BREXIT AND THE EU ENERGY UNION
KEEPING EUROPE’S ENERGY AND CLIMATE TRANSITION ON TRACK

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The European Union has committed to develop “a resilient Energy Union with a forward-looking climate policy”, and has embarked on reforms to integrate energy markets across borders and accelerate the shift to an efficient, low-carbon and high-renewables energy system.

The decision of the UK to leave the EU does not change the underlying case for Europe’s energy and climate transition, but it does complicate efforts to take the Energy Union forward. The UK is deeply connected into EU energy policies, markets and physical systems. In both political and practical terms, dealing with the UK’s exit will be complex.

Five specific threats for the EU-27 need to be managed to keep the Energy Union on track as the Brexit process unfolds:

> **Distraction**: Maintaining political focus and diplomatic capacity.
> **Deregulation**: Avoiding a ‘race to the bottom’ on environmental standards.
> **Disruption to markets**: Securing pathways for trade in clean energy and low carbon goods and services.
> **Disentanglement**: Ensuring the integrity of climate and energy policy instruments.
> **Deferral of investment**: Averting a hiatus in clean energy investment, particularly in the context of changes to European Investment Bank and EU budget.

Beyond managing risks, the reform processes unleashed by the Brexit vote are an important moment to recast not only UK-EU energy relationships, but also EU energy relations with third countries in general, and the role of the energy and climate transition in the ‘Future of Europe’ debate itself.
INTRODUCTION
The UK’s referendum on leaving the EU in June 2016 was a surprise to many on both sides of the channel. The decision has kicked off a broad conversation on reform. Two specific processes have been initiated: a set of exit negotiations with the UK now that the UK has triggered Article 50, and a wider debate on the ‘Future of Europe’.

So far, there has been relatively little political focus on energy and climate change in either reform process. This is an unfortunate oversight: European citizens rank climate change as a key security risk, and investment in clean energy and low carbon technologies is central for the economic development of Europe as a whole.

A positive approach is needed that both protects the EU’s Energy Union and climate ambition, and recognizes Europe’s climate transition as core to Europe’s future energy relationships and the future of Europe itself.

This briefing note maps out key risks for the EU-27 on climate and energy from the Brexit process, and a way forward for building Europe’s Energy Union after Brexit.

The EU Energy Union
Developing a ‘resilient Energy Union with a forward-looking climate policy’ was agreed as a strategic priority for the next 5 years by EU leaders in 2014. In February 2015, the European Commission set out an agenda for what this should look like in practice, which included a strong clean energy vision:

> “An Energy Union with citizens at its core, where citizens take ownership of the energy transition”
> “Energy efficiency and demand side response can compete on equal terms with generation”
> “Becoming the world leader in renewable energy”
> “An integrated continent-wide energy system where energy flows freely across borders”
> “Move away from an economy driven by fossil fuels and outdated business models”
> “Longer-term policy coherence ... provides long term certainty and guidance for investors”.

Major legislative reform on energy and climate has been launched in support of this agenda, including the ‘Clean Energy for All Europeans’ package on electricity, renewables and efficiency, and revisions to the EU Emissions Trading Scheme and Effort Sharing Directive.

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1 Pew Research Centre (2016) Europeans see ISIS, climate change as most serious threats
MANAGING BREXIT RISKS

Much of the analysis so far on Brexit and energy has focused on potential impacts on the UK’s energy market and climate policy. Yet while the UK will be disproportionately affected, the implications will spill over to the EU-27 and beyond.

Five key risks to the EU’s Energy Union will need to be managed: political distraction, deregulation, disrupted markets, policy disentanglement and deferral of investment.

Distraction

The first risk is that of distraction, both in terms of political attention and of diplomatic capacity. The Brexit process comes at a critical moment for the EU both on international climate change and on its domestic energy transition. These priority issues demand deep political focus and commitment at all levels; Brexit threatens to monopolise airtime and agenda space.

The Paris Agreement provides an essential platform for protecting global climate stability, and represented an important diplomatic achievement for the EU and its partners. Following the election of Donald Trump in the USA, the success and very survival of the Paris Agreement depends on continued leadership of the EU, including by working with major economies such as China and India.

