. We pay for assets today, which yield energy tomorrow. There is much attention for the steep investment needs, justly so. But few people notice how these investments can help cover future pension payments and living costs. The direct utility of renewables

is providing energy for longer, and this is mirrored in the financial utility of investments that cover tomorrow’s pension payout needs. By building a reliable and affordable energy system today, we prevent further inflation in the cost of living, for the current generation’s retirement and for the next generations.

3. A STRONG VISION IN ENERGY REQUIRES A GLOBAL PERSPECTIVE

Green policies have primarily been European in scope and aimed at domestic impact (e.g., Emission Trading Scheme). There was an embedded belief that free-trade and a highly skilled workforce would bring technological leadership. The Cross Border Adjustment Mechanism (CBAM) is already an important nod in recognition of global dynamics. CBAM can be an important instrument to embed security better into our global trade strategy. There is also an opportunity for Europe to step up internationalism while the US is withdrawing. Amidst an evolved global playing field, the new von der Leyen presidency is shifting to a global vision.

The energy transition brings energy independence, but will require vast global flows of investment, cleantech equipment and mineral resources. Capital will continue to move freely in international markets, and it will follow the risk-return path of least resistance. Cleantech competition is global, not regional. Trade partners will use their bargaining power to ask for more than commodity payments for their resources, and Europe needs to be ready to step up its offer to these partners. But supplier countries are also high-growth markets and bring new opportunities. More equitable trade deals



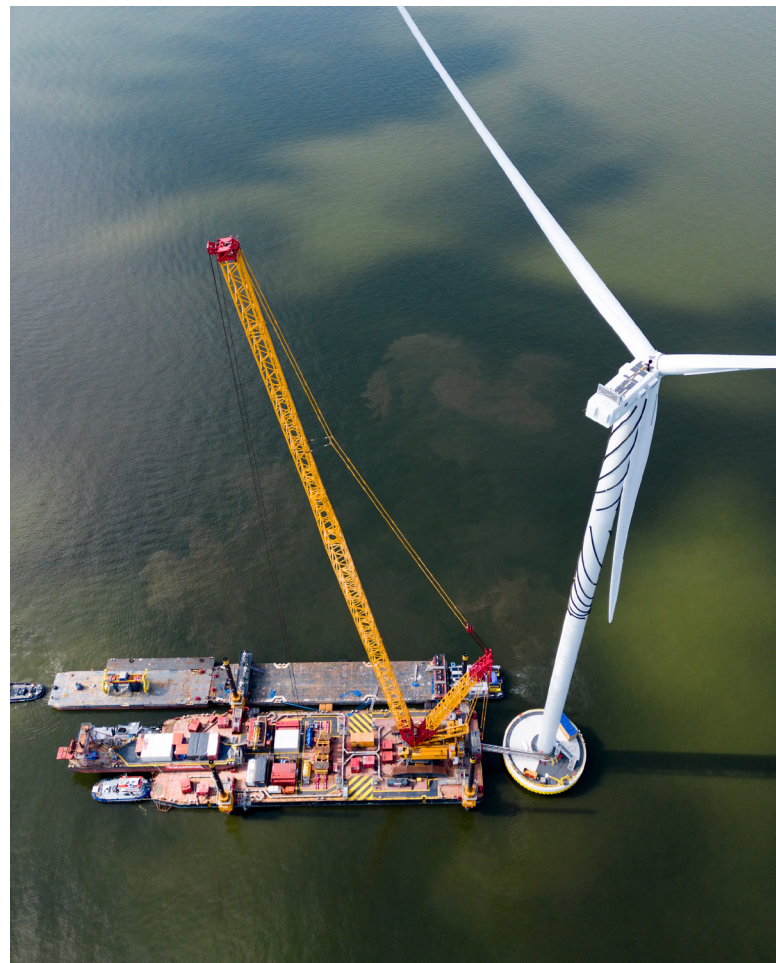
through cooperative diplomacy can support a truly global Green Deal. Now is the time for Europe to play a leading role in the growth value chains of the 21st century around the world.

The United States is retreating. While the US cannot escape climate change, its vast and temperate landmass is relatively less exposed than Europe, Japan and many regions in the Global South. Revenues from shale oil and gas bring a new era of American fossil dominance with LNG exports in the lead role. The US can benefit twice from a melting Arctic: with access to minerals under the Arctic seabed and via a “northern passage”. Europe faces a choice now to build its own path or it will get bogged down in deeper US dependency.

China needs to be in the picture. The trade relationship with China is sensitive due to clean-tech imports and an EU trade deficit close to €300bn. Structural decoupling is not a viable path: both regions benefit too much. Europe requires Chinese technology to enable the energy transition and meeting climate commitments, and China needs markets. Nor is unguided open trade viable if China continues subsidies and other policies. A better trade relationship needs to be negotiated. The EU is far behind in affordable solar PV and batteries but should still support strategic production capacity at home, particularly in batteries. Cooperation on key supply chains (including solar and EVs) through licensing, knowledge/skill transfers and locations can alleviate European strategic concerns while acknowledging Chinese interests.

