A Briefing Note on Climate and Energy Priorities for the UK-EU Summit on 19 May 2025^{*}

Michael G. Pollitt[†] Energy Policy Research Group, University of Cambridge Centre on Regulation in Europe, Brussels

> David M. Reiner[‡] Energy Policy Research Group University of Cambridge

> > 16 May 2025

Promoting a race to the top: The London – Brussels effect

Columbia Law School Professor Anu Bradford identified the 'Brussels Effect'¹ to highlight the success of the EU in encouraging high regulatory standards in other jurisdictions across a range of areas. Similar to the state-level 'California Effect' within the US, this effect is about promoting a race to the top. In the same spirit, we wish to encourage a 'London-Brussels' effect in the area of climate and energy policy.

The UK and the EU are well aligned on the ultimate objectives of energy and climate policy with respect to carbon emissions reductions, the rollout of renewables and other low-carbon technologies, and the need for increasing energy efficiency and energy savings. They also recognise the importance of competitive energy markets and the maintenance of energy security via deep pan-European energy system integration. There is also a recognition that national regulatory agencies (NRAs) should be both independent and effectively balance producer and consumer interests. Regulatory alignment between the two jurisdictions was complete on 31 December 2020, just before the UK formally left the EU Single Market the next day. The EU-UK Trade and Cooperation Agreement (TCA) of 2020 governs the post-Brexit relationship between the

^{*} This paper builds on ideas put forward in earlier work to which we have contributed. On Europe, CERRE (2024), *Ambitions for Europe 2024-2029: Harnessing regulation to boost the Twin Transition*, CERRE White Paper, Brussels: Centre on Regulation in Europe. <u>https://cerre.eu/wp-content/uploads/2024/06/CE-7919-AMBITIONS-WHITE-PAPER-DRAFT-6-UPDATED-MOBILITY-241011.pdf</u> On the UK, M.G. Pollitt and D.M. Reiner (2024), *An Energy and Climate Policy Primer for Incoming Ministers: Some thoughts on the past, present and future inspired by the 2024 GB Party manifestos*, <u>https://www.jbs.cam.ac.uk/wp-content/uploads/2024/07/eprg-Energy-and-Climate-Manifestos-290624.pdf</u>

[†] Professor of Business Economics, Judge Business School, University of Cambridge. Contact: m.pollitt@jbs.cam.ac.uk

⁺ Professor of Technology Policy, Judge Business School, University of Cambridge. Contact: d. reiner@jbs.cam.ac.uk

¹ Bradford, A. (2012), 'The Brussels Effect', *Northwestern University Law Review* Vol. 107, No. 1, pp.1-68. <u>https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1081&context=nulr</u>

two trading partners.² It has a significant amount to say about energy and climate policies.³ But looking forward and with the benefit of five years of experience and further developments, there are a substantial number of measures that could be taken that would enhance cooperation and competitiveness, reduce costs and paperwork and encourage investment in the energy transition in the UK and EU.

This short note is meant to inform discussions around the upcoming EU-UK Summit on May 19th 2025, in the area of climate and energy. As with the TCA, we think there is much that can be done to strengthen the already good relationship between the EU and UK in these areas. We identify a number of priority areas, where we think there is significant room for improvement on the current arrangements.

Climate Priorities

Climate change is a global problem that demands an effective global solution. The elements needed for an effective global solution have been well known for well over a decade.⁴ These include a reasonably comprehensive set of agreements to control the total quantity of emissions and a set of supporting policies to promote the uptake of low-carbon technologies in power, transport and heating. Between countries there needs to be an effective transfer mechanism which results in richer countries paying a greater share of total greenhouse gas (GHG) abatement costs.

The EU-UK climate relationship should be a model for the world on how the EU (and UK) can interact with third countries to encourage them to have regulatory alignment on the efficient quantity control of total emissions. If economies as aligned as the EU and UK cannot agree to coordinate their emissions reductions and their key policies then there would seem to be little hope of this happening at scale across the world. If both the UK and the EU seek to lead the world in demonstrating best practice climate policies for net zero, then they must do so in the area of emissions trading schemes (ETSs) which seek to efficiently limit the quantity of GHG emissions.

Climate Priority 1: The UK ETS and EU ETS should be formally coupled, as is the case for the EU and Swiss ETSs.