The next three years – directly overlapping with the Brexit process – is the critical period for embedding the Paris international climate regime and for starting to align emissions reductions pledges with the goal of keeping global warming to ‘well below 2 degrees’. To this end, the UNFCCC will launch a facilitative dialogue on climate ambition in 2018, with the first round of new commitments submitted in 2020. Achieving global alignment with the ‘well below 2 degrees’ goal means the EU will need to submit a new ‘nationally determined contribution’ (NDC) with higher ambition by 2020, and work with other major countries to do the same.

The UK has traditionally been a major international champion on climate change and has provided significant diplomatic capacity to EU efforts on international climate leadership. The UK employs roughly 14% of all diplomats in the EU, and runs a network of nearly 150 diplomats working full time on climate change.3 Despite recent cuts, the UK is likely to remain a considerable force in international climate diplomacy, and close alignment with the efforts of the EU-27 will be essential.

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3 Carnegie Europe (2012) The Big 3 in EU Foreign Policy; Foreign and Commonwealth Office data
Similar considerations apply to diplomatic relationships on energy security with energy suppliers and partner countries.

Although the Brexit negotiations will be complex, it will be of fundamental importance that they do not detract political focus or diplomatic capacity from the international climate agenda and clean energy transition. Instead, the EU will need to deepen its international engagement on climate change in the run up to the ‘2020 moment’. Given the shared objectives on climate change and energy, pragmatic and practical EU-UK cooperation on climate is needed, even while the Brexit negotiations are ongoing – no matter how fraught or divisive the negotiations get.

**Priority actions**

- Maintain clarity on long-term outcomes and principles for climate and clean energy
- Increase international engagement and invest in increased diplomatic capacity on climate change, both in member states and the European External Action Service
- Coordinate EU-27 and UK diplomatic strategies on climate change and energy, including during the course of the exit negotiations

**Deregulation**

The second risk is that of the UK adopting a radical deregulatory approach that would roll back UK climate, environment and social standards, in an attempt to boost the UK economy after Brexit.

To be clear, this radical deregulatory approach is not the stated policy of the current UK government, and there is a spectrum of opinion within the Conservative Party which Theresa May is seeking to manage. Even after the referendum, the UK ratified the Paris Agreement and legislated for its ‘fifth carbon budget’ which sets stronger climate targets than the rest of the EU. The UK’s Brexit White Paper contained a commitment to “ensuring we become the first generation to leave the environment in a better state than we found it” and to continued domestic and international action on climate change.  

However the prospect of a ‘Singapore in the North Sea’ remains a credible threat, and is actively sought by sections of the political right. The Daily Telegraph and leading pro-Brexit politicians have launched a campaign for a ‘bonfire of EU red tape’ after Brexit, and are specifically targeting green energy policies and EcoDesign regulations covering inefficient vacuum cleaners and incandescent light bulbs. Similarly the rightwing thinktank Civitas recently published a report calling for abandoning the

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4 HM Government (2017) *The United Kingdom’s exit from and new partnership with the European Union*

5 Daily Telegraph (2017) *Cut EU Red tape campaign: 10 laws that could be axed after the Great Repeal Bill*
Climate Change Act and restarting coal mining, as an explicit attempt to undercut the EU on energy costs.\(^6\)

Such an approach would be damaging both to UK and EU citizens. Environmental problems such as air pollution are by nature cross border. EU member states will be wary of a neighbouring state pursuing a ‘race to the bottom’ on environmental standards in order to gain an advantage on trade. A deregulatory UK that weakens climate and environment regulation would make it more difficult to strengthen and enforce such rules in the EU, and would strengthen the hand of blockers and laggards.

EU institutions recognise this risk. The European Parliament’s draft resolution on Brexit calls for EU environment and climate standards to be built into a future association agreement with the UK. The draft European Council negotiation guidelines specify that any Free Trade Agreement with the UK must protect against environmental dumping.\(^7\)

“Any free trade agreement [...] must ensure a level playing field in terms of competition and state aid, and must encompass safeguards against unfair competitive advantages through, inter alia, fiscal, social and environmental dumping”
- European Council draft negotiation guidelines

Given both the commitments and track record of both the UK and EU-27, climate, clean energy and environment should be areas for cooperation rather than conflict. Building mutual protections into an agreement on the future relationship seems a good first step. Further focus is now needed on how such commitments will be upheld.