There are many opportunities beyond the US and China. The EU Clean Industrial Deal rightly aims to nurture EU-made clean

manufacturing and avoid “solar repeats”. The jury is out on who will lead other cleantech value chains: wind turbines, power grids, heat-pumps, energy storage, electrolysis, power2x, CCS and efficiency and system integration software. To be competitive, European cleantech will need to be global in reach. Biden era ambitions for a “cleantech Marshall plan” can be adopted by the European Union, more structurally backed by its current trade surplus.⁴ Like the Marshall Plan helped Europe after the war, technology export and overseas investments can support economic development for countries on the receiving end. Renewables replace fuel imports, so that cheaper power can enable local growth and allow these countries stable participation in the global economy.



4. EUROPEAN ENERGY CAN BECOME AN INVESTMENT DESTINATION WITH LOWER POLITICAL RISK

Europe can profile itself as an investable destination with lower political uncertainty and economic volatility than the US. The flexibility and efficiency of electrification through renewables will bring new benefits that we have only started to imagine. A resolute choice for electrification, power market reform and openness to new business models can turn Europe into the leader in energy productivity and an attractive investment destination built on strong security foundations. Long-term commitment provides the confidence business needs to make big moves and investors to finance them. Innovative business models and new value chains can emerge and thrive when there is an enabling environment and clarity on the incentives of tomorrow.

It is not a question of finding the capital, but how to unlock it. EU programmes are often left untapped. Italy has mobilised only ~60% and spent ~25% of its ~200bn euro NextGenerationEU funding, while its mandate explicitly covers green transition investments.⁵ The new Clean Industrial Deal will mobilise €100 billion and the EIB stands ready to support with blended finance, derisking tools and support for innovation. Germany stands at the cusp of a momentous shift in public investment. Simplicity of funding schemes is key: US schemes have often proved easier to access than EU ones.

The Inflation Reduction Act has shown that where public commitments lead private money will follow. The recent exit of US banks from the Net Zero Banking Alliance demonstrates the close link between political

signaling and finance.⁶ While brown balance sheets make better sense in brown policy environments, green balance sheets will follow where there is well designed green policy. The wealth transfers of inheritance in the coming years are significant and can be funneled in the transition with the right incentives, backed by a clear story on tomorrow's economy.

5. THE ROLE OF GOVERNMENT IS HEAVILY DEBATED; BUT BUSINESS CAN APPRECIATE ITS WIDER CONTRIBUTION BEYOND FINANCIAL SUPPORT

The role of the state in shaping leading value chains has been key since before the industrial revolution. This ranges from R&D, shaping markets and incentives, coordinating linked policy areas, public procurement, direct investment, derisking and coordinating infrastructure. With sound, long-term policies and a democratic mandate, these initiatives should be applauded for their founding roles in the value chains eventually taken over by the private sector investment and execution. But there are also tensions to manage.

The EU and its member states have a stake in shaping markets for the general good and with broader objectives in mind. Proactive policy in the EU supports public goods such as democracy, fair wages and healthy environments. The private sector benefits from this through a stable business context and strong demand. However, it also means that business cannot expect a free lunch of support without strings attached. Policy makers need to balance a preference for market-based solutions with a deliberate vision where to provide targeted support in line with EU objectives.

Good regulation combines long-term signaling with an enabling environment. Like Goldilocks' porridge, the temperature needs to be just right: both over- or under-regulation stifle innovation and investment. The peril of over-regulation is often quoted. Business leaders also have valid concerns that watering down targets erodes confidence, but this receives less attention. Backtracking policies penalizes those that already made investment decisions and are counting on a stable policy context. The new omnibus update on CSRD is fueling a heated debate: what is "simplification" to some implies "deregulation" to others. The debate needs to evolve from ideological slogans towards practical solutions.

Next, the overlapping authorities between EU-level, national and regional decision making need to be resolved. There are many policy areas where devolvement is fruitful, but industrial policy requires scale and is most effective at the EU level. Brussels is the only stakeholder that can prevent a race to the bottom across member states. Maintaining a level playing field and a large single market is needed to ensure healthy competition wins from national champion strategies.

To remain true to its values, the EU will need to balance supporting business with protecting consumers and with keeping markets fair, open and competitive. A case in point is the link between energy and digital-AI. Full deregulation can lead to American big tech dominance and rampant disinformation, including on energy and climate. Over-regulation would stifle innovation and forfeit AI-enabled flexibility use cases and R&D breakthroughs. Ironically, this path can also

lead us back to US dependency. The balance is a tightrope act but getting it right can bring a productivity revolution that is value-based, backed by social consent.