The EU and Swiss ETSs coupled in 2020.⁵ While rejoining the EU ETS would be possible in theory, formal market coupling would have most of the same economic effect, with the additional benefit of providing another example of how the EU can grow the climate of nations effectively committed to the same carbon reduction targets as itself. As the UK trade body, Energy UK has argued, linkage would 'provide certainty for industry,

² https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22021A0430(01)

³ Pollitt, M.G. (2022) "The further economic consequences of Brexit: energy." *Oxford Review of Economic Policy* 38 (1): 165–178. <u>https://doi.org/10.1093/oxrep/grab044</u>

⁴ Hepburn, C. and Stern, N. (2008), 'A new global deal on climate change', *Oxford Review of Economic Policy*, 24(2): 259-279. <u>https://doi.org/10.1093/oxrep/grn020</u>

⁵ https://www.bafu.admin.ch/bafu/en/home/topics/climate/info-specialists/reductionmeasures/ets/linking-swiss-eu.html

remove barriers to trade and encourage investment in clean technologies.'⁶ Formal coupling would also clear up the anomaly that electricity generation in Northern Ireland has remained part of the EU ETS.⁷

Climate Priority 2: There should be full alignment between the UK and EU CBAM.

The case for a carbon border adjustment mechanism (CBAM) is that countries should not derive a competitive benefit from maintaining a lower (or no) carbon price and so the UK and EU have both sought to discourage this longstanding erosion in their competitiveness.⁸ A CBAM was a key element of the European Green Deal and entered into force in 2023⁹ and the UK has since followed with draft legislation in 2024¹⁰. Creating two independent CBAMs however means that there is potential UK liability under the EU CBAM and vice versa, which would be compounded by very significant reporting burdens on firms in both jurisdictions, despite there being negligible climate benefit. Both the UK and EU have similar climate targets and so if the UK and EU ETSs are coupled then there is no rationale for subjecting each other to independent CBAMs.

Climate Priority 3: There should be alignment on the scope extension of the EU and UK ETSs.

The share of emissions covered by both the EU and UK ETSs has dropped over time as they have successfully decarbonised relative to non-covered sectors¹¹. In the coming years, however, more substantive divergence is likely due to the creation of EU ETS2, which covers emissions from heating and transport,¹² and due to the possible extension of ETSs to cover methane supply chain emissions¹³. While separate but linked schemes do give rise to the possibility of some divergence in coverage, there should be an ongoing effort to reconcile the scope of ETSs in both the UK and EU as they expand.

⁹ <u>https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en</u> ¹⁰

⁶ <u>https://www.energy-uk.org.uk/publications/energy-uk-explains-linking-the-uk-and-eu-emissions-</u> <u>trading-schemes/</u>

⁷ <u>https://www.energy-uk.org.uk/publications/borderline-confusion-carbon-border-adjustment-mechanisms-in-northern-ireland/</u>

⁸ Mehling, M.A., Dolphin, G., Ritz, R.A. (2024). *European Union's CBAM: averting emissions leakage or promoting the diffusion of carbon pricing*, EPRG Working Paper 2416. <u>https://www.jbs.cam.ac.uk/wp-content/uploads/2024/10/eprg-wp2416.pdf</u>

https://assets.publishing.service.gov.uk/media/679cb194a9ee53687470a2fa/Introduction_of_a_UK_Car bon_Border_Adjustment_Mechanism_from_January_2027_-

Government_response_to_the_policy_design_consultation.pdf

¹¹ In 2022 the EU ETS covered 40% of GHGs, the UK ETS 27% of GHGs. Source: <u>https://icapcarbonaction.com/en/compare</u>

¹² Pollitt, M.G. and Dolphin, G. (2022) "Should the EU ETS be extended to road transport and heating fuels?" *Economics of Energy and Environmental Policy*, Vol.11(2): 125-144. <u>10.5547/2160-5890.11.1.mpol</u>

¹³ Both the UK and the EU have considered but not implemented extensions to their ETSs to cover methane emissions. <u>https://www.gov.uk/government/publications/uk-emissions-trading-scheme-long-term-pathway/the-long-term-pathway-for-the-uk-emissions-trading-scheme and https://energy.ec.europa.eu/topics/carbon-management-and-fossil-fuels/methane-emissions_en</u>

Climate Priority 4: Building on enhanced EU-UK cooperation, the EU and UK should together actively seek to recruit more countries from across the wider region to a European climate club with aligned targets for emissions reduction and coordinated carbon markets.

