

Sustainability and Net Zero climate agreements – a transatlantic antitrust perspective

Maurits Dolmans, Wanjie Lin, and Jessica Hollis*

Abstract: The climate crisis requires a transition to a Net Zero economy. Such a transition is possible only through concerted public and private action. While a number of financial institutions and insurance companies had agreed to align their activities with Net Zero targets, reconsidering support for new coals and fossil fuel projects, these initiatives have come under attack from political groups in the US, who have labelled such agreements ‘collective boycotts’. Such accusations feed a collective action problem, and thus hinder private sector cooperation.

This article discusses the background to Net Zero Agreements, and the antitrust criticisms launched by anti-ESG partisans under US, EU and UK antitrust law and precedent. Net Zero Agreements can alleviate market failures, resolve collective action problems, and improve consumer welfare by lowering the potentially huge costs to consumers of an unmitigated climate crisis. Under a rule of reason, antitrust authorities and courts in the US, EU, and UK can and should give room for private sector cooperation between companies pursuing an effective transition to a clean economy, where these agreements correct market failures and resolve collective action problems.

Keywords: antitrust, climate change, market failure, Net Zero agreements, collective boycott, rule of reason, ancillary restraints, consumer welfare

Greenhouse gas (GHG) emissions are externalities and represent the biggest market failure the world has seen. We all produce emissions, people around the world are already suffering from past emissions, and current emissions will have potentially catastrophic impacts in the future. Thus, these emissions are not ordinary, localized externalities. Risk on a global scale is at the core of the issue. These basic features of the problem must shape the economic analysis we bring to bear; failure to do this will, and has, produced approaches to policy that are profoundly misleading and indeed dangerous.

Nicholas Stern, ‘the Economics of Climate Change’ (2008)

Climate change is probably the single biggest threat to humanity.¹ Even at 1.5°C warming, we will see dramatic changes in weather systems, biodiversity and oceanic conditions that will impact our habitable space, crop yields, water supply, and health. Our response to this

threat requires a transition to a Net Zero economy requiring at least USD 125 trillion in investment.² This challenge can only be met through concerted public and private action – but also offers the prospect of a clean, stable, and prosperous world.

A number of financial institutions and insurance companies attempted jointly to align their activities with a Net Zero future, including ambitions to cease support for new fossil fuel projects. These Net Zero Agreements are now under attack from some members of Congress and State Attorneys General in the US, who label them ‘collective boycotts’. They argue that the withdrawal of finance and insurance from new fossil fuel projects ‘has led not only to increased insurance costs, but also to high gas prices and higher costs for products and services across the board, resulting in record-breaking inflation and

* Cleary Gottlieb Steen & Hamilton, LLP, London, UK, Brussels, Belgium, and Washington DC, US.

We are grateful for the comments from Prof. Peter Tufano, Josh White of Analysis Group, Martijn Snoep, Simon Holmes, Denise Hearn, Cynthia Hanawalt, and Lisa Sachs of the Columbia University Sabin Center for Climate Change Law, Andreas Pihlmeier, George Barker, and our colleagues including Bruce Hoffman, Mario Siragusa, Joseph Kay, and Mari Koskela. They may not all agree with all of our views, and errors are ours. This article was not requested or funded by any third party, and views expressed do not bind the firm or its clients.

1 IPCC, *Special Report: Global Warming of 1.5°C – Summary for Policymakers* (2018), available at: <https://www.ipcc.ch/report/ar6/wg1/> (accessed 14 September 2023).

2 Race to Zero, ‘Finance Goes Green and Resilient’ (3 November 2021), available at: <https://climatechampions.unfccc.int/finance-goes-green-and-resilient/> (accessed 14 September 2023). McKinsey estimates \$275 trillion, ‘Financing the net-zero transition: From planning to practice’, available at: <https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/financing-the-net-zero-transition-from-planning-to-practice> (accessed 14 September 2023).

financial hardships for the residents of our states'.³ Their accusations seek to hamper private sector cooperation, and appear to succeed through the mere threat of enforcement action. The latest accusation (at the time of writing) was levelled in the week the world experienced its hottest average temperature of the last 120,000 years, following on record high Antarctic winter temperatures, widespread drought fueling forest fires, oceanic heat-waves causing mass marine die-off, unusually strong storms, and warnings of approaching tipping points with potentially devastating effects for the world's ecosystems and the global economy.⁴

This article discusses the background to Net Zero Agreements and the criticisms from anti-ESG partisans, and offers an analysis of these initiatives under US, EU and UK antitrust law. It explains that Net Zero Agreements alleviate market failures, resolve collection action problems, and have consumer welfare enhancing effects by lowering the potentially huge costs to consumers of an unmitigated climate crisis. Antitrust authorities can and should take account of these redeeming features in a 'rule of reason' analysis.

1. Net Zero agreements: cooperation to accelerate transition

Climate change is the result of the greatest market failure the world has ever seen.⁵ It is driven largely by the burning of fossil fuels and deforestation,⁶ and threatens millions of lives and livelihoods globally.

- The economic consequences of climate change are not reflected in the market price of carbon-intense products and services (i.e., they are 'externalities'). Every new fossil fuel project – and every financial institution or insurer who supports such a new project – contributes to the risk profiles for all other insurers, asset owners, and society from, for instance, floods and wildfires, without compensating for that. This means there is excess production and insufficient incentive to reduce consumption. Firms, countries

and consumers have benefitted from fossil fuels, but passed the social costs on to the future, which we are beginning to experience now.

- It's hard to solve this problem. First, consumers do not sufficiently demand, or are not sufficiently willing to pay for, sustainable goods if others do not also. They might have a poor understanding of the benefits, be preoccupied with immediate costs over long-term pay-offs (or losses paid out over those avoided), and other behavioral biases. There is also a mismatch between where high emissions occur (e.g., developed economies, China, India) and where the effects are first and most keenly felt (such as in the Global South). There is a lack of transparency on what goods are sustainable or how to reward firms that are on a sustainable pathway.
- Second, we face a collective action problem. Collectively, we have a shared incentive to solve the problems of climate change, but individually, we fear having to foot the bill without achieving meaningful results. Firms wishing to make improvements unilaterally fear free riding by others and a first mover disadvantage for themselves. It may be costly to reduce emissions, and so long as cheaper goods remain in the market from suppliers who exploit externalities, first movers fear losing out on profits and market share.

Firms wishing to make improvements unilaterally may fear a first mover disadvantage

So long as prices do not reflect the costs of climate change, unmitigated market forces will push companies to exploit natural resources and emit greenhouse gases as much as they can. The future costs continue to mount.⁷ As a result, economic actors are caught in a climate prisoners' dilemma,⁸ which can only be overcome through coordination.

It is often said that coordination can and should be achieved through regulation. Governments can fund climate-friendly technologies, mandate better reporting,

3 See, e.g., Attorneys General of various US States, *Letter to NZIA* (15 May 2023) 1, available at: <https://attorneygeneral.utah.gov/wp-content/uploads/2023/05/2023-05-15-NZIA-Letter.pdf> (accessed 14 September 2023). For a summary presentation of contrary thinking, see M. Dolmans 'If we can't do what we must, we must do what we can ...; climate change, private sector cooperation and the race to net-zero' (6 December 2022), available at: <https://www.cgnl.earth/insight/if-we-can-t-do-what-we-must-we-must-do-what-we-can> (accessed 14 September 2023).

4 J. Berardelli 'We're experiencing Earth's hottest weather in 120,000 years, and it's just getting started' (*The Hill*, 7 August 2023), available at: <https://thehill.com/policy/energy-environment/4086841-were-experiencing-earths-hottest-weather-in-120000-years-and-its-just-getting-started/> (accessed 14 September 2023). D. Armstrong McKay et al., 'Exceeding 1.5°C Global Warming Could Trigger Multiple Climate Tipping Points' (2022) 377 *Science* 6611.

5 N. Stern, 'The Economics of Climate Change' (2008) 98 *TAER* 2, 1.

6 EPA, 'Sources of Greenhouse Gas Emissions', available at: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions> (accessed 14 September 2023).

7 IPCC, *Sixth Assessment Report – Summary for Policymakers* (2023) para C.2.

8 Market players may gain important benefits from cooperating to resolve market failures, but fail to do so because they find it difficult or expensive to coordinate their activities, for instance, because of a (mis)perception of individual gain from non-cooperation, or a lack of trust that others will not free ride. All suffer as a result. See W. Poundstone, *Prisoner's Dilemma: John von Neumann, Game Theory, and the Puzzle of the Bomb* (Anchor Books, 1992).

introduce taxes on polluting goods, or establish carbon trading schemes. States could embed the costs of climate change within the costs of production, imposing a ‘polluter pays’ principle.⁹ Unfortunately, there is widespread political and regulatory failure. Indeed, regulation suffers the same shortcomings as market failure: (i) first-mover disadvantage at country-level, where countries do not want to lose competitiveness on the global scene, (ii) behavioural biases and unpopularity among the electorate of policies for which they will bear the cost but think they will not get the full long-term benefits (inter-generational inequality); and (iii) lobbying by vested interests.¹⁰ As a result, current regulations fall far short of the Paris Agreement’s 1.5°C target. We are currently headed for at least 2.7°C warming, and associated extreme weather, biodiversity loss, and food and water insecurity.¹¹

In the face of market and regulatory failures, private cooperation can help. Commercial actors can step into the void and align action to alleviate the consumer welfare harms that will flow from the climate crisis.

One form of cooperation are pledges to reduce GHG emissions to Net Zero by 2050, in line with the global effort required to limit warming as much as possible to 1.5°C. Businesses commit to measure, reduce, and ultimately eliminate net emissions generated by their own operations and in their value chains, by adapting business processes and suppliers, and developing products and services that

are climate neutral. Such pledges increase transparency, reduce the fear of a first mover disadvantage or free riding, and help stimulate the transition towards a climate neutral economy.¹²

Net Zero Agreements come in many shapes and form, with different levels of coordination, such as joint advocacy, joint studies, voluntary codes of conduct, joint basic R&D, asset sharing, joint underwriting of new technologies, or joint purchasing of low carbon inputs to lower costs and create economies of scale.¹³ Parties may simply agree to adopt and publish GHG reduction targets, but decide individually what these targets might be or how they are achieved. A step further is to align on standardized methods for targets, exchange ideas and information for best practice benchmarking, so that stakeholders can better compare and track the climate profile of different firms.¹⁴ In a more developed form, firms would promise or commit to take specified actions that – based on the best available scientific input – will help keep global warming as close to a 1.5°C pathway as possible.

2. Net Zero Agreements in political crosshairs

Net Zero Agreements gained momentum in 2021 around COP26 in Glasgow.¹⁵ The UN established the global Race to Zero campaign to mobilize private action,

9 Ronald Coase theorized that by assigning property rights to negative externalities and establishing clear rules on the ownership and exploitation of these rights, these could be efficiently resolved through bargaining and trading. See R. Coase, ‘The Problem of Social Cost’ (1960) 3 TjLE 1, 44: ‘If factors of production are thought of as rights, it becomes easier to understand that the right to do something which has a harmful effect (such as the creation of smoke, noise, smells, etc.) is also a factor of production. [...] The cost of exercising a right (of using a factor of production) is always the loss which is suffered elsewhere in consequence of the exercise of that right—the inability to cross land, to park a car, to build a house, to enjoy a view, to have peace and quiet or to breathe clean air.’ This is a sound basis for the ‘polluter pays’ principle.