**Priority actions:**
> Prioritise continued cooperation on climate, clean energy and environment in the future UK-EU relationship
> Build in mutual adherence to climate and environment standards as a core element for a future UK-EU association agreement or trade deal
> Develop models for monitoring implementation and resolving disputes

\(^6\) Civitas (2017) *Competitiveness before Carbon*

\(^7\) European Council (2017) *Draft guidelines following the United Kingdom’s notification under Article 50 TEU*
Disrupted markets
The third threat is disruption to the internal energy market as a result of the UK’s exit. The impacts are asymmetric: it is clear that the UK itself will bear the biggest brunt of any changes to UK participation in EU energy markets. Nevertheless, the UK is a significant part of the EU energy market as a whole and the repercussions of a disorderly exit would be felt well beyond the UK itself.

The UK is responsible for 12% of the EU’s overall energy consumption. It is the third largest electricity consumer in the EU, representing over 10% of EU power use. It is also the second largest electricity net importer in the EU: despite limited interconnection capacity, 5% of all cross-border power flows in Europe flow into the UK. This makes the UK an important market for power generators elsewhere in Europe, who are already dealing with challenging economic conditions. While the UK is a net importer, its interconnectors supply other EU markets at times of high demand, including during the recent nuclear outage in France.

The UK represents 12% of overall EU energy consumption, and 10% of electricity use

5% of EU cross-border power transfers flow to the UK

43% of UK offshore wind investment goes to UK suppliers; much of the remaining 57% is supplied by EU companies

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The physical connectedness between the UK and other European countries is set to increase, with a strong project pipeline for new electricity interconnectors. UK government projections suggest 15GW of new interconnection capacity could be added by 2025 (compared to only 4GW installed at present).\(^9\)

The UK’s exit from the EU is a special challenge for Ireland, where the Irish Republic and Northern Ireland operate an integrated ‘Single Energy Market’ that could now be at risk of regulatory divergence. Another special challenge arises from the UK’s exit from Euratom Treaty, which – unless swiftly replaced – would disrupt nuclear safety regimes and the supply of nuclear fuels.\(^10\)

There is widespread appetite amongst the EU energy industry for the UK to continue to participate in the internal energy market so long as it complies with basic market, environmental and competition rules. As electricity industry body Eurelectric rightly points out, “the unique networked characteristics of the electricity sector and importance of energy to both economies require mutual collaboration” and means the internal energy market should be treated differently from the EU single market as a whole.\(^11\)

But so far there is little clarity on how the UK will interact with the internal energy market in future. The UK white paper on exiting the EU simply said “we are considering all options for the UK’s future relationship with the EU on energy”\(^12\), while the Article 50 letter identified network industries as a priority area for future cooperation. The European Council draft negotiation guidelines, meanwhile, do not mention energy explicitly, but do warn against ‘cherry-picking’ or a sector-by-sector approach.

“Coordinated energy trading arrangements help to ensure lower prices and improved security of supply for both the UK and EU Member States by improving the efficiency and reliability of interconnector flows, reducing the need for domestic back-up power and helping balance power flows as we increase the level of intermittent renewable electricity generation. We are considering all options for the UK’s future relationship with the EU on energy.”
- UK government white paper on exiting the EU

Beyond physical flows of energy, the UK and EU are deeply integrated in wider markets and supply chains of relevance to energy. Four out of the ‘big six’ energy retailers in the UK are subsidiaries of companies established in other EU member

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\(^10\) Bruegel (2017) Brexit goes nuclear: the consequences of leaving Euratom
\(^11\) Eurelectric (2017) Post Article 50 statement on UK-EU Internal Energy Market relationship
\(^12\) UK government (2017) The United Kingdom’s exit from and new partnership with the European Union
states (two from Germany and one each from France and Spain). UK development of clean energy involves equipment and suppliers from the EU27. The UK leads the EU in offshore wind investment, for example, but only 43% of this investment is local content, with much of the remaining 57% is supplied by other European companies.\textsuperscript{13}

These factors suggest that a disorderly ‘crash exit’ could disrupt cross-border energy flows, clean energy deployment, and harm the interests of European companies and consumers. To mitigate these risks, early clarification will be needed of the basic principles for the future UK-EU relationship on energy including the conditions required for UK participation in the internal energy market. In wider negotiations on trade, specific attention should be given to supply chains in the low carbon economy, following the model of the proposed Environmental Goods Agreement.\textsuperscript{14}