SEIZING THE MOMENT

The stakes are high and the circumstances complex. Policy makers will need to put on many hats, exercise diplomatic skill and be pragmatic. They will need to convince voters and find equitable mechanisms. They will need to work closely with business to find practical ways forward. They will need to negotiate with foreign counterparts to build mutually beneficial partnerships. It will not be easy, but the EU Clean Industrial Deal and the UK Climate Change Commission 2040 pathway provide the signals and evidence-base that point in the right direction.

To unlock the benefits of cheap and secure energy, policymakers need to act fast and decisively. Support for renewables has already proven its merit, as contracts for difference in wind shifted from state contributions to negative bids within years. Planning and permitting is high on the agenda, but more needs to be done to streamline and accelerate processes. However, the biggest unlocks can come from broadening the toolkit:

1. Unlock investments. The debt brake debate in Germany shows that capital markets accept increases in debt when they are used for pro-growth infrastructure: a double win of public investment that brings along private investment. Reliable energy infrastructure can surf on the security premium.

2. Incentivize electrification. At the very least, stop disincentivizing it. Today, many European

countries still tax electricity higher than fossil fuels. Research shows that equalising the taxation of electricity and gas increases annual savings for a heat-pump from <100 to ~1,000 EUR/year.⁷

3. Make prices more informative. Implementing market pricing reforms can bring the lower costs of renewables closer to customers and help decouple from gas prices. Zonal and nodal pricing can also shift the wider public debate, as regions with high renewables will show lower electricity prices.

4. Make flexibility pay off. More flexible power pricing regimes can unlock new balancing use cases, such as thermal storage or using cars as moving batteries (so called “vehicle-to-grid”). This leads to better supply and demand matching but requires the right power pricing regimes.

5. Decentralise where possible. Large energy users are located around fossil assets, but renewables will bring a new energy geography. Data centers are already settling near cheap hydropower. More energy users must be incentivized to locate close to abundant renewables, e.g., in industry hubs.

6. Use the grid better. Batteries can give leverage to the existing grid and avoid curtailments. This increases returns and lowers electricity bills. However, today batteries often get charged twice. This treats them as grid users rather than as the facilitators they really are.

7. Resolve owner-user conflicts. Landlords are responsible for renovations, but tenants pay the energy bills. This tension blocks many

profitable interventions. Policymakers can resolve this incentive mismatch with both carrots and sticks.

These are not easy actions. But it is the only path forward to avoid entrenched dependency. More importantly, there is plenty of upside to make this worth the extra mile. This path leads to a cleaner, more competitive and more secure Europe. It gives Europe an entry ticket to the next industrial revolution. Like past revolutions, the growth story of the 21st century will be built on productivity breakthroughs from a new resource. It will not be built on depleting the scarce resources of the previous model, as other regions are arguing to do.

Europe faces an important choice. Does it want to compete from a position of weakness, in legacy fossil value chains where we have an unbridgeable disadvantage? Or does it want to compete from a position of strength, in new value chains built that are built on a productivity revolution in local renewables? When the world least expects it, can this be Europe’s moment?

© Systemiq Ltd, 2025

*Questions for the authors :
energy@systemiq.earth*

Eveline Speelman is a partner at Systemiq, and leads our Energy platform, where she focuses on accelerating the transition towards a low-carbon energy system. She established and heads up our Amsterdam office.

Peter Hulshof is a partner and member of the leadership team of our Energy platform and Amsterdam office. His net-zero transition work includes strengthening energy companies, accelerating industry decarbonization, and working with frontrunners in tech and AI.

Boris Vergote is a project manager based in Amsterdam. He has frequently worked on national climate action plans and focuses on the questions that arise where energy, finance and public governance meet.

Acknowledgements

Throughout this paper, we have referenced key ideas and opinions from the ongoing energy policy debate across Europe. We want to particularly call out the FT Live International Energy Policy Forum 2025, as well as the recent announcements of the EU Clean Industrial Deal and the UK Climate Change Committee's new decarbonization pathway. For further reading we recommend the EU policy whitepaper from the Energy Transitions Commission "*Solidifying the EU's leadership position in the global energy transition*".

There are footnotes throughout the text where we have explicitly leveraged existing research:

1. <https://www.cleanenergywire.org/factsheets/germanys-dependence-imported-fossil-fuels>

2. https://www.eia.gov/international/content/analysis/countries_long/China/

3. <https://www.eia.gov/energyexplained/us-energy-facts/imports-and-exports.php>

4. <https://www.foreignaffairs.com/united-states/case-clean-energy-marshall-plan-deese>

5. <https://www.euractiv.com/section/politics/opinion/italy-and-the-challenge-of-spending-european-funds/>

6. <https://www.abnamro.com/research/en/our-research/esg-strategist-what-does-the-nzba-exodus-tell-us-about-banks-climate>

7. Ember research based on IEA and Eurostat data.