10 See, for instance, <https://influencemap.org/> (accessed 14 September 2023).

11 Climate Action Tracker, ‘2100 warming projections’, available at <https://climateactiontracker.org/global/temperatures/#:~:text=Current%20policies%20presently%20in%20place,C%20above%20pre%2Dindustrial%20levels> (accessed 28 September 2023). See also IPCC, *Special Report on Global Warming of 1.5°C – Summary for Policymakers* (2023). The remaining budget to limit global warming to 1.5°C with a 50% probability is about 500 GT of CO₂. Pathways that limit warming to 1.5°C (>50%) with no or limited overshoot require global GHG emissions to go down at the latest before 2025. All pathways require deep and immediate cuts in GHGs (CO₂, NO₂ and methane) of 43% by 2030 and 84% by 2050 (median of modelled pathways compared to 2019 emission levels). See IPCC report, footnote 8, para. B.5.2, B.6.1-2, Table SPM.1). See SBTi Technical Summary, *Pathways to Net-Zero* (October 2021), p. 5, available at: <https://sciencebasedtargets.org/resources/files/Pathway-to-Net-Zero.pdf> (accessed 14 September 2023) and <https://netzeroclimate.org/what-is-net-zero/> (accessed 14 September 2023). We are currently emitting 34 billion tonnes a year (at a rate that is still accelerating albeit more slowly than in the past), suggesting that we have less than 15 years left at current rates of emissions to stay within

this budget. See <https://ourworldindata.org/co2-emissions> (accessed 14 September 2023).

12 Announcing the formation of GFANZ and the other Net Zero finance initiatives, business leaders referred to the ‘much-needed acceleration towards net zero’, ‘the breakthrough in mainstreaming climate finance’, and ‘establish[ing] a robust and transparent framework for monitoring progress’ (UNEP, ‘43 banks launch Net-Zero Banking Alliance as key part of consolidated Glasgow COP climate action’ (21 April 2021), available at: <https://www.unepfi.org/industries/banking/43-banks-launch-net-zero-banking-alliance-as-key-part-of-consolidated-glasgow-cop-climate-action/> (accessed 14 September 2023)). See also G. Thallinger, ‘Fulfilling Individual Fiduciary Responsibilities Requires A Collaborative Response to Climate Risk’ (NZAOA, June 2023), available at: <https://www.unepfi.org/industries/fulfilling-individual-fiduciary-responsibilities-requires-a-collaborative-response-to-climate-risk/> (accessed 14 September 2023). For a critical review, see L. Sachs, N. Mardirossian, and P. Toledano, ‘Finance For Zero: Redefining Financial-Sector Action to Achieve Global Climate Goals’ (June 2023), available at: <http://dx.doi.org/10.2139/ssrn.4512376> (accessed 14 September 2023) (‘meaningful progress in realigning global finance to support climate goals has been limited’).

13 ICC, ‘When Chilling Contributes to Warming’ (November 2022), available at: <https://iccwbo.org/news-publications/policies-reports/how-competition-policy-acts-as-a-barrier-to-climate-action/> (accessed 14 September 2023).

14 See, for instance, NZAOA, Target Setting Protocol (January 2023, 3rd edn), available at: <https://www.unepfi.org/industries/target-setting-protocol-third-edition/> (accessed 14 September 2023).

15 COP or ‘Conference of Parties’ is the annual meeting of parties to the 1994 UN Framework Convention on Climate Change and the 2015 Paris Agreement. See <https://unfccc.int/process/bodies/supreme-bodies/conference-of-the-parties-cop> (accessed 14 September 2023).

which led to the formation of sector-specific alliances under the Glasgow Financial Alliance for Net Zero (GFANZ), including the Net Zero Insurers Alliance (NZIA), Net Zero Banking Alliance (NZBA), Net-Zero Asset Owners Alliance (NZAOA), Net Zero Asset Managers initiative (NZAM), and others.

Under the UN Race to Zero campaign, 'Each Race to Zero member shall independently undertake an approach based on the best available science to implement the 'unabated fossil fuel phase down and out' criterion, in compliance with all legal and professional obligations. Each Race to Zero member shall phase out its development, financing and facilitation of new unabated fossil fuel assets, including coal, in line with appropriate global, science-based scenarios.'¹⁶ The various Net Zero Alliances implement this pledge in different ways. Some only require members to take general action and provide regular updates on progress.¹⁷ Others align on protocols for targets that members should adopt and on what members should report.¹⁸ Some alliances develop guidance on the nature of targets that would be compatible with Net Zero alignment, against which members' targets might be assessed on a non-coercive 'comply or explain' basis.¹⁹ None presently contemplate a contractually binding refusal to deal.

Net Zero Agreements have become a target of rising anti-ESG sentiment, particularly in the US. A weapon of choice is antitrust law. In July 2023, the House of Representatives Judiciary Committee accused the

NZAM, GFANZ and individual asset managers of 'potentially violating U.S. antitrust law by coordinating their members' agreements to 'decarbonize' their assets under management and reduce emissions to net zero'.²⁰ In August 2023, the Committee sent similar letters to proxy advisory firms and other asset managers.²¹ In May 2023, a group of 23 US State Attorneys General wrote to members of the NZIA, accusing them of colluding with other insurers 'to advance an activist climate agenda'. They claimed: 'The push to force insurance companies and their clients to rapidly reduce their emissions has led not only to increased insurance costs, but also to high gas prices and higher costs for products and services across the board'.²² These salvos are but the latest in a string of inquiry letters and public opinion pieces beginning in early 2022, directed at asset owners, asset managers, banks, and even law firms that have supported Net Zero alliances, in addition to the alliances themselves.

These US antitrust challenges contrast markedly with the thinking in other jurisdictions, where scholars and enforcers are seeking to ensure antitrust policy integrates climate goals.²³ The EU Commission recognizes that 'Consumer cooperation agreements may address residual market failures that are not or not fully addressed by public policies and regulation'.²⁴ Uncertainty in the US is nonetheless having an outsized effect. GFANZ withdrew from the Race to Zero campaign even though Race to Zero watered down the required pledge.²⁵

16 See Letter to Race to Zero Members, Update 2: Guidance on support for new coal projects (16 September 2022) 1-2.

17 See Venture Climate Alliance, *Commitment document* (April 2023), available at: https://cdn2.assets-servd.host/pink-caribou/production/230412_VCA_Commitment.pdf (accessed 14 September 2023).

18 The Net Zero Banking Alliance guidelines specify that targets shall include clients' Scope 1, Scope 2 and Scope 3 emissions 'where significant and data allows' and a 'significant majority' of a bank's Scope 3 emissions including those from a defined list of carbon-intensive sectors. Banks' transition plans should explain the actions that will be undertaken to meet the targets, such as client engagement, capacity building, divestment, etc. (UNEP FI, 'Guidelines for Climate Target Setting for Banks', April 2021, available at: <https://www.unepfi.org/industries/banking/guidelines-for-climate-target-setting-for-banks/> (accessed 14 September 2023)).

19 NZIA supported the Partnership for Carbon Accounting Financials in developing a non-binding open-source methodology to allow re/insurers to calculate their carbon footprints using consistent terms (the PCAF Standard); and developed a non-binding target-setting protocol (TSP) that provides NZIA members with a menu of options for setting emissions reduction targets that align with their own respective Net Zero pathways. See Letter of NZIA to Attorneys General of the States Listed as Signatories of the 15 May 2023, Letter 15 June 2023.

20 US House of Representatives Judiciary Committee, *Letter to GFANZ and NZAM* (6 July 2023) 2, available at: <https://judiciary.house.gov/media/press-releases/judiciary-committee-expands-esg-inquiry-blackrock-vanguard-state-street> (accessed 14 September 2023).

21 US House of Representatives Judiciary Committee, *Letters to Glass Lewis, ISS and others* (1 August 2023) 2, available at: <https://judiciary.house.gov/>

[sites/evo-subsites/republicans-judiciary.house.gov/files/evo-media-document/letters.pdf](https://evo-subsites/republicans-judiciary.house.gov/files/evo-media-document/letters.pdf) (accessed 14 September 2023).

22 Attorneys General of various US States, *Letter to NZIA* (15 May 2023) 1, available at: <https://attorneygeneral.utah.gov/wp-content/uploads/2023/05/2023-05-15-NZIA-Letter.pdf> (accessed 14 September 2023).

23 See, e.g., the series of essays in S. Holmes, D. Middelschulte and M. Snoep, *Competition Law, Climate Change & Environmental Sustainability* (Concurrences, March 2021) including 'The "Polluter Pays" Principle as a Basis for Sustainable Competition Policy'. See also M. Dolmans, 'Competition Overdose, Noble Co-opetition, and the Climate Change Example' [2022] Concurrences 38. For a recent EU survey, see S. Holmes, 'Sustainability and Competition Policy in Europe: Recent Developments' [2023] JECLP.

24 EU Commission Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 259, 21 July 2023. UK Competition and Markets Authority's Draft Guidelines on Environmental Sustainability Agreements ('Enforcement action: the CMA will not take enforcement action against environmental sustainability agreements, including climate change agreements, that clearly correspond to examples used in this Guidance and are consistent with the principles set out in this Guidance'). See also Communication from the Commission – A Competition Policy Fit For New Challenges' (18 November 2021)¹¹. Various other competition agencies, notably in Austria, Germany, Greece, Japan, the Netherlands, and Singapore have produced draft or final guidelines or offer guidance on sustainability business collaboration.

25 M. Segal, 'Mark Carney led GFANZ Drops Requirement for Race to Zero Commitment' (*ESG Today*, 28 October 2022), available at: <https://www.esgtoday.com/mark-carney-led-gfanz-drops-requirement-for-race-to-zero-commitment> (accessed 14 September 2023).

In Spring 2023, the NZIA lost half of its members.²⁶ The surviving NZIA dropped the commitment for members to individually set and publish targets,²⁷ while other Net Zero alliances may be rolling back their ambitions and deferring reporting milestones. Is all this really required by antitrust law?

3. Net Zero Agreements are not ‘per se illegal’

To advance consumer welfare, antitrust law prohibits commercial behavior that is harmful to competition.²⁸ Enforcement requires an assessment of ‘the facts peculiar to the business’ to understand ‘the nature of the restraint and its effect, actual or probable’, under the instruction of economic theory.²⁹ Over time, courts have found that there are some agreements ‘whose nature and necessary effect are so plainly anticompetitive that no elaborate study of the industry is needed to establish their illegality – they are ‘illegal per se.’³⁰ While justifications for such agreements are theoretically possible, they are unlikely since these agreements have been examined

many times in different contexts and rarely found to be justified.³¹

The principal charge laid against Net Zero Agreements is that they amount to a ‘boycott’³² or ‘horizontal output restriction’, and are therefore per se illegal.³³ A critical examination, however, reveals that this association with classic group boycotts is based on a misunderstanding of the facts,³⁴ and a misapplication of the case law.³⁵ Instead, Net Zero Agreements are subject to an assessment of their overall effects and countervailing justifications, known as the ‘rule of reason’ treatment. They pass muster under this test.

3.1. Net Zero Agreements are not collective boycotts subject to ‘per se’ or ‘by object’ analysis

Net Zero Agreements are not collective boycotts subject to ‘per se’ or ‘by object’ analysis

- 26 See, e.g., K. Rives and R. Barrett, ‘Net-zero Alliances Jittery as GOP Attorneys General Play Antitrust Card’ (8 June 2023), available at: <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/net-zero-alliances-jittery-as-gop-attorneys-general-play-antitrust-card-76075679> (accessed 14 September 2023); T. Wilkes, A. Hübner and T. Sims, ‘Insurers Flee Climate Alliance After ESG Backlog in the U.S.’ (*Reuters* 26, May 2023), available at: <https://www.reuters.com/business/allianz-decides-leave-net-zero-insurance-alliance-2023-05-25/> (accessed 14 September 2023).
- 27 T. Wilkes, ‘Exclusive: Insurers Look to Ease UN Climate Alliance Rules After Member Exodus’ (*Reuters*, 5 July 2023), available at: <https://www.reuters.com/sustainability/insurers-look-ease-un-climate-alliance-rules-after-member-exodus-sources-2023-07-04/> (accessed 14 September 2023).
- 28 ‘The goal is to ‘distinguish between restraints with anticompetitive effect that are harmful to the consumer and restraints stimulating competition that are in the consumer’s best interest.’ *Ohio v American Express Co*, 585 U. S. (2018). See also Communication from the Commission – Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 259, 21 July 2023, pp. 1–125, para 9 (‘Article 101 aims to ensure that undertakings do not use horizontal cooperation agreements to prevent, restrict or distort competition in the internal market to the ultimate detriment of consumers’). This should be seen in the light of the constitutional provisions detailing the goals of the EU, discussed below.
- 29 ‘The true test of legality is whether the restraint imposed is such as merely regulates and perhaps thereby promotes competition or whether it is such as may suppress or even destroy competition. To determine that question the court must ordinarily consider the facts peculiar to the business to which the restraint is applied; its condition before and after the restraint was imposed; the nature of the restraint and its effect, actual or probable. The history of the restraint, the evil believed to exist, the reason for adopting the particular remedy, the purpose or end sought to be attained, are all relevant facts.’ (*Chicago Board of Trade v United States*, 246 U.S. 231 (1918).)
- 30 *National Society of Professional Engineers v United States*, 435 U.S. 679, 692 (1978). Compare *Budapest Bank and Others* Case C-228/18, EU: C:2020:265, para 35 (‘certain types of coordination between undertakings reveal a sufficient degree of harm to competition to be regarded as being restrictions by object, so that there is no need to examine their effects’).