**Priority actions:**
- Ensure early clarification of basic principles for future UK-EU energy relationship and conditions for participating in the internal energy market
- Protect value chains in low carbon goods and services, for example through following the model of the Environmental Goods Agreement

**Disentanglement**

The fourth threat comes from policy disentanglement, and the political and regulatory risks that this brings. As a full member of the EU, the UK is deeply embedded in EU climate and energy policy frameworks. There could be scope for the UK to continue to participate in the EU’s 2030 climate and energy framework, but this would need important issues on decision-making and enforcement to be resolved.

The process of disentanglement will need to protect policy integrity to ensure climate and energy goals are not compromised.

The UK has been responsible for 20% of overall EU greenhouse gas emissions reductions since 1990. If the UK is no longer counted within the EU 2030 climate target, either the headline target will need to be lowered or other EU countries will need to increase their efforts – by a total of 4.5% – to maintain the ‘at least 40%’ goal.\textsuperscript{15} The former option would damage the EU’s international reputation on climate change; the latter would require reopening difficult negotiations between member states on Effort Sharing and climate ambition at a time when these negotiations are

\textsuperscript{13} BVG (2015) *The UK content of operating UK wind farms*

\textsuperscript{14} See for example LSE Grantham Institute (2017) *UK needs free trade with the European Union in low-carbon technologies*

\textsuperscript{15} LSE Grantham Institute (2017) *With or without you? Why the European Union’s climate targets will be harder to meet post-Brexit*
already difficult. It is nevertheless clear that a pathway compatible with the ‘well below 2 degrees’ objective will require greater commitments from both the EU and its partners, so reopening the question of EU and member state climate ambition is perhaps inevitable.

Other energy and climate targets may also need to be revisited. The EU has targets for a 20% improvement in energy efficiency (compared to business as usual) by 2020 and 30% by 2030. The UK has reduced its energy consumption by significantly more than the EU average: 21% of the EU’s reduction in energy consumption since 2005 has occurred in the UK. An efficiency target that includes the UK could look very different to one applying only to the EU-27.

Similar issues apply to the renewables targets of 20% by 2020 and at least 27% by 2030. 6% of all renewable energy in the EU is produced in the UK, although the UK has significantly lower renewable energy production than the EU as a whole (in 2014, renewables had a 6.4% share of UK energy consumption, compared to 12.5% in the EU-28).

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16 The final EU 2030 energy efficiency target is still to be resolved. European Commission has proposed a 2030 target of a 30% improvement against the baseline. The European Council has previously agreed “at least 27%”, while the European Parliament has supported a 40% energy efficiency target for 2030.

17 Source: Eurostat
Depending on the nature of the UK’s exit, EU policy instruments may also need to be reopened. The UK is an important participant in the EU Emissions Trading Scheme: 9% of installations covered by EU ETS are located in the UK.¹⁸ There are multiple potential pathways for the future, and it is not yet clear which the UK wishes to pursue. Continued participation means either the UK remains subject to the Court of Justice of the European Union (identified as a red line for Theresa May) or the scheme is revised to allow for a different dispute resolution process – which may pose risks to the scheme’s integrity.

If the UK leaves the EU-ETS, then the issue of how to handle UK-originated allowances will be equally challenging. Currently, allowances can be freely traded between countries and transferred across phases of the EU-ETS. When the UK leaves the EU, UK-originated allowances cannot simply be expropriated or cancelled, as they were bought and traded in good faith and may no longer be held by UK companies. However, without further adjustment, leaving legacy UK emissions allowances in the EU-ETS could increase the amount of surplus ‘hot air’ in a system that is already heavily oversupplied. The alternative is costly and contentious compensation.

These are not isolated examples. The exit of a large EU member state will inevitably have repercussions across a wide range of EU energy and climate targets and policies. Reopening these measures creates not only technical complexity but also a risk to the integrity and effectiveness of the policy framework, including as a result of opportunistic lobbying and special interest pleading. The key point is that the negotiations on the UK exit and subsequent revision of EU policies and targets must focus on achieving real-world outcomes for the transition to a zero-carbon economy – rather than simply following the path of least resistance.