The EU and UK CBAMs are helping encourage third countries to adopt carbon pricing to mitigate the impact of CBAM. This response was part of the original intention of the introduction of the mechanism. Albania, Bosnia and Herzegovina, Georgia, Moldova, Montenegro, North Macedonia, Serbia, Türkiye, Ukraine, Kosovo, Morocco, and Tunisia, to name some obvious candidates¹⁴, could all, in time, participate in carbon markets and be encouraged to align them with those in the EU, Norway, UK¹⁵, Iceland, Liechtenstein and Switzerland. In time, this club¹⁶ of nations committed to ambitious carbon markets could form the basis of a workable framework for global decarbonisation.¹⁷

Climate Priority 5: The EU and UK should actively seek to learn lessons from each other in the development of the first projects for decarbonising industrial clusters.

The UK and EU have both moved forward in the past five years with a number of programmes to support industrial decarbonisation and carbon capture and storage (CCS) in particular. This has led to final investment decisions being taken on CCS infrastructure projects in the UK, Denmark, the Netherlands, and Norway.¹⁸ These projects are key to the net-zero ambitions of both the UK and EU but as the very first projects their success will impact future scale up and so it is particularly important that both governments and firms learn from these first projects.¹⁹

Energy Priorities

The 2021-23 energy crisis in Europe demonstrated three important facts.²⁰ First, European energy markets for electricity and gas are already heavily integrated and that regardless of differences in national energy mix, wholesale prices went up across

https://www.sciencedirect.com/science/article/pii/S0301421524000715

¹⁴ This list includes EU candidate members and countries which already are electrically connected to the EU.

¹⁵ Electricity generation in Northern Ireland is already in the EU ETS. See <u>https://www.energy-</u> <u>uk.org.uk/publications/borderline-confusion-carbon-border-adjustment-mechanisms-in-northern-</u> <u>ireland/</u>

¹⁶ Nordhaus, W. (2015), 'Climate Clubs: Overcoming Free-riding in International Climate Policy', *American Economic Review* 105(4): 1339–1370, <u>http://dx.doi.org/10.1257/aer.15000001</u>

¹⁷ Pollitt, M.G. (2019), 'A Global Carbon Market?', *Frontiers of Engineering Management*, 6(1): 5-18. <u>https://rdcu.be/emeEU</u>

¹⁸ <u>https://think.ing.com/articles/carbon-capture-storage-outlook-2025-gaining-ground-despite-challenges/</u>

¹⁹ DM Reiner (2016) <u>Learning through a portfolio of carbon capture and storage demonstration</u> projects, *Nature Energy*, 1 (2016): 15011

²⁰ Pollitt, M.G., von der Fehr, N-H., Willems, B., Banet, C., Le Coq, C. and Chyong, C.K. (2024), 'Recommendations for a Future-Proof Electricity Market Design in Europe in the light of the 2021-23 energy crisis', *Energy Policy*, 188 (May): 114051.

Europe. Second, Europe really benefitted from this integration in that the initial external supply stock was spread over the whole of Europe, not just limited to those who were directly purchasing gas from Russia, for whom this would have been economically catastrophic if it had not been mitigated in this way. Finally, ignoring the basic principles of good energy policy can come at enormous cost. Faced with an unprecedented crisis, the UK and most EU member states (all acting in an uncoordinated manner) committed vast sums (many tens of billions in the UK²¹ and hundreds of billions across the EU²², (at least part of which were unnecessary) violating many basic principles of good energy (and economic) policy.²³

The wider European economic area has a mutual interest in a common electricity and gas market. Wide area electricity and gas markets are more secure with respect to both global, regional and national shocks. Weak interconnection almost certainly worsened the recent 2025 Spanish blackout²⁴, while low hydro and nuclear output in France was mitigated by strong interconnection in 2022.²⁵ Market-based sharing of electricity and gas supplies provides mutual insurance, protects mutual GDP, exports and imports. The case for wider European energy market integration is growing as wind in the north and solar in the south become more significant in total energy production and consumption. As is the case for carbon markets, extending European energy markets north, east and south is in every participating country's interests.

Energy Priority 1: The UK should fully participate in the EU market coupling platform for electricity, EUPHEMIA.

Currently the UK is not part of the single market coupling algorithm, which adds unnecessary inefficiency to the scheduling of power flows across UK-EU electricity interconnectors. This means that UK-EU transmission capacity auctions are not fully coordinated with power flows in the EU.²⁶ Electricity could learn from gas in finding a private solution to the achievement of market coupling, which achieves genuine free trade in electricity. This means the possibility of power transferring in the wrong direction. While this is a small heightened cost most of the time, it could be disastrous in an electricity emergency whereby power flowing in the wrong direction could be the difference between having a wide-area blackout or avoiding one.

https://www.bruegel.org/dataset/national-policies-shield-consumers-rising-energy-prices