See also A. Italianer, ‘Competitor Agreements Under EU Competition Law’ (Speech at 40th Annual Conference on International Antitrust Law and Policy, Fordham Competition Law Institute (26 September 2023), available at: https://ec.europa.eu/competition/speeches/text/sp2013_07_en.pdf (accessed 14 September 2023).

- 31 Communication from the Commission – Guidelines on the application of Article 81(3) of the Treaty, OJ C 101, 27 April 2004, 97–118, para 46.
- 32 See e.g., *Letter to NZIA* (fn 3).
- 33 See e.g., *Letter to Glass Lewis* (fn 21), p. 2; *Letter to NZIA* (fn 3); and *Letter to GFANZ and NZAM* (fn 20).
- 34 See, for instance, letter of NZIA to Attorneys General of the States Listed as Signatories (fn 19) (‘Membership affords no additional visibility as to each other’s competitive strategies or the terms of each other’s client offerings, and there is no agreement with the NZIA, nor any agreement or alignment among its members, as to how NZIA members will compete. The NZIA’s activities benefit members’ customers, as both re/insurers and re/insureds innovate new products to respond to client demand, facilitate net zero transitions, and mitigate and adapt to climate risks. ... there is nothing in the TSP that constitutes an agreement: (i) to boycott any sector or company; (ii) to fix prices or restrict production, sales, or outputs; or (iii) to impose conditions on customers under re/insurance contracts. Members retain complete autonomy with respect to how they work toward their own goals within their portfolios and on the terms of the contracts they enter into with their respective customers.’). See also D. Webb, ‘NZIA Says US Attorneys General Concerns Based On “Mistaken Interpretation” of Its Activities’ (*Responsible Investor*, 4 July 2023), available at: <https://www.responsible-investor.com/nzia-says-us-attorneys-general-concerns-based-on-mistaken-interpretation-of-its-activities/#:~:text=The%20Net%20Zero%20Insurance%20Alliance,the%20NZIA%20and%20its%20members%E2%80%9D> (accessed 14 September 2023).
- 35 D. Hearn, C. Hanawalt and L. Sachs, ‘Antitrust and Sustainability: A Landscape Analysis’ (26 July 2023), available at: <https://ccsi.columbia.edu/sites/default/files/content/docs/Antitrust-Sustainability-Landscape-Analysis.pdf> (accessed 14 September 2023); C. Hanawalt and D. Hearn, ‘The Slippery Notion of Boycotts in the Anti-ESG Movement – Climate Law Blog’ (14 June 2023), available at: <https://blogs.law.columbia.edu/climatechange/2023/06/14/the-slippery-notion-of-boycotts-in-the-anti-esg-movement> (accessed 14 September 2023).

An agreement to decarbonize by 2050 is not equivalent to a collective refusal to deal. Members individually decide how to act, according to their own decarbonization profiles and timelines. Some alliances encourage members to stop support for new coal power projects and for the development of new oil and gas fields, but do so only on a ‘comply or explain’ basis.³⁶

Even if these undertakings to cease supporting fossil fuels were binding, however, such arrangements would not be a per se violation of the Sherman Act. As the US Supreme Court explained in *Northwest Wholesale Stationers v. Pacific Stationery & Printing Co.*, ‘[e]xactly what types of activity fall within the [per se] category is ... far from certain.’³⁷ Yet the Court’s application of per se treatment to concerted refusals has been limited to circumstances where the collective action was intended to support rent seeking by enforcing price fixing, or by excluding competitors from the market where the parties are themselves active (horizontal effects, as opposed to any effects upstream or downstream). This is not the goal or effect of Net Zero Agreements.

The focused application of the per se rule is articulated in *Indiana Federation of Dentists (1986)*: ‘Although this Court has, in the past, stated that group boycotts are unlawful per se [...] the category of restraints classed as group boycotts is not to be expanded indiscriminately, and the per se approach has generally been limited to cases in which firms with market power boycott suppliers or customers in order to discourage them from doing business with a competitor.’³⁸

An examination of the main US Supreme Court cases on ‘collective boycotts’ confirms this narrow application of the per se rule – despite recourse by the State Attorneys General and the House Judiciary Committee to these authorities in their criticisms of Net Zero Alliances.

- In the early cases of *Klor’s Inc. v Broadway Hale Stores* (1959) and *Fashion Originators’ Guild of America v Federal Trade Commission* (1941), the Court did not use the term ‘per se’ to describe the violations in question but followed a ‘per se’ approach.³⁹ Both cases involved agreements to exclude rivals. *Fashion Originators* concerned a group of designers and manufacturers refusing to sell their clothes to

retailers who bought clothes from competing suppliers who copied their designs. The Court pointed out that ‘the aim of petitioners’ combination was the intentional destruction of one type of manufacture and sale which competed with Guild members’. *Klor’s* involved an agreement between a retail store (Broadway Hale), appliance manufacturers, and their distributors not to sell appliances to Broadway Hale’s competitor *Klor’s* – a concerted refusal to deal to exclude a competitor.

- In *United States v General Motors Corp.* (1966), the Court examined a concertation between General Motors and dealers in Los Angeles to stop selling Chevrolets to ‘discount houses’. It held that ‘Elimination, by joint collaborative action, of discounters from access to the market is a per se violation of the Act.’⁴⁰
- In *Superior Court Trial Lawyers Association* (1990), a group of lawyers agreed not to take on criminal defence assignments in the District of Columbia Superior Court until the government increased fees. This was an agreement ‘designed to obtain higher prices for their services’. The Court highlighted: ‘this case involves not only a boycott but also a horizontal price fixing arrangement – a type of conspiracy that has been consistently analyzed as a per se violation for many decades’, and duly accorded per se treatment to the lawyers’ campaign.⁴¹

In concerted refusals to deal lacking the key elements of a calculated price increase or harm to rivals, the US Supreme Court applied a rule of reason analysis.⁴²

- *National Society of Professional Engineers* (1978) concerned an agreement among competitors to refuse to discuss prices with potential customers until after the initial selection of an engineer. The Court evaluated this restriction under the rule of reason, after determining that it was ‘not price fixing as such’ (although still finding it illegal under the rule of reason ‘as an absolute ban on competitive bidding’).⁴³
- *NCAA v Board of Regents* (1984) involved US colleges jointly licensing the broadcast rights for intercollegiate football games, which limited the number of games any one team could televise. The Court observed: ‘Horizontal price-fixing and output limitation are ordinarily condemned as a matter of law under an ‘illegal per se’ approach, because the probability that these practices are anticompetitive is so high’ but

36 NZAOA, Thermal Coal Position (November 2020) 2; NZAOA, Position on the Oil and Gas Sector, (March 2023) Figure 5. For the ‘comply or explain’ principle, see UNEPFI FAQ on Target Setting Protocol Third Edition (‘**Shall** means that a process is binding for the purpose of the Alliance but remains subject to the unilateral decision of the member concerned. If the member concerned does not follow the guidance, an explanation to the Alliance is required’), available at: <https://www.unepfi.org/net-zero-alliance/alliance-extranet/other-items/faq-on-target-setting-protocol-third-edition/> (accessed 14 September 2023).

37 472 U.S. 284, 294 (1985).

38 *FTC v Indiana Federation of Dentists*, 476 U.S. 447, 458 (1986).

39 *Fashion Originators’ Guild of America v FTC*, 312 U.S. 457, 467 (1941); *Klor’s Inc. v Broadway Hale Stores*, 359 U.S. 207, 212 (1959).

40 *United States v General Motors Corp.*, 384 U.S. 127, 145 (1966).

41 *FTC v Superior Court Trial Lawyers Association*, 493 U.S. 411, 423 and 436 (1990).

42 FTC & Department of Justice, Antitrust Guidelines for Collaborations Among Competitors § 3.31(a), at 14 (2000) (‘most collaborations for innovation ‘are procompetitive, and they typically are analyzed under the rule of reason’).

43 *National Society of Professional Engineers v United States*, 435 U.S. 679, 692 (1978).

held that ‘per se’ treatment was not appropriate because ‘this case involves an industry in which horizontal restraints on competition are essential if the product is to be available at all’.⁴⁴ In other words, the nature and context of the agreement indicated there could be procompetitive justifications.

- In *Northwest Wholesale Stationers* (1985), a wholesale purchasing cooperative that excluded a member without due process was found not so conclusively anticompetitive as to merit per se assessment. Unless it is shown that the cooperative possesses market power or exclusive access to an element essential for effective competition, the conclusion that expulsion of a competitor is virtually always likely to have an anticompetitive effect is not warranted.⁴⁵

So, it is not enough that a collective refusal can be described in some fashion as a ‘boycott’. To be condemned as ‘per se’ illegal, it must have the attributes that display manifest harm to competition at a horizontal level without plausible procompetitive benefits. The US Supreme Court’s careful approach reflects the fundamental principle that the per se rule is applied restrictively, because ‘[l]egal presumptions that rest on formalistic distinctions rather than actual market realities are generally disfavored in antitrust law’ and ‘there are often hard-to-see efficiencies attendant to complex business arrangements’.⁴⁶

EU and UK law take a similar position to the US. The EU Guidelines for Horizontal Agreements distinguish between collective refusals to buy and refusals to sell.

A collective refusal to buy ‘that aims to exclude an actual or potential competitor from the downstream selling market is a form of horizontal boycott [that] amounts to a restriction by object’.⁴⁷ On the other hand, a vertical boycott ‘between purchasers to no longer buy products from certain suppliers due to particular product characteristics, production processes or working conditions, for example because the products offered are unsustainable whereas the purchasers want to buy only sustainable products, does not have the object of restricting competition [and] must therefore be considered in their legal and economic context to assess their actual or likely effects on competition’.⁴⁸ The UK’s Guidelines say the same.⁴⁹

A comparable rule applies to joint refusals to sell, when competitors ‘agree to phase out, withdraw, or, in some cases, replace non-sustainable products (for example, plastics or fossil fuels, such as oil and coal) and processes (for example, coal-fired steel production) with sustainable ones’.⁵⁰ Such agreements require an individual assessment of their effects under Article 101 TFEU. If they are found to have an appreciable effect on parameters of competition, they may be justified under the *Wouters* doctrine of ‘regulatory ancillarity’,⁵¹ or under Article 101(3) TFEU.⁵² An early example of this assessment is the *CECED* decision, where the European Commission blessed an arrangement among almost all EU washing machine manufacturers to cease production of machines in the lowest energy efficiency categories.⁵³

44 *NCAA v Board of Regents of University of Oklahoma*, 468 U.S. 85, 100–101 (1984).

45 *Northwest Wholesale Stationers, Inc. v Pacific Stationery & Printing Co.*, 472 U.S. 284 (1985).

46 *Eastman Kodak Co. v Image Technical Services, Inc.*, 504 U.S. 451, 466–467 (1992) and *Leegin Creative Leather Products, Inc. v PSKS, Inc.*, 551 U.S. 877, 886–887 (2007). See also, *United States v Jerrold Electronics Corporation*, 187 F. Supp. 545, 556 (E.D. Pa. 1960) (‘Any judicially, as opposed to legislatively, declared per se rule is not conclusively binding on this court as to any set of facts not basically the same as those in the cases in which the rule was applied. In laying down such a rule, a court would be, in effect, stating that in all the possible situations it can think of, it is unable to see any redeeming virtue in tying arrangements which would make them reasonable. The Supreme Court of the United States did not purport in the Northern Pacific case to anticipate all of the possible circumstances under which a tying arrangement might be used. Therefore, while the per se rule should be followed in almost all cases, the court must always be conscious of the fact that a case might arise in which the facts indicate that an injustice would be done by blindly accepting the per se rule.’).