**Priority actions**

> Re-affirm commitment to overall level of ambition on climate and clean energy
> Prioritise the integrity and effectiveness of EU climate policy, regardless of the shape of future UK participation

¹⁸ BEIS (2016) *Guidance: Participating in the EU ETS*
Deferred investment

A final challenge is the need to keep investment flowing into the clean energy economy despite the Brexit process. This was already a challenge before the UK referendum: clean energy investment in the EU is far below its 2010 peak, and the EIB estimates that there is an ‘investment gap’ of €100 billion per year for meeting 2030 energy and climate targets.\(^{19}\)

In recent years, the UK has led the rest of the EU on clean investment, and accounting for 37% of European clean energy investment in 2016.\(^{20}\) London is a key centre for sustainable finance both for the EU and internationally.

Several specific issues need to be managed. There are concerns that the uncertainty involved in the Brexit process will trigger a hiatus in clean investment not only in the UK but also elsewhere in the EU.\(^{21}\) Transparency in the negotiations and predictability of outcomes will be as important for managing this risk as any form of investment support.

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19 E3G et al (2016) A sustainable finance place for the EU
20 Bloomberg New Energy Finance (2017) Record $30bn year for offshore wind but overall investment down
The European Investment Bank (EIB) has been a key source of low cost capital for EU clean energy investment, with €77 billion of energy loans issued since 2010.\textsuperscript{22} With the UK’s exit the EIB could be losing a major shareholder (providing 16% of its capital). The UK has made no indication of its preferred future relationship with the EIB: the EIB was not mentioned either in the Brexit white paper or the Article 50 letter. Nevertheless, the EIB and EU-27 member states will need to take steps to ensure the uncertainties over the UK’s participation in the EIB does not constrain its ability to support clean energy lending.

Similarly – and potentially even more challenging - the UK’s exit could affect climate and clean energy investment in the EU budget. The EU has committed to spending at least 20% of the ‘Multi-annual Financial Framework’ on climate-related purposes; for the 2014-2020 period, this amounts to €205 billion of investment.\textsuperscript{23}

The UK is a net contributor to the EU budget, and UK contributions represented 14% of EU spending in 2015.\textsuperscript{24} The UK’s withdrawal could lead to a gap in the EU budget of roughly €10 billion per year.\textsuperscript{25} Reducing spending in areas such as clean energy would be deeply damaging – particularly at a moment when investment in these areas need to increase – but other member states may be reluctant to make up the gap. In this context, deeper options for EU budget reform – such as those set out by Mario Monti’s High Level Group on Own Resources\textsuperscript{26} – deserve full consideration.

\textbf{Priority actions}

\begin{itemize}
  \item Clarify the UK’s position in the European Investment Bank, and ensure resources are maintained for energy and climate lending during any transition period
  \item Protect climate and clean energy investment in the next phase of the EU budget, and examine more fundamental options for EU budget reform
\end{itemize}

\textsuperscript{22} EIB (2017) Projects financed: multicriteria list
\textsuperscript{23} E3G (2016) A mission-oriented budget: Priorities for the MFF mid-term review
\textsuperscript{24} European Parliament (2017) EU budget explained: expenditure and contribution by member state
\textsuperscript{25} Jacques Delors Institute (2017) Brexit and the EU Budget: Threat or Opportunity?
\textsuperscript{26} European Commission (2017) High level group on own resources
ENERGY UNION BEYOND BREXIT

Managing the risks of Brexit will be necessary for keeping the Energy Union on track, but it is not sufficient. The decisions taken through the Brexit negotiations and related reform processes have the potential to shape the future not only of the future UK-EU relationship on energy, but also the position of third countries in the Energy Union more generally and the role of energy and climate in the Future of Europe itself.

With this in mind, there are several emerging areas that are worthy of further development and attention:

> **Bottom-up cooperation and ‘facts on the ground’**
The future of the UK-EU relationship on energy and climate change will result not only from formal negotiations but also from the ‘facts on the ground’ created through practical, bottom-up cooperation that will continue even during and after the formal negotiations.