²³ Pollitt, M.G., Reiner, D.M., Newbery, D.M.G. (2022), The Energy Price Guarantee: What principles should the UK Government apply in thinking about how to implement this? <u>https://www.jbs.cam.ac.uk/wp-</u> <u>content/uploads/2024/01/eprg-EPRG-The-Energy-Price-Guarantee.What-principles-should-the-UK-</u> <u>Government-apply-in-thinking-about-how-to-implement-this-1.pdf</u>

²⁵ <u>https://theconversation.com/britain-is-a-net-electricity-exporter-for-first-time-in-44-years-197506</u>

²¹ <u>https://www.nao.org.uk/reports/energy-bills-support-an-update/</u>

²² Sgaravatti, G., Tagliapietra, S., Trasi, C., Zachmann, G. (2023). National fiscal policy responses to the energy crisis, Bruegel,

²⁴ https://www.renewableenergyworld.com/power-grid/outage-management/iberian-blackout-sheds-light-on-grid-fragility/

²⁶ Guo, B. and Newbery, D. (2021), 'The cost of uncoupling GB interconnectors', *Energy Policy*, 158:

^{112569.} https://doi.org/10.1016/j.enpol.2021.112569

Energy Priority 2: The EU and UK (along with Norway) should prioritise the joint development of the North Sea as a key part of achieving their climate targets.

European continent modelling of net zero shows that developing offshore wind and underground CO₂ storage in the North Sea is a key part of delivering a cost-efficient decarbonisation of the European economy.²⁷ The coordinated development of offshore wind projects should seek to minimise generation plus network development costs by directly delivering power to optimal landing points around the North Sea. Similarly, co-ordinated and optimised carbon capture and storage projects could deliver economies of scale and play a key role in decarbonisation.²⁸

Energy Priority 3: UK participation in EU stakeholder arrangements should be enhanced in ENTSO-E, ENTSOG and ACER.

The UK and EU benefit substantially from learning from each other considering how their energy and climate overall targets are well aligned and the obstacles to the rollout of low carbon technologies are similar. The UK continues to set the regulatory standards for best practice regulation of energy networks²⁹, while the UK can benefit from a better understanding of regulatory experiences and priorities around Europe. Post-Brexit, the UK has continued to participate as a full member of Council of European Energy Regulators (CEER)³⁰ but it is not a member of the European Network for Electricity Transmission System Operators for Electricity - ENTSO-E³¹, the European Network Transmission System Operators for Gas – ENTSOG³² or the EU Agency for the Cooperation of Energy Regulators (ACER)³³. Opening up these agencies to full UK participation would benefit both sides.

Energy Priority 4: Explore the potential for a special visa to encourage exchange of skilled labour in energy between the UK and EU.

The UK and the EU have massive infrastructure investment needs in the energy sector. Large infrastructure projects, such as the Hinkley C and Sizewell C nuclear projects will temporarily require large numbers of skilled workers at the peak periods for construction work. Hinkley C has 12000 workers on site at the moment³⁴. This will be true of projects in the EU such as large-scale offshore wind projects. Reducing visa

²⁷ See Chyong, C.K., Pollitt, M.G., Reiner, D., Li, C., Aggarwal, D., Ly, R. (2021), *Electricity and Gas Coupling in a Decarbonised Economy*, Brussels: Centre on Regulation in Europe.

https://cerre.eu/publications/electricity-gas-sector-coupling-decarbonised-economy/

²⁸ Chyong, C.K. Reiner, D.M., Ly, R. & Fajardy, M. (2023) <u>Economic modelling of flexible carbon capture</u> and storage in a decarbonised electricity system. *Renewable and Sustainable Energy Reviews*, 188, 113864

²⁹ See Glachant, J-M., Joskow, P.L. and Pollitt, M.G. (2025) (Eds.), *Handbook on Electricity Regulation*, Edward Elgar, forthcoming.

³⁰ <u>https://www.ceer.eu/about-us/our-members/</u>

³¹ <u>https://www.entsoe.eu/about/inside-entsoe/members/</u>

³² <u>https://www.entsog.eu/members</u>

³³ <u>https://www.acer.europa.eu/the-agency/organisation-and-bodies</u>

³⁴ https://constructionwave.co.uk/2025/05/07/hinkley-point-c-reaches-peak-construction/

limits (or creating a new category) for energy workers could help advance these projects.

Energy Priority 5: The current TCA on energy policy alignment should be extended substantially beyond 2026 with regular transparent reporting on progress against targets, on areas for coordination and on the benefits of energy cooperation.