47 EU Commission Horizontal Guidelines, para 284; See also Whish and Bailey expert report on ‘Horizontal Guidelines on purchasing agreements’, available at: https://competition-policy.ec.europa.eu/system/files/2022-03/kd0722_013enn_purchasing_agreements.pdf (accessed 28 September 2023). Whish and Bailey conducted a comprehensive analysis of EU and national jurisprudence and decisional practice on purchaser agreements. They found that collective decision not to purchase from specified suppliers was considered a restriction by object only where the collaboration was intended to punish a competitor or keep them out of their market (para 2.39).

48 EU Commission Horizontal Guidelines, para 284.

49 CMA Horizontal Guidelines, paras 6.15–6.16. CMA Draft Sustainability Guidelines, paras 4.10–4.11 (‘... an environmental sustainability agreement that involves a group of competing purchasers agreeing only to purchase from suppliers that sell sustainable products. Such an agreement would be unlikely to restrict competition by object despite it involving conduct that could be regarded as a form of collective boycott ... In the case of the horizontal collective boycott, the intention is to eliminate a competitor that is operating at the same level of the market as the participants in the boycott whereas in the case of the purchasing agreement it is to eliminate unsustainable products from the supply chain. Such purchasing agreements should therefore typically be the subject of an effects analysis’).

50 EU Commission Horizontal Guidelines, para 538.

51 Under the *Wouters* doctrine, restrictions of competition emanating from agreements or decisions of associations of undertakings may fall outside the scope of Article 101(1) TFEU if they are inherent in the pursuit of a legitimate public policy objective and proportionate thereto (see, inter alia *Albany International* Case C-67/96, EU:C:1999:430; *Wouters and Others* Case C-309/99, EU:C:2002:98; and *Meca-Medina and Majcen v Commission* Case C-51/04 P, EU:C:2006:492).

52 EU Commission Horizontal Guidelines, para 556 and following, and fn 377; for the UK equivalent, see CMA Draft Sustainability Guidelines, para 2.5, paras 3.13 and following, and paras 5.1 and following.

53 *CECED* (Case IV.F.1/36.718) Commission Decision of 24 January 1999 (‘On the basis of reasonable assumptions, the benefits to society brought about by the CECECED agreement appear to be more than seven times greater than the increased purchase costs of more energy-efficient washing machines. ... Such environmental results for society would adequately allow consumers a fair share of the benefits even if no [in-market] benefits accrued to individual purchasers (...)’).

To summarize, Net Zero Agreements are not per se violations:

- They are not intended to seek rents, like a classic cartel or a boycott to exclude rivals. Parties instead forego revenues in the short run to secure ‘spill-over benefits’ or positive externalities in the longer run, in the form of a reduction of the risk of economic, social, and environmental disruption resulting from the climate crisis. Such agreements in the longer term benefit all market participants, consumers, and society as a whole, in line with public policy. Indeed, coordination may be the only stable response to finance and insurance externalities that create potentially catastrophic risk.
- Second, there is no harm to rivals, or exclusion of rivals in the same market. Indeed, competitors benefit from the positive externalities that motivated the agreements in the first place. If the agreements have any effect, these are felt downstream (and in the case of refusals to buy, upstream), in that they create an incentive for customers and suppliers to transition to a clean and low-carbon business model.
- Third, members do not stop financing, insuring, or dealing with, specific individual customers – rather, they encourage customers to develop new climate-aligned technologies, products and services.⁵⁴
- Finally, the goal is not to distort the competitive process, but restore it – to increase market efficiency by reducing externalities. The target is not subjectively set by private entities reflecting private goals, but by 197 countries, including the United States, in the public interest and reflecting objective scientific findings.⁵⁵ Avoiding new fossil fuel projects may even increase capacity to fund or insure low-carbon projects, which might lower the costs of insurance for such projects and overall.

3.2. Net Zero Agreements are not a reduction of output subject to a ‘per se’ analysis.

Apart from invoking collective boycott case law, critics argue that Net Zero Agreements are a restriction of

output, which has often been described as one of the most harmful types of competitive restrictions.⁵⁶ The US FTC explains: ‘An agreement to restrict production, sales, or output is just as illegal as direct price fixing, because reducing the supply of a product or service drives up its price.’⁵⁷

Net Zero Agreements may superficially look like a reduction of output of carbon-intensive products, that may be procured through a reduction of input (like finance or insurance), but they are not ‘naked’ restraints of competition. As explained, their objectives and effects are not short-term rent seeking or the exclusion of competitors, but the transition to, and increased output of, clean production. They are subject, therefore, to a rule of reason, to determine whether they enhance consumer welfare.

The objectives and effects of Net Zero Agreements are a transition to, and increased output of, clean production, subject to a rule of reason

The criticism of Net Zero Agreements reflects what Prof. Newman calls the ‘output-welfare fallacy’ and a ‘modern antitrust paradox’, with a nod to Robert Bork.⁵⁸ ‘Output effects cannot serve as the sole criterion for evaluating welfare effects,’ amongst other reasons because ‘various types of marketplace activity can increase output while decreasing welfare. The inverse is also true: various types of conduct can decrease output while increasing welfare.’ Specifically, ‘alleviating a negative externality can reduce output of a relevant product yet increase consumer welfare’ – which is directly relevant for climate action.

54 As one asset manager observed: ‘We could reduce the emissions of our portfolio very quickly by selling off the high-carbon assets, but it does nothing to achieve net zero. The ultimate test is how much emissions are reduced in the real economy, rather than in our portfolio. [...] The worst mistake would be to isolate carbon-heavy places and enterprises by starving them of capital [...] Heavy emitters cannot decarbonise alone.’ These remarks were echoed by Catherine McKenna, U.N.’s High-level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities, see M. Scott, ‘Reality Bites As Finance Firms Row Back On Their Climate Pledges’ (*Reuters*, 20 December 2022), available at: <https://www.reuters.com/business/sustainable-business/reality-bites-finance-firms-row-back-their-climate-pledges-2022-12-20/> (accessed 14 September 2023).

55 UNFCCC, The Paris Agreement, available at: <https://unfccc.int/process-and-meetings/the-paris-agreement> (accessed 14 September 2023).

56 See e.g., *Letter to Glass Lewis* (fn 21), 2, citing *NCAA v Bd. of Regents*, 468 U.S. 85, 104 (1984).

57 FTC webpage ‘Price Fixing’, available at: <https://www.ftc.gov/advice-guidance/competition-guidance/guide-antitrust-laws/dealings-competitors/>

price-fixing (accessed 14 September 2023). See e.g., *National Collegiate Athletic Association v Alston*, 594 U.S. ____ (2021) (‘[S]ome agreements among competitors so obviously threaten to reduce output and raise prices that they might be condemned as unlawful per se or rejected after only a quick look’) and *NCAA v Board of Regents of University of Oklahoma*, 468 U.S. 85, 107 (1984) (‘Restrictions on price and output are the paradigmatic examples of restraints of trade that the Sherman Act was intended to prohibit’). For a survey of US academic and judicial authorities describing output effects as central to the competitive assessment, see J. Newman, ‘The Output-Welfare Fallacy: A Modern Antitrust Paradox’ (2022) 107 *ILR* 573 et seq.

58 Newman, *Ibid.* See also H. Hovenkamp, ‘Are Regulatory Agreements to Address Climate Change Anticompetitive?’ (11 September 2019), available at: <https://www.thereview.org/2019/09/11/hovenkamp-are-regulatory-agreements-to-address-climate-change-anticompetitive/> (accessed 14 September 2023). For a more traditional approach, see OECD, *Horizontal Agreements in the Environmental Context* (2010), available at: <http://www.oecd.org/competition/cartels/49139867.pdf> (accessed 14 September 2023).

By way of example, insurance firms and ‘universal asset owners’⁵⁹ may find they insure or finance high-carbon emitting activities that create climate risk that comes back to haunt their other investments or other insured projects (and those of other market players) in the form of physical risks and economic disruption, which could make their entire business model unviable.⁶⁰ As Aviva Investors’ chief sustainability officer said, ‘Our sector has an existential issue with warming above 4 degrees. It simply won’t be possible to price insurance products at a premium we can sustain, and which economies can afford. That’s a profound macroeconomic problem, given the role of insurance in pricing and redistributing risk’.⁶¹ Even below 1.5°C, problems arise: State Farm, America’s biggest car and home insurer by premium volume, halted the sale of new home insurance policies in California because of increasing wildfire risks and construction costs, and others have left the Florida market – a harbinger of widespread reductions of consumer welfare if insufficient climate action is taken.⁶² Net Zero Agreements aim to avoid this as much as possible.

3.3. Net Zero Agreements do not harm the competitive process.

In the US, ‘[t]he purpose of the [Sherman] Act is not to protect businesses from the working of the market; it is to protect the public from the failure of the market.’⁶³ In the EU, similarly, ‘the competition rules [are] designed

to protect not only the immediate interests of individual competitors or consumers but also to protect the structure of the market and thus competition as such’.⁶⁴ Against this benchmark, a third criticism is that Net Zero Agreements distort the process of competition.⁶⁵

It would be facile and wrong to condemn Net Zero agreements simply because they may reduce the number of suppliers in certain markets. They are designed to improve market efficiency by mitigating market failures and so enhance rather than harm the competitive process. EU, UK, and US antitrust laws do not and should not protect inefficient markets at the expense of consumer welfare, and will take account of proportionate and verifiable efficiencies. Thus, in *Indiana Federation of Dentists*, the US Supreme Court described the agreement as ‘likely enough to disrupt the proper functioning of the price-setting mechanism of the market’ or ‘limiting consumer choice by impeding the ‘ordinary give-and-take of the marketplace’ but remained open to justifications based on ‘some countervailing procompetitive virtue – such as, for example, the creation of efficiencies in the operation of a market or the provision of goods and services’.⁶⁶ The reference to ‘efficiencies in the operation of a market’ as a justification is particularly relevant: it includes the mitigation of market failures for a more efficient and sustainable allocation of resources and away from production that overexploits public goods.

Applying the principles discussed above, we propose the following simplified decision tree for assessing

59 ‘A Universal Asset Owner, also called a Universal Owner, are institutional investors that are so large and invest in so many securities and assets that they are a representative component of financial markets. Universal asset owners have a difficult time diversifying from systemic risks. ... Examples of universal asset owners include sovereign wealth funds, large public pensions, and large mutual funds.’ (SWFI, What is a Universal Asset Owner, available at: <https://www.swfinstitute.org/news/95055/what-is-a-universal-asset-owner> (accessed 14 September 2023)).

60 According to a joint study by GIC and Ortec Finance, long-term investors face significant losses from climate change risks, with a 1.5°C warming scenario being the least worst option. The 40-year annualized absolute return for investment portfolios (based on a hypothetical global 60% equities and 40% bonds portfolio) is projected to be 10% lower than a climate-uninformed baseline in a 1.5°C warming scenario, compared to 37% under current policies. See R. Teo and W. Verdegaaal, ‘Integrating Climate Scenario Analysis into Investment Management: A 2023 Update’ (April 2023) 15, 22–23. Amelia Miazad uses the perspective of universal asset owners as a basis for her calls for a ‘universal consumer standard’. See A. Miazad, ‘Prosocial Antitrust’ (2022) 73 HLJ 6.

61 S. Waygood, quoted in CDP ‘Business in Action’, available at: <https://www.cdp.net/en/research/global-reports/tracking-climate-progress-2017/business-in-action> (accessed 14 September 2023).