The international climate change regime is an important venue for this. Despite the Brexit vote in June 2016, deep alignment and cooperation between UK and other EU negotiators continued into the 2016 UNFCCC conference in Marrakech. This practical focus on shared interests will help to maintain trust and establish conditions for future relationships.

Bottom-up cooperation is also happening at sub-national and regional levels as well as via the EU. The Mayors of London and Paris have launched a cooperation initiative on air quality and emissions monitoring. UK cities play an active role in European networks on climate and clean energy, including the Covenant of Mayors.

Similarly, even after the EU referendum the UK joined a regional political initiative on North Seas Grid collaboration, in recognition of the shared value in coordinated development of offshore renewables and interconnection resources.

> **A ‘collaborative track’ to the exit negotiations**
Enabling future cooperation requires explicit venues for collaboration on climate and clean energy to be built into the exit negotiations themselves.

Much of the attention on the negotiations so far has focused either on the conditions of exit (e.g. resolving outstanding financial liabilities) or on a future trade agreement. Such a narrow economic framing overlooks the mutual public value of cooperation in areas beyond budget and trade, including on climate change and environment. Other sectors such as digital, security, innovation, health, science and criminal justice are
also important venues for continued and dynamic cooperation between the EU27 and the UK.

The structure of the negotiations will need to allow for sufficient time and negotiating space for a ‘collaborative track’ on long-term shared interests to succeed.

**> Energy Union beyond EU borders**

Beyond the UK, the Brexit negotiations mark an opportunity for rethinking EU relationships with third countries on energy more generally, as the outcomes of negotiations with the UK form a precedent for other external energy partnerships in future.

European Commission Vice President Maros Sefcovic has backed the idea of an ‘Energy Union beyond EU borders’. There are a very wide range of initiatives for enabling this, including regional initiatives that include non-EU countries (such as the North Seas Grid initiative which includes Norway, and the CESEC initiative in South East Europe) and more formal structures such as the European Community.

There are strong drivers for the EU to widen its energy relationships with its neighbours, including access to renewable energy and flexibility resources, and cooperating on energy security.

A set of common principles should be developed to underpin different models for participation in the ‘Energy Union Beyond EU Borders’. The Brexit context offers an important trigger for a dialogue to be initiated between the EU and its neighbours on how to take this cooperation forward.

**> Integrating Energy Union into Future of Europe**

Finally, the UK’s vote to leave the EU triggered a broader process of reflection on the ‘Future of Europe’ itself. A European Commission White Paper was published in March, and European Council conclusions are likely to be agreed in December.

This ‘Future of Europe’ process is an opportunity to deliberate the core values of the EU, what it chooses to focus on and ultimately how the EU operates. The EU Energy Union should be positioned at the heart of this process. Rather than being treated as a technical process or subsidiary concern, the EU’s energy and climate transition will be central to the prosperity and security of every European citizen. The issues at stake range from the directly personal (the air that we breathe) to the most geopolitical (ending energy import dependency and restoring vitality to the global economy).
CONCLUSION

The UK is deeply embedded into EU energy systems, markets and policies. Negotiating the UK’s exit from the European Union will be complex, and is likely to have significant ramifications on energy and climate change both for the UK and EU-27. Specific threats to the EU Energy Union will need to be mitigated, including: political distraction, deregulation, disruption to markets, policy disentanglement and deferral of investment. These issues would be challenging enough in isolation, but must be managed against the backdrop of a difficult and highly-charged political environment.

In this context, keeping Europe’s climate and energy transition on track will require a return to the fundamentals. A focus is needed not just on the terms of the UK’s exit, but the overall outcomes that must be reached for international climate security and a smooth energy transition. Creating spaces for continued cooperation between the UK and EU on climate and energy will be important, but so too will protecting the integrity and effectiveness of climate and energy policies. Ultimately, the exit negotiations and related processes of reform will shape the course of Europe’s energy system, including relationships not just with the UK but also other third countries. Designing these relationships to enable and accelerate rather than impede the energy and climate transition will be crucial.

About E3G

E3G is an independent, non-profit European organisation operating in the public interest to accelerate the global transition to sustainable development. E3G builds cross-sectoral coalitions to achieve carefully defined outcomes, chosen for their capacity to leverage change. E3G works closely with like-minded partners in government, politics, business, civil society, science, the media, public interest foundations and elsewhere.

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