The UK and EU have currently only agreed to align their energy and climate policies and institutional approaches to 2026. This means that, inter alia, the UK is only committed to an independent energy regulator and competitive energy markets until then. The Specialised Committee on Energy (set up under the TCA to oversee the new arrangements)³⁵ could provide more transparency around the mutual benefits to the UK and the EU deriving from close alignment on energy policy. One way of enhancing transparency would, for instance, be for both the UK and EU to produce an annual Energy and Climate Plan aimed at documenting how on track their mutual co-ordination was.

Energy Priority 6: The EU and UK should seek to create wider energy markets which can be extended to the south and east.

As with carbon markets, there are countries to the south and east of Europe that could be part of a wider Europe-MENA (Middle East and North Africa) market area for electricity and gas. It should be a priority for both the UK and the EU to encourage these countries into greater regulatory alignment, as their enhanced economic development would benefit the UK and EU.

Energy Priority 7: The EU and UK should seek to extend the TCA to include trade and regulation of green gases: hydrogen, biomethane and ammonia.

The current TCA only covers electricity and natural gas markets and networks. This is unfortunate because of the potential future importance of green gases. Modelling suggests that hydrogen and biomethane may play significant roles in a fully decarbonised European energy system.³⁶ Ammonia may also play a role. It is possible that regulatory misalignment on green gases will increase substantially in the next decade and these gases should be subject to the same degree of market integration enjoyed by the UK and EU in electricity and gas.

Energy Priority 8: The EU and UK should work together to safeguard energy infrastructure.

The energy systems (and economies) of the UK and EU have both benefited from significant growth in interconnection over the past decade. Since 2011, interconnector

³⁵ https://www.gov.uk/government/groups/specialised-committee-on-energy

³⁶ Chyong, C.K., Pollitt, M., Reiner, D. and Li, C. (2024), 'Modelling Flexibility Requirements in Deep Decarbonisation Scenarios: The role of conventional flexibility and sector coupling options in the European 2050 energy system, *Energy Strategy Reviews*, 52 (March): 101322. https://doi.org/10.1016/j.esr.2024.101322

capacity has grown from 2GW (based on a single interconnector to France) to almost 10 GW with diversified sources from the Netherlands, Norway, Ireland, Belgium and two more to France. This diversification has been a boon to the UK and each interconnector improves the energy security of countries at both ends but this also highlights the increased dependence on these interconnectors. However, the overall security environment – as highlighted by the damage to the Nord Stream 2 pipeline – places physical security (as well as cybersecurity) front and centre and should encourage greater coordination between the UK and EU, building on existing EU efforts.³⁷

Energy Priority 9: Not all aspects of energy policy can or need to be coordinated, but to the extent possible, the EU and UK should aim to reduce tariffs wherever possible so as not to undermine their energy transitions.

Tariffs, such as those levied by the EU on electric vehicles made in China, may reflect divisions between the EU and UK over some aspects of energy and climate policy, but unlike CBAM or ETS there is no essential need for full harmonisation – the UK (like Switzerland) can maintain their lower tariffs than the EU on Chinese EVs with minimal knock-on effects. Nevertheless, while EV tariffs may be seen as helping shield domestic production, it is important that they do not undermine access to affordable EV imports, which is particularly important for smaller segments that are essential to enable consumers on lower incomes to participate in the energy transition.³⁸

Closing thoughts

We live in a world of rising geopolitical tensions involving restriction of international trade in energy, critical minerals and energy equipment, which will inevitably hamper the energy transition needed to meet the goals laid out in the Paris Agreement. The EU and UK should seek to set an example of how reducing barriers to trade and mutual cooperation can be good for the economy and the environment. The evolving post-Brexit world offers an opportunity for both the EU and the UK demonstrate how distinct jurisdictions with closely aligned energy and climate targets can work together in ways that the rest of the world can learn from.

The rewards from such joint working on energy and climate are various. UK and EU consumers should see lower prices and reduced costs in achieving energy and climate targets. Investors in both UK and EU energy sectors will see a lower risk regulatory environment with reduced uncertainty and zero-sum competition. At a particularly fractious moment in global geopolitics, the rest of world will see an admirable international collaboration that builds prosperity, security and trust without compromising environmental integrity and climate action.

³⁷ <u>https://energy.ec.europa.eu/topics/energy-security/critical-infrastructure-and-cybersecurity_en</u>

³⁸ M Liu , X Sun , Y Geng , DM Reiner , K Hubacek , X Qu , J Lu , F You , F Zhao (2025) The potential for differentiated vehicle segment tariffs, *Nature Energy* (in press).