62 See <https://newsroom.statefarm.com/state-farm-general-insurance-company-california-new-business-update/> (accessed 14 September 2023). See also, e.g., R. Cho, ‘With Climate Impacts Growing, Insurance Companies Face Big Challenges’ (*State Of The Planet: Columbia Climate School*, 3 November 2022), available at: <https://news.climate.columbia.edu/2022/11/03/with-climate-impacts-growing-insurance-companies-face-big-challenges/> (accessed 14 September 2023). (‘Premiums already rose 12.1 percent across the U.S. from 2021 to 2022, with higher rates in states where natural

disasters occur more frequently’); see, e.g., McKinsey & Co., ‘Climate Change and P&C Insurance The Threat and Opportunity’ (19 November 2020), available at: <https://www.mckinsey.com/industries/financial-services/our-insights/climate-change-and-p-and-c-insurance-the-threat-and-opportunity> (accessed 14 September 2023) (‘research shows that the value at stake from climate-induced hazards could, conservatively, increase from about 2 percent of global GDP to more than 4 percent of global GDP in 2050’). In other words, even in the case that Net Zero Agreements are negative for direct consumer welfare in the short term (due to lower outputs or higher prices), the discounted present value of overall consumer welfare the ‘business as usual’ scenario without the Net Zero Agreement (the counterfactual), may be lower than in a world where the agreements are implemented.

63 *Spectrum Sports, Inc. v McQuillan*, 506 U.S. 447, 458 (1993). Recently, various US enforcers and scholars have called for renewed focus on ‘the protection of competition and the competitive process’ as a goal of competition law (see OECD, *Consumer Welfare Standard: Advantages and Disadvantages Compared to Alternative Standards* (2023) Section 2.5, and the works cited; J. Kanter (2023) *Protecting Competition – Remarks as Prepared for the Handler Lecture to the New York City Bar Association*, available at: <https://www.justice.gov/opa/speech/assistant-attorney-general-jonathan-kanter-delivers-remarks-new-york-city-bar-association> (accessed 14 September 2023)).

64 *T-Mobile Case C-8/08*, EU:C:2009:343, para 38.

65 See, e.g., *Letter to Glass Lewis* (fn 21), 2, citing *Associated General Contractors of California, Inc. v California State Council of Carpenters*, 459 U.S. 519, 528 (1983); Whish and Bailey expert report (fn 46), para 2.32.

66 *FTC v Indiana Federation of Dentists*, 476 U.S. 447, 475 (1986). In the end, the court found the agreement illegal. See also *NCAA v Board of Regents of University of Oklahoma*, 468 U.S. 85 (1984).

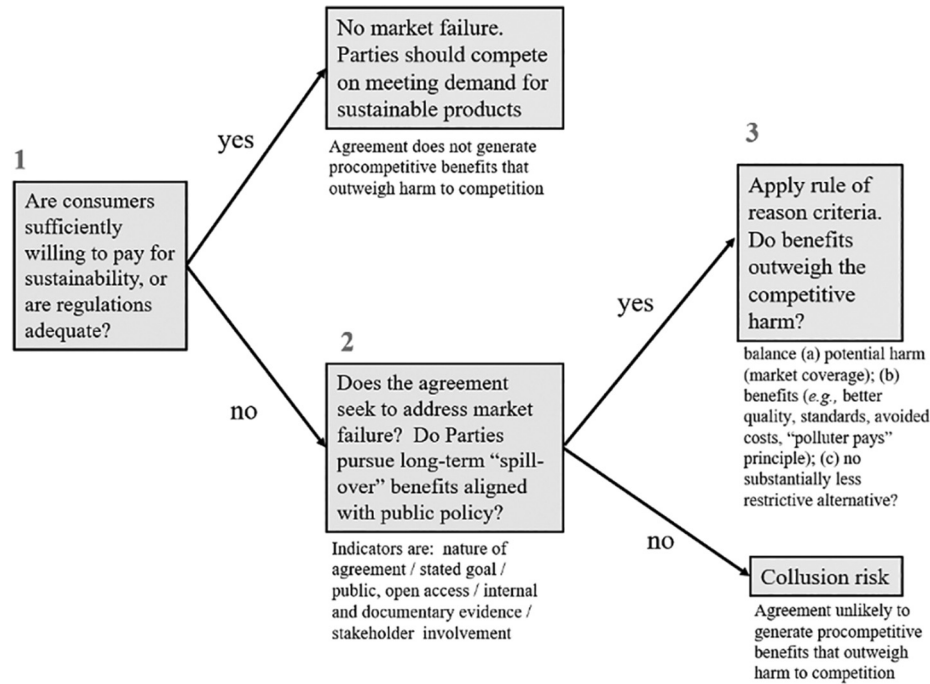


Figure 1 Decision tree for assessing restrictions in climate/sustainability agreements (US)

competitive restrictions in pursuit of sustainability goals. It is clear that neither in the US nor in the EU or UK do Net Zero Agreements deserve ‘per se’ or ‘by object’ treatment. Their assessment requires a thoughtful analysis of the benefits under the rule of reason.

4. Net Zero Agreements under a ‘rule of reason’ analysis

US, EU and UK antitrust law apply a similar framework to assess the balance of harm and ‘redeeming virtues’⁶⁷ of restrictive agreements. In the US, ‘the plaintiff has the initial burden to prove that the challenged restraint has a substantial anticompetitive effect that harms consumers in the relevant market. [...] If the plaintiff carries its burden, then the burden shifts to the defendant to show a procompetitive rationale for the restraint. [...] If the

defendant makes this showing, then the burden shifts back to the plaintiff to demonstrate that the procompetitive efficiencies could be reasonably achieved through less anticompetitive means.’⁶⁸

The EU and UK follow similar steps,⁶⁹ with the explicit added stipulation that a ‘fair share’ of the benefits should go to final consumers, and the agreement cannot eliminate all competition for the goods or services concerned.⁷⁰

4.1. The redeeming virtues of Net Zero Agreements

Critics of Net Zero Agreements suggest that ‘social justifications [...] cannot redeem anticompetitive collusion’.⁷¹ The rule of reason, however, explicitly allows for an analysis of a procompetitive rationale for an

67 *California Dental Ass’n v FTC*, 526 U.S. 756 (1999).

68 *Ohio v American Express Co.*, 585 U.S. (2018).

69 EU Commission Horizontal Guidelines, paras 17–18 (‘The assessment under Article 101 consists of two steps. The first step, under Article 101(1), is to assess whether an agreement between undertakings that is capable of affecting trade between Member States has an anti-competitive object or actual or potential restrictive effects on competition. The second step, under Article 101(3), which only becomes relevant when an agreement is found to restrict competition within the meaning of Article 101(1), is to determine the advantages produced by the agreement and to assess whether those advantages offset the disadvantages for competition’). See also UK CMA Draft Sustainability Guidance, para 5.1 and following.

70 Article 101(3) TFEU. The *Wouters* doctrine on regulatory ancillarity mentioned above follows similar criteria, using a proportionality test.

71 *Letter to Glass Lewis* (fn 21); ISS and others, p. 2 and *Letter to GFANZ and NZAM* (fn 20), 2 (fn 13), citing *FTC v Superior Ct. Trial Laws. Ass’n*, 493 U.S. 411, 424 (1990). But that case, discussed above, concerned price fixing and an agreement ‘designed to obtain higher prices’ for the purpose of rent seeking, subject to a ‘per se’ analysis. FTC Chair Khan explained there is no special exemption from merger review for ESG goals, but said nothing about Net Zero Agreements. Lina Khan, Remarks at Senate Subcommittee on Competition Policy, Antitrust, and Consumer Rights hearing on Oversight of Federal Enforcement of the Antitrust Laws, (20 September 2022), available at: <https://www.judiciary.senate.gov/committee-activity/hearings/oversight-of-federal-enforcement-of-the-antitrust-laws> (accessed 14 September 2023). Some argue that sustainability agreements lack democratic legitimacy. Market and regulatory failures are to be mitigated by the legislature and not by market power created through agreements with anti-competitive effects. But we face political failure. Moreover, the rule of reason, provisions

agreement, even if it restricts competition, and allows consideration of a range of efficiencies and benefits. Moreover, climate action benefits are not just social justifications, but economic justifications, because there are quantifiable consumer benefits, aligned with public interest. For instance, two-thirds of U.S. adults prefer developing alternative energy sources over expanding production of oil, coal and natural gas. A similar majority are of the view that large businesses and corporations do too little to mitigate climate change.⁷² Agreements that achieve that should be allowed.

As Prof. Newman explained, ‘procompetitive justification analysis entails three steps. First, the defendant must identify a specific cause of market failure. ... high transaction costs, free-rider problems, downstream market power, information asymmetries, or another well-established cause of market failure ... Second, the defendant must prove that the relevant market actually failed (or would have failed) absent the challenged restraint. ... Third, the defendant must prove that the challenged restraint actually alleviated the market failure.’⁷³

There is clear and convincing evidence of the economic harms caused by market failures leading to climate change, and the collective action problems that impede their resolution.⁷⁴ Net Zero Agreements are capable of reducing these market failures in various ways. For instance:

- Common standards for measuring, reporting, and disclosing GHG emission help producers present consistent and comparable information, combat greenwashing, and help customers exercise informed choice – addressing demand side market failures.
- Firms benefit from common cost savings when they share infrastructure, or the costs of developing, maintaining, and applying science-based sustainability standards that they would or could not develop alone.⁷⁵
- Common goals for producers can resolve the problem that firms face economic damage from increased climate risks but may have no incentive unilaterally to

reduce emissions, because doing so has little effect when other firms do not follow – and even more so when other firms free ride. ‘Where positive spill-overs exist between firms, efforts by one firm also benefit other firms. In this case, the level of sustainability efforts by other firms would actually have a positive effect on a firm achieving its own objectives. Allowing firms to coordinate their sustainability efforts will then lead to higher overall effort levels.’⁷⁶ For instance, insurance companies can reduce climate risks by offering insurance for carbon-neutral energy, while desisting from new fossil fuel projects, to speed up the transition to a carbon-free economy. This preserves their business in the longer run, and benefits consumers by lowering premiums overall (compared to the counterfactual) and preserving access to insurance for fire, floods, and other effects of climate change.

These redeeming virtues are part of public policy. Under the Biden Administration, Section 201 of the ‘Executive Order on Tackling the Climate Crisis at Home and Abroad’ of 27 January 2021 provides that ‘The Federal Government must drive assessment, disclosure, and mitigation of climate pollution and climate-related risks in every sector of our economy. ... It is the policy of my Administration to organize and deploy the full capacity of its agencies to combat the climate crisis to implement a Government wide approach that reduces climate pollution in every sector of the economy.’⁷⁷ This order covers antitrust enforcement and policy, calling on the US Department of Justice and Federal Trade Commission to take into account the climate benefits of private sector cooperation in the application of antitrust law.

EU and UK competition law take the same approach. Article 101(3) TFEU recognizes all benefits that ‘contribute to improving the production or distribution of goods or contribute to promoting technical or economic progress’. In the EU, this should be read in light of the constitutional provisions of the Treaties, notably Article 3(3) TEU (the Union shall work for ‘the sustainable development of

of Article 101(3) TFEU and the UK equivalent, the line of cases following *Wouters*, and (in the EU) the constitutional provisions of the Treaties discussed below, explicitly contemplate the possibility of pro-social agreements. The proposal is not to condone illegal behaviour, but to recognize that antitrust authorities should not expand their powers to prohibit pro-social arrangements, and should apply a full understanding of economics, including the implications of externalities, within the parameters of antitrust law.

72 See Pew Research Center, ‘Americans Largely Favor U.S. Taking Steps To Become Carbon Neutral by 2050’, available at: <https://www.pewresearch.org/science/2022/03/01/americans-largely-favor-u-s-taking-steps-to-become-carbon-neutral-by-2050/> (accessed 14 September 2023). See Consumer Reports, ‘Majority of Americans Want Cleaner Energy From Renewable Sources’, available at: <https://www.consumerreports.org/alternative-energy/majority-of-americans-want-cleaner-energy-from-renewable-sources/> (accessed 14 September 2023).

73 J. Newman, ‘Procompetitive Justifications in Antitrust Law’ (2019) 94 *INDLJ* 501, 506.

74 IPCC, *Sixth Assessment Report – Summary for Policymakers* (fn 7).

75 G. Thallinger, ‘Fulfilling Individual Fiduciary Responsibilities Requires A Collaborative Response to Climate Risk’ (NZAOA, June 2023) (fn 12).

76 H. Jenkins, N. Rosenboom, T. Klein and G. Castroviejo, ‘When To Give The Green Light To Green Agreements’ (13 September 2021), available at: <https://www.oxera.com/insights/agenda/articles/when-to-give-the-green-light-to-green-agreements/> (accessed 14 September 2023).

77 Executive Order 14008, available at: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/> (accessed 14 September 2023). See also Section 219: ‘Agencies shall make achieving environmental justice part of their missions by developing programs, policies, and activities ...’ Section 222(c)(iii): ‘The Attorney General shall, within existing appropriations and consistent with applicable law ... ensure comprehensive attention to environmental justice throughout the Department of Justice...’. See also Executive Order 13990 of 20 Jan 2020 on ‘Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis’ 86 FR 7037.

Europe based on (...) a high level of protection and improvement of the quality of the environment'), Article 3(5) TEU (the EU 'shall contribute to (...) the sustainable development of the Earth'), and Article 11 TFEU ('environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development'), as well as Article 191(2) TFEU ('Union policy on the environment shall aim at a high level of protection (...) It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay'), and Article 37 of the EU Charter of Fundamental Rights ('a high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development'). It is clear from these that abatement of the climate crisis is a legitimate purpose of an agreement under Article 101(3) TFEU.

In the UK, too, the CMA will recognize the benefit of 'eliminating or reducing the harmful effects arising from the production or consumption of particular goods or services that the market has failed to address, for example reducing greenhouse gas emissions; improving product variety or quality (for example, creating new or improved products which have a reduced impact on the environment); reducing production and distribution costs (for example, combining resources to create economies of scale in relation to a new, more environmentally sustainable input, enabling the parties to produce or distribute their products more cheaply); improving production or distribution processes (for example, the introduction of new cleaner technologies); and increasing innovation

(for example, developing new, more energy-efficient processes).⁷⁸

To summarize, antitrust economics can and should integrate the benefits of averting climate change. Antitrust authorities should not block private sector cooperation between firms effectively pursuing a transition to a clean economy, where it corrects market failures and resolves collective action problems, to the benefit of consumers.

4.2. A fair share to consumers – balancing consumer welfare benefits⁷⁹

Article 101(3) TFEU requires that an exemption from the ban on restrictive agreements is available only if a 'fair share' of the benefits accrue to the consumers affected by the agreement. The European Commission's revised Horizontal Guidelines identify three categories of welfare benefits to be taken into account, which are also instructive for a US rule of reason analysis: (a) individual use value benefits: benefits derived from the use of the products, such as reduced emissions, or improved quality, variety or prices; (b) individual non-use value benefits: benefits resulting from an appreciation of the impact of the products' (non-)consumption on others, such as reduced deforestation associated with sustainably-sourced timber;⁸⁰ and (c) collective consumer benefits: benefits that occur irrespective of the consumers' individual appreciation of the product and that accrue to a wider section of society including the consumers in the relevant market, such as an improvement in air quality as a result of phasing out polluting technology in cars, or climate change mitigation.⁸¹

Economic techniques and quantification tools are available to measure each of these benefits.⁸² For instance, consumer welfare can be measured by reference to

78 CMA Draft Sustainability Guidance, para 5.4 and following.

79 There are voices calling for a broader total or social welfare goal, or criticizing 'consumer welfare' as too narrow or confused. See for instance B. Orbach, 'The Antitrust Consumer Welfare Paradox' [2007] JCLE 7, 149-179. As a middle ground, Amelia Miazad calls for a 'universal consumer standard' in 'prosocial Antitrust' (fn 59) ('antitrust must evolve to use a welfare standard that will account for systematic risks... the universal consumer standard could allow competitor collaboration if the parties demonstrate that: 1) The collaboration is designed and narrowly tailored to mitigate a specifically identified systematic risk; 2) The collaborators' investors have identified the systematic risk as a focus area through public statements, engagement priorities, shareholder proposals, or proxy voting; 3) One competitor's unilateral action will not sufficiently mitigate the systematic risk; 4) Prohibiting the collaboration will reduce the welfare of future consumers (i.e., decreased supply or increased cost); and 5) The universal consumer welfare exceeds any harm from the collaboration'). The reasoning in this article applies *a fortiori* for broader welfare goals.

80 The EU Commission Horizontal Guidelines explain: 'From an economic perspective, such indirect qualitative benefits are no different from the quality-enhancing benefits that increase the direct use value of a product'

(para 578). See also OECD, *Environmental Considerations in Competition Enforcement – Note by Greece* (1 December 2021), para 10.

81 EU Commission Horizontal Guidelines, paras 571 and following. See also UK Competition and Markets Authority, Draft Sustainability Guidelines (fn 48), paras 5.17-5.22.

82 N. Stern and J. Stiglitz, 'The Social Cost of Carbon, Risk, Distribution, Market Failures: An Alternative Approach' (February 2021) NBER Working Paper 28472; J. Kikstra et al., 'The Social Cost of Carbon Dioxide Under Climate-economy Feedbacks and Temperature Variability' 16 ERL 9; R. Inderst, 'Incorporating Sustainability into an Effects-Analysis of Horizontal Agreements – Expert Advice', European Commission, Directorate-General for Competition (2022); R. Inderst, E. Sartzetakis and A. Xepapadeas, 'Technical Report on Sustainability and Competition', Report Jointly-Commissioned by ACM and HCC (January 2021). The OECD also maintains cost-benefit analysis guidelines for environmental initiatives which are used to evaluate the benefits and costs of policy options (OECD, *Cost-Benefit Analysis and the Environment: Further Developments and Policy Use*, 2018). In the UK, a range of government resources for quantifying the monetary value of improved environmental outcomes include the UK environment ministry's valuation of different natural capital asset categories, ecosystem services (e.g., flood regulation)

consumers' willingness to pay.⁸³ To be reliable as a quantification of consumer welfare, however, willingness-to-pay surveys should compensate for demand-side market failures – i.e., involve only fully rational and fully informed consumers, unaffected by any behavioural biases, and knowledgeable about the risks or benefits of their choices.⁸⁴ The benefits are not limited to price effects (including through development of cheaper renewables) or reduced costs of climate change, but encompass a range of other parameters such as improved choice, quality, and innovation.⁸⁵ They include the quality of life, wellbeing, or the value of biodiversity and other non-market goods.⁸⁶

A debated question is whether consumers should be 'fully compensated' for competitive harm, and whether out-of-market or extraterritorial collective benefits are relevant.⁸⁷ As the U.S. Ninth Circuit recognized in *Epic v. Apple*, the U.S. Supreme Court and others have implicitly supported weighing benefits across markets

in rule of reason decisions, but few courts have directly addressed the issue.⁸⁸ The European Commission will take account of out-of-market collective benefits that arise in closely-related markets, namely those where EU consumers who are affected by the relevant agreement substantially overlap with those who benefit.⁸⁹ The CMA proposes to go further and recognize benefits to any consumers (albeit still only those within its jurisdiction) – at least for agreements that combat or mitigate climate change, because it represents a 'special category of threat'.⁹⁰ Limits on the recognition of collective benefits would maintain, at least in part, the market failures that lead to climate change. Indeed, 'If all countries set their greenhouse emission levels based on only domestic costs and benefits, ignoring the large global externalities, the aggregate result would be substantially sub-optimal climate protections and significantly increased risks of severe harms to all nations'.⁹¹ There is no coherent basis for these limitations.⁹² Article 101(3) TFEU only

and environmental impacts (e.g., air pollution) (the *Asset Databook* and *Services Databook*); its tariff rate for biodiversity loss and Natural England's measurement of biodiversity value, and more, see Frontier Economics, The CMA's Draft Guidance on Environmental Sustainability Agreements, (11 April 2023).

- 83 R. Inderst and S. Thomas, 'Prospective Welfare Analysis – Extending Willingness-to-Pay Assessment to Embracing Sustainability' [2021] JOCLE 1-33. This reflects the traditional economic model that individual consumers acting to maximize their personal utility will produce the best overall outcome in terms of resource allocation to satisfy their preferences.
- 84 See also R. Inderst and S. Thomas 'The Scope and Limitations of Incorporating Externalities in Competition Analysis within a Consumer Welfare Approach' (July 2021). Inderst explains that 'without compromising the consumer welfare criterion, the authority may incorporate ecological sustainability and thereby externalities into its decision – to the extent that these are represented in an extracted consumer willingness-to-pay.' Inderst would allow an antitrust authority to go even further and, rather than observed choices, take into account choices that consumers are supposed to make in the collective interest 'if they had complete information, unlimited cognitive abilities and no lack of self-control', but suggest that this is justified only if the choice 'represent a direct threat to the consumer's health'. Although Inderst does not explicitly say so, this will be the case if the worst consequences of the climate crisis materialize in full. But even apart from this, one might ask why it is fair to rely on a willingness-to-pay study that ignores that a consumer who is unwilling to pay for sustainability damages others and endangers collective consumer welfare. That is inconsistent with the 'polluter pays' principle. See Dolmans (fn 23). At least for climate mitigation agreements, the full "collective welfare" effect should therefore be counted, not limited by willingness to pay.
- 85 The EU Commission explained: 'all objective economic efficiencies can be acceptable in EU antitrust and merger proceedings, irrespective of the terminology used to describe them. Hence, acceptable efficiencies include 'static and dynamic' efficiencies, 'allocative, productive and dynamic efficiencies' or 'cost and qualitative' efficiencies' (OECD Policy Roundtables, *The Role of Efficiency Claims in Antitrust Proceedings* (2012) 91). See also Communication from the Commission, Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements, OJ C 101, 27.4.2004 ('Article 81 Guidelines'), para 59. In *Microsoft/LinkedIn*, the Commission concluded that privacy was 'an important parameter of competition' and 'driver of customer choice' (*Microsoft/LinkedIn* (Case M.8124), Commission decision of 6 December 2016, fn 330). This contrasts with *Google/Fitbit*, where they found that there was no evidence about the importance of privacy as a parameter of competition in wearables (*Google/Fitbit* (Case M.9660), Commission decision of 17 December

2020, fn 300). The recognition of privacy as a competitive parameter marks an evolution in the European Commission's thinking from *Facebook/Whatsapp*, where it had observed that 'Any privacy-related concerns flowing from the increased concentration of data within the control of Facebook as a result of the Transaction do not fall within the scope of the EU competition law rules but within the scope of the EU data protection rules' (*Facebook/Whatsapp* (Case M.7217), Commission decision of 3 October 2014, paras 87 and 165).

- 86 P. Dasgupta, *The Economics of Biodiversity: The Dasgupta Review* (2021) (London: HM Treasury), available at: <https://www.gov.uk/government/publications/final-report-the-economics-of-biodiversity-the-dasgupta-review> (accessed 14 September 2023).
- 87 Think of a firm which disposes of its garbage in public spaces, and assume that its customers are willing to pay more for a company that does not, but not enough to clean up the mess entirely. So little is done, and other community members have to continue to walk through the garbage. They have no say in the matter, but they still 'pay' in the form of inconvenience caused by others' consumption. Is that 'fair' for purposes of Article 101(3) TFEU?
- 88 See *Epic Games, Inc. v. Apple, Inc.*, 67 F.4th 946, 990 (9th Cir. 2023) ('[T]he Supreme Court has considered cross-market rationales in Rule of Reason and monopolization cases'). The U.S. Supreme Court has expressed skepticism of the practice in *dicta* in a 'per se' case, *United States v. Topco Assocs., Inc.*, 405 U.S. 596, 609-10 (1972) (questioning whether courts can 'weigh ... destruction of competition in one sector of the economy against promotion of competition in another sector'), but that dictum did not concern rule of reason cases.
- 89 EU Commission Horizontal Guidelines, para 583 and following. See Article 81 Guidelines, para 43. CGSH, 'EU Adopts Antitrust Guidelines for Sustainability Agreements', 5 June 2023, available at: <https://www.clearantitrustwatch.com/2023/06/eu-adopts-antitrust-guidelines-for-sustainability-agreements/> (accessed 14 September 2023).
- 90 CMA draft Guidelines, paras 1.11 and 6.4 ('[C]limate change agreements seek to limit negative externalities of a type that are likely to have devastating effects inside the UK and outside of the UK and immeasurable long-term effects on the whole planet once certain tipping points are reached.') (ACM second draft Guidelines, para 48).
- 91 Institute for Policy Integrity, 'What is the Best SC-GHG Estimate?', available at: <https://costofcarbon.org/faq/what-is-the-scc> (accessed 14 September 2023).
- 92 The Dutch competition authority ACM proposed that the procompetitive benefits should be deemed to sufficiently offset consumer harms in the case of environmental damage agreements that further a concrete policy

requires a 'fair share' and not 'full' compensation, and does not limit the nature of the benefits or the markets where they are realized. These limitations, and a requirement of 'full' compensation are also inconsistent with the 'polluter pays' principle.⁹³ Producers and consumers should not be allowed to claim compensation for having to adjust production and consumption that impose damage on others. Climate change is a global and existential threat with impacts not confined to any specific group of consumers, and this threat is directly aggravated by every unit of greenhouse gas emission produced or avoided. All benefits of Net Zero Agreement should therefore be counted in the balancing exercise.⁹⁴ All of that said, the practical implications of this debate for Net Zero Agreements affecting the energy sector are probably limited, since even with these limitations, even a small reduction of the risk of enormous and devastating consequences and tipping points will outweigh the costs – as shown in the 'no new coal' analysis discussed below.

4.3. Future benefits

It is well established that procompetitive benefits do not need to be immediate, but can include future gains (or avoided costs) provided they are suitably discounted.⁹⁵ Gains arising from climate change mitigation may only materialize some time in the (avoided) future, and may not be evenly distributed over time, as tipping points are uncertain, and it is important to avoid cascading risks.⁹⁶

The recognition of future benefits requires regulators to apply an appropriate discount rate to estimate their

present value, so that the analysis of the gains and losses are both carried out at present value.⁹⁷ The discount rate applied can significantly alter the value of future benefits, and its calculation reflects complex assumptions such as the risk of benefits not materializing and the wealth of society in the future. In the area of climate change, many governments have developed discount rates to assess the benefits of avoiding carbon emissions for impact assessments and policy-making.⁹⁸ This discount rate will form part of the government's calculation of the 'social cost of carbon' (the present value of the economic cost of emitting an additional ton of greenhouse gas into the atmosphere). Antitrust agencies could rely on the same values for their cost-benefit assessments.

5. A preliminary assessment of 'no new coal agreements'

In this Section, we examine how 'no new coal agreements' could be analysed under the rule of reason, applying the principles above. These are agreements to refrain from supporting new coal power projects, including new coal mines or mine extensions and new unabated coal power plants.⁹⁹ A full competitive assessment takes account of the economic benefits of climate mitigation.

5.1. Competitive impact

Coal is estimated to account for about a third of the world's energy needs.¹⁰⁰ If there were no new coal mines and no extensions or new unabated coal power

goal, explaining: 'it can be fair not to compensate users fully for the harm that the agreement causes because their demand for the products in question essentially creates the problem for which society needs to find solutions'. ACM second draft Guidelines, paras 45-48. M. Snoep (ACM Chair), 'Climate Change Requires a Fresh Look on Fair and Efficient in Competition Law' 26 June 2022, available at: <https://www.acm.nl/en/publications/speech-martijn-snoep-climate-change-requires-fresh-look-fair-and-efficient-competition-law> (accessed 14 September 2023). See also Kartell und Wettbewerbsrechtsänderungsgesetz (KaWeRAG) 2021, Austrian Federal Law Gazette [2021/176].

93 Article 191(2) TFEU ('the polluter should pay'). See also 'The "Polluter Pays" Principle as a Basis for Sustainable Competition Policy' in S. Holmes, D. Middelschulte and M. Snoep, *Competition Law, Climate Change & Environmental Sustainability* (Concurrences, March 2021). In accordance with this principle, a consumer receives a 'fair share' of the environmental benefits if the price increase or incremental cost they bear is less than the sum of: (i) the benefit they derive from the sustainability agreement, plus (ii) the reduction of the social costs of greenhouse gas emissions to others (or other externalities).

94 See also Executive Order 13990 (fn 76), Section 5: 'It is essential that agencies capture the full costs of greenhouse gas emissions as accurately as possible, including by taking global damages into account. ... An accurate social cost is essential for agencies to accurately determine the social benefits of reducing greenhouse gas emissions when conducting cost-benefit analyses of regulatory and other actions.'

95 EU Commission Horizontal Guidelines, para 591; EU Article 81 Guidelines, para 87.

96 See S. Willcock, 'Earlier collapse of Anthropocene Ecosystems Driven by Multiple Faster and Noisier Drivers' (*Nature Sustainability*, 22 June 2023), available at: <https://www.nature.com/articles/s41893-023-01157-x> (accessed 14 September 2023); W. Steffen et al., 'Trajectories of the Earth System in the Anthropocene' (August 2018)115PNAS Vol 33, available at: <https://www.pnas.org/doi/10.1073/pnas.1810141115> (accessed 14 September 2023) ('self-reinforcing feedbacks could push the Earth System toward a planetary threshold that, if crossed, could prevent stabilization of the climate at intermediate temperature rises and cause continued warming on a 'Hothouse Earth' pathway even as human emissions are reduced. Crossing the threshold would lead to a much higher global average temperature than any interglacial in the past 1.2 million years and to sea levels significantly higher than at any time in the Holocene.').

97 See Inderst, 'Technical Report' (fn 82).

98 See e.g., Vivid Economics, *Carbon Values Literature Review* (Research paper number 2021/049), UK Department for Business, Energy & Industrial Strategy, September 2021, 16-17.

99 To assess the competitive impact in the most extreme scenario, this discussion assumes there is perfect implementation of a 'no new coal agreement': in other words, that the level of market participation and coverage is such that there are in fact no new coal mines or mine extensions and no new unabated coal power plants constructed, and renewables or nuclear power provide the energy that in the counterfactual would be provided by coal.

100 IEA, *Coal Market Update* (July 2023) 4.

plants, coal supplies would taper off. Whether this leads to higher energy prices depends on the evolution of demand and the availability of similarly priced renewable and non-renewable substitutes. There are in fact studies indicating that replacing US coal plants with renewables would be cheaper if barriers to substitution were removed.¹⁰¹

If governments promoted efficient energy use and transition to low-carbon energy sources, demand for coal should shrink and prices could in fact fall. The International Energy Agency's (IEA) roadmap to Net Zero by 2050 finds that – in such an orderly transition – there would be no need for any new coal mines or extensions or unabated coal plants to satisfy global energy demand, and coal prices would decline from \$ 45/ton in 2020 to \$ 24/ton in 2030 in the US.¹⁰² Accordingly, a 'no new coal agreement' would not necessarily lead to higher coal (or energy) prices, but there are investment costs involved in transitioning from coal to alternative energy sources so to avoid higher consumer energy prices, which an IMF Working Paper calculates to be USD 28.98 trillion.¹⁰³

The competitive analysis should focus on the overall impact on end consumers.¹⁰⁴ Should antitrust agencies wish to include the impact on the coal industry and intermediary users, the same IMF Working Paper estimated that phasing out coal would lead to missed revenues of USD 50 billion.¹⁰⁵ Costs of lost wages and retraining for coal workers would be USD 331 billion. Combined with the investment costs required to

transition to renewable energy sources, the total cost of a coal phase-out would be USD 29.03 trillion. (Note that these amounts relate to the total shutdown of the coal industry worldwide, including existing projects, as opposed to the opportunity cost of not starting new coal projects (pursuant to a 'no new coal' agreement), which would be much lower. In addition, they would not necessarily need or deserve protection or compensation, since (a) coal companies could mitigate or avoid the opportunity costs of foregoing new projects by fully and effectively abating emissions associated with these new projects, or transitioning to sustainable alternative activities, and (b) they involve additional negative externalities in the form of huge medical and social costs imposed on society by new coal combustion, to which the 'polluter pays' principle applies.)¹⁰⁶

5.2. Procompetitive benefits

The objective of a 'no new coal agreement' is to curtail greenhouse gas emissions so that humanity can meet its goal of limiting warming to 1.5°C with little or no overshoot to avoid the worst impacts of climate change.¹⁰⁷ Coal is the most carbon-intensive fossil fuel and produces 1.5–2 times as much carbon per unit of energy as oil and natural gas,¹⁰⁸ and coal causes 44% of global emissions from fuel combustion.¹⁰⁹ There is broad international and scientific consensus that phasing out coal power generation is an essential step towards achieving the 1.5°C warming target.¹¹⁰ The IEA roadmap

101 C. Wanna, 'Replacing US Coal Plants With Solar and Wind Is Cheaper Than Running Them' (*Bloomberg*, 30 January 2023), available at: <https://www.bloomberg.com/news/articles/2023-01-30/new-us-solar-and-wind-cost-less-than-keeping-coal-power-running#xj4y7vzkg> (accessed 14 September 2023). See also Speech by Fabio Panetta, Member of the Executive Board of the ECB, 'Greener and cheaper: could the transition away from fossil fuels generate a divine coincidence?' (16 November 2022) 'greener can mean cheaper. This depends crucially on the policies we adopt. If properly managed, the global response to the climate crisis can increase productivity and growth through several channels: by improving the allocation of resources, enhancing health conditions and stimulating technological progress. ... appropriate public policies that compress the demand for fossil fuels and stimulate the production of cheaper renewable energy sources can help to contain inflationary pressures and may even help to reduce inflation.', available at: <https://www.ecb.europa.eu/press/key/date/2022/html/ecb.sp221116~c1d5160785.en.html> (accessed 14 September 2023).

102 IEA, *Net Zero by 2050 A Roadmap for the Global Energy Sector* (October 2021), 51 and Table 2.1.

103 T. Adrian, P. Bolton and A. Kleijnijenhuis, 'The Great Carbon Arbitrage' WP/22/107, (*International Monetary Fund*, May 2022) 27.

104 S. Albæk, 'Consumer Welfare in EU Competition Policy' [2013] AVCL 67–88, 75–8, 67–88, 2013, pp. 75–78. The US State Attorney-General and the House Judiciary Committee letters have also focused on the impact on end consumers (fns 3 and 22).

105 Adrian, Bolton and Kleijnijenhuis, 'The Great Carbon Arbitrage' (fn 103) 27. They calculated the opportunity cost of coal as: (a) the discounted value of the missed free cash flows of coal companies and conservatively assume that the profit per unit of coal production is constant across all

firms and time and is equal to the median coal profit of the top 10 pure coal companies, and (b) the lost wages and retraining costs of coal workers. This study concerns a total phase-out of coal beginning in 2024.

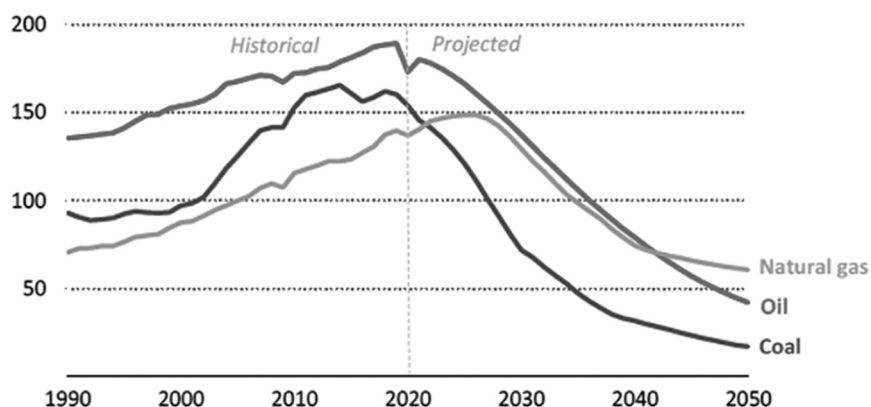
106 The Global Burden of Disease study estimates that in 2019, air pollution from fine particulate matter (with coal being one of the 'greatest contributors') caused 6.4 million premature deaths and 93 billion days lived with illness. See World Bank, 'International Development in Focus: The Global Health Cost of PM2.5 Air Pollution: A Case for Action Beyond 2021' (22 April 2022). A 2020 report for Environmental Justice Australia estimates the economic cost of the health impacts of air pollution from coal-fired power in 2019 alone amounted to AUD 2.4 billion by conservative estimates. Jonson, Pin Low, Scaria et al, 'Costs of Negative Health Outcomes Arising from Air Pollution from Coal-Fired Power Stations' (19 August 2020). The total cost to the NHS and social care system of air pollutants (fine particulate matter and nitrogen dioxide) between 2017 and 2025, for which there is more robust evidence for an association, will be £1.6 billion. See UK Government, Guidance: Air pollution: applying All Our Health (updated 28 February 2022).

107 IPCC, *Sixth Assessment Report* (fn 7).

108 US Energy Information Administration, *Carbon Dioxide Emissions Coefficients* (5 October 2022), available at: https://www.eia.gov/environment/emissions/co2_vol_mass.php (accessed 14 September 2023).

109 IEA, 'Greenhouse Gas Emissions from Energy, Data Explorer' (August 2023), available at: <https://www.iea.org/data-and-statistics/data-tools/greenhouse-gas-emissions-from-energy-data-explorer> (accessed 14 September 2023).

110 IPCC *Sixth Assessment Report* (fn 7), paras C.3–3.2 and C.4.4. All pathways modelled in the IPCC Sixth Assessment Report that limit warming to 1.5°C with no or limited overshoot project coal use to decline 95%



Between 2020 and 2050, demand for coal falls by 90%, oil by 75%, and natural gas by 55%

Figure 2 Coal, oil and natural gas production in the NZE

Source: IEA.

for ‘the most technically feasible, cost-effective and socially acceptable’ pathway to reach Net Zero emissions for the energy sector by 2050 envisages an immediate and deep decline in the supply of coal (as shown in the figure below).¹¹¹

As the Chairperson of GFANZ put it: ‘Halting the financing of new coal is absolutely necessary to limit warming to 1.5 degrees C’.¹¹² The benefits of reduced greenhouse gas emissions from a ‘no new coal agreement’ can be measured using various metrics. They should include the avoidance of negative externalities that in the absence of the agreement would be imposed on the participating insurance and finance firms, in the form of insurance claims and investment risks associated with the medical and climate damage, and possible business interruption, resulting from unabated coal combustion. Apart from that, also taking into account the ‘polluter pays’ principle, two options for counting the collective benefits are:¹¹³

- (a) Social cost of carbon (SCC). The SCC is the economic cost of emitting an additional ton of greenhouse gas into the atmosphere, discounted to present levels. It is calculated by modelling future emissions, the currently anticipated effects of the emissions on the climate (more frequent and more extreme weather events, longer and more intense droughts and fiercer fires, more frequent and greater floods, etc.), their impact on the physical and biological environment (destruction of assets, interruption of economic activity, food shortages, etc.), and the resulting economic damage (economic dislocation, population displacements, social disruption, etc.), which is then discounted to present value. The SCC ‘signals what society should, in theory, be willing to pay now to avoid the future damage caused by incremental carbon emissions’.¹¹⁴ These estimates can vary, and increase over time.¹¹⁵ The present US administration has estimated a global SCC of \$51/metric ton, while the US Environmental Protection Agency has proposed a new estimate of \$190/metric ton.¹¹⁶

by 2050 compared to 2019 (or 100% without the use of carbon capture and storage), and coal assets ‘are projected to be at risk of being stranded before 2030’. In November 2021 at COP26 in Glasgow, 197 countries have agreed to accelerate individual efforts towards the phase-down of unabated coal power (the Glasgow Climate Pact, para. 36). 40 countries specifically committed to end issuance of new permits, new construction and new direct government support for unabated coal power generation under the Global Coal to Clean Power Transition statement.

111 IEA, *Net Zero by 2050 A Roadmap for the Global Energy Sector* (October 2021), 51 and Table 2.1.

112 M. Bloomberg, M. Carney and M. Schapiro, ‘Statement on “No New Coal”’ (GFANZ, 14 September 2022), available at: <https://www.gfanzero.com/press/statement-on-no-new-coal-from-michael-r-bloomberg-mark-carney-and-mary-schapiro/> (accessed 14 September 2023).

113 Regardless of the option used, antitrust agencies should consider that the estimate may understate the (avoided) economic impact of increased emissions, by failing to adequately account for cascading risks (such as

mutually enforcing risks that trigger multiple tipping points). See N. Stern and J. Stiglitz, ‘The Social Cost of Carbon, Risk, Distribution, Market Failures: An Alternative Approach’ (February 2021) NBER Working Paper 28472, 52–53.

114 R. Price, S. Thornton and S. Nelson, ‘The Social Cost of Carbon And the Shadow Price of Carbon’, UK Department for Environment, Food and Rural Affairs (DEFRA), (December 2007) 2.

115 Because the economic damage of each incremental unit of carbon in the atmosphere depends on the concentration of atmospheric carbon today and in the future to which it is added, the social cost of carbon varies depending on which emissions and concentration trajectory the world is on (see Price et al., ‘The Social Cost of Carbon And the Shadow Price of Carbon’ (fn 114)).

116 US Environment Protection Agency, *Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances* (September 2022).

- (b) Marginal abatement cost. The marginal abatement cost is the cost associated with reaching an emission reduction target such as ‘50% emissions reduction by 2030’ or ‘Net Zero by 2050’, expressed per ton of carbon. It is also called ‘target-consistent pricing’. The UK government estimates a MAC in the range of £126 to 378/metric ton for 2023.¹¹⁷

The avoided emissions associated with ‘no new coal agreements’ may be calculated using the difference in plant-level coal production between a current policy scenario and a Net Zero by 2050 scenario.¹¹⁸ The IMF Working Paper estimates total emissions avoided of 1,425.55 GtCO₂, yielding a benefit value from phasing out coal of USD 114.02 trillion (at \$80/ton), at a cost of USD 29.03 trillion, resulting in a net benefit of no less than USD 85.01 trillion.¹¹⁹

In the EU, the European Commission may take the view that the SCC or MAC metrics should be adjusted to count only the procompetitive benefits for EU consumers affected by a ‘no new coal agreement’. In the UK, the CMA would count all consumers, but still only those in the UK,¹²⁰ so may have a preference for the UK-government defined MAC test which is designed to reflect the UK’s domestic targets and abatement options. However, a global value could also be appropriate, since the consequences of UK greenhouse gas emissions are global – such as flooding, a disrupted world economy, food supply shortages, and mass population displacements.

5.3. Balancing

A proper comparison of the anticompetitive harms and benefits of a ‘no new coal agreement’ shows that the benefits vastly outweigh the harm to end consumers. The amount of harm (potentially higher energy prices) is driven by demand levels for coal and investment in replacement energy sources. Based on the IMF Working Paper, these costs (USD 29.03 trillion) are a fraction of the economic benefits of the greenhouse gas emissions avoided (USD 114.04 trillion), yielding a global net social gain of USD 85.01 trillion. These benefits may not all be achieved if not all investors and insurers join the agreement, but the

assessment confirms that the agreement could have substantial net benefits for consumers.

5.4. Reasonable necessity

To assess the reasonable necessity of a ‘no new coal agreement’, it is appropriate to consider what would occur in the counterfactual – the *status quo* under current policies. The global supply of coal would probably fail to see the immediate and deep declines required by ‘the most technically feasible, cost-effective and socially acceptable’ pathway to achieve the Net Zero 2050 objective.¹²¹ G20 countries account for 88% of proposed (pre-construction) new coal power capacity, and 11 of these countries have not defined specific timeframes and strategies for a coal phase-out.¹²² Finally, projected CO₂ emissions from existing fossil fuel infrastructures (most of which are in the power sector) would exhaust the remaining carbon budget for limiting warming to 1.5°C,¹²³ which underscores the need to refrain from adding new fossil fuel capacity. But even if not all coal capacity can be phased out, that is not a reason to reject a ‘no new coal’ agreement. A phase-out of coal would be significantly less likely or would take longer to materialize without such an agreement. It may be less beneficial than a full phase-out, but may be necessary to meet the Paris Agreement goals even if it is not sufficient to that end (and additional measures are needed).

6. Conclusion

The climate crisis is caused by an all-encompassing market failure and persistent regulatory failure (inadequate implementation of the ‘polluter pays’ principle). Its resolution is hampered by a collective action problem. It is in the interest of every individual, company, and country to take effective action, but there is insufficient incentive to move individually unless everyone moves. We are caught in a climate prisoner’s dilemma. This particularly affects investors and (re)insurers, whose investments in and insurance of greenhouse gas emitting activities create long-term risks (negative externalities) not only for themselves but also

¹¹⁷ UK Department for Business, Energy and Industrial Strategy and UK Department for Energy Security & Net Zero, Valuation of greenhouse gas emissions: for policy appraisal and evaluation (2 September 2021) Annex 1, available at: <https://www.gov.uk/government/publications/valuing-greenhouse-gas-emissions-in-policy-appraisal/valuation-of-greenhouse-gas-emissions-for-policy-appraisal-and-evaluation> (accessed 14 September 2023).

¹¹⁸ T. Adrian, P. Bolton and A. Kleinnijenhuis, ‘The Great Carbon Arbitrage’ WP/22/107, (*International Monetary Fund*, May 2022) 27.

¹¹⁹ Adrian, Bolton and Kleinnijenhuis ‘The Great Carbon Arbitrage’ *ibid.* The \$ 80/ton of carbon emissions is conservative. If the SCC of MAC values mentioned above are used, the total benefits could be even higher. Even

a marginal levy (or some other internalization mechanism applied to the costs of phase out) on the existing coal production could internalize the remainder of the \$275 billion in lost wages and \$7 billion needed for retraining.

¹²⁰ CMA Draft Sustainability Guidelines, para 6.4.

¹²¹ O. Senlen and C. Littlecott, ‘G20 Coal Transition Progress Tracker’ (E3G, 7 July 2023), available at: <https://www.e3g.org/news/g20-coal-transition-progress-tracker/> (accessed 14 September 2023).

¹²² *ibid.*

¹²³ IPCC, *Sixth Assessment Report* (fn 7), paras B.7-B.7.1.

for their competitors and customers. Private sector cooperation can help resolve this. Everyone benefits, as demonstrated by a recent IMF Working Paper on a phase-out of coal power, which calculates a net benefit of no less than USD 85.01 trillion.

antitrust policy can and should integrate sustainability economics

Some are threatening antitrust enforcement to prevent such collaboration, for political reasons, without a proper evaluation of the competitive harms and benefits. This is misguided, since antitrust policy can and should take account of the welfare improvements from abating climate change. For instance, it is not enough that a collective refusal can be described in some fashion as a ‘boycott’. To be condemned as a ‘per se’ violation, it must have attributes that display manifest harm to competition at a horizontal level without plausible procompetitive benefits.

The idea is not that antitrust policy should be used to pursue climate goals, but that antitrust authorities and

courts can permit, and should not block, private sector cooperation between firms pursuing an effective transition to a clean economy, where these agreements correct market failures and resolve collective action problems. That benefits them as well as consumers.

In other words, antitrust policy should integrate and take account of sustainability economics. A failure to do so is inconsistent with the goals of antitrust law, including efficient allocation of resources in the interest of consumer welfare. US Supreme Court case law, as well as EU and UK antitrust law, allows a rule of reason analysis of Net Zero Agreements. The costs of transitioning away from coal are trifling compared to the discounted costs of frequent and more extreme weather events, longer and more intense droughts and fiercer fires, more frequent and greater floods, destruction and stranding of assets, interruption of economic activity, food shortages, economic dislocation, mass population displacement, and social disruption that we face. In sum, Net Zero Agreements have tremendous potential in helping to accelerate climate action. It would be a great loss to consumers and society at large if they were buried by antitrust concerns.