German Law Journal (2024), **25**, pp. 873–892
doi:10.1017/glj.2024.65

CAMBRIDGE UNIVERSITY PRESS

ARTICLE

Special Issue: Strategic Litigation in EU Law

Hidden in Plain Sight? Corporate Strategic Litigation in the EU Emissions Trading System

Sofie Fleerackers

University of Amsterdam, Amsterdam, the Netherlands; KU Leuven, Leuven, Belgium
Email: s.h.h.fleerackers@uva.nl

(Received 28 November 2024; accepted 28 November 2024)

Abstract

This Article examines how private economic actors mobilize EU law to pursue broader legal, political, economic, or societal ends. It studies the strategic nature of corporate litigation before the Court of Justice of the EU in the context of the EU Emissions Trading System, a prime illustration of neglected strategic climate litigation. Corporate cases against the ETS have so far fallen under the radar of scholarship focused on EU strategic climate litigation. Such underrepresentation is linked to a double bias in scholarship, favoring high-profile climate cases that advance public interest causes and progressive agendas. Applying a normatively open definition of strategic litigation and actor-centered methodological approach, the Article brings to light features of corporate strategic litigation in EU law which otherwise go unseen. It offers empirical observations into boundary-testing behavior by private economic actors and the notion of a private generalizable interest, untangling strategic climate litigation by private economic actors as overlooked proponents in Court. The Article finally distinguishes a selection of legal strategies through which corporate actors mobilize EU law, such as instances of coordinated litigation; futile and seemingly routine challenges initiated before the Court to test judicial waters; and the use of litigation as a political advocacy tool.

Keywords: Strategic Litigation; Corporate Litigation; Legal Mobilization; Climate Change Litigation; EU Emissions Trading System; European Union Law; Court of Justice of the European Union

A. Introduction

Two decades since the introduction of the EU Emission Trading System ("EU ETS" or "Scheme") and numerous legislative revisions later, the Scheme still features as the primary climate mitigation instrument and cornerstone of the EU's climate policy arsenal.[1] Designed as a market-based control mechanism, the ETS fundamentally affects the economic position of countless stakeholders across the EU. Through the institution of a trading scheme for emission allowances, the ETS puts a cap on the volume of carbon emission allowances allocated to emitters in the EU with the objective to reduce greenhouse gas emissions. The EU ETS legislative framework finds its

[1]Jon B. Skjærseth and Jørgen Wettestad, *Implementing EU Emissions Trading: Success or Failure?*, 8 INT'L ENV'T AGREEMENTS: POL., L. & ECON. 275, 276 (2008) [hereinafter Skjærseth & Wettestad, *Success or Failure*]; Sanja Bogojević, *Litigating the NAP: Legal Challenges for the Emissions Trading Scheme of the European Union*, 4 CARBON & CLIMATE L. REV. 219, 220 (2010) [hereinafter Bogojević, *Litigating the NAP*]; Eugénie Joltreau and Katrin Sommerfeld, *Why Does Emissions Trading under the EU Emissions Trading System (ETS) Not Affect Firms' Competitiveness? Empirical Findings from the Literature*, 19 CLIMATE POL'Y 453, 453 (2019).

origin in the EU Emissions Trading System Directive[2] which entered into force in 2005. This legislative framework underpinning the ETS is as simple as it is complex. Whereas the underlying idea constitutes an inherently straightforward market-based approach to environmental problems in which carbon emission allowances are allocated, the technical rule-making that comes with emissions-trading legislation, and the trial-and-error development of the EU ETS system have turned the EU ETS into a complex regulatory web.[3]

From the onset, the EU ETS regulatory web has spurred mobilization by private sector actors across political and judicial venues of the EU polity. Spectators have noted a "tsunami"[4] of lobbying to steer legislative developments, and equally, at the Court of Justice of the EU ("CJEU" or "the Court"), more than a hundred applications were lodged by private as well as public sector litigants targeting the ETS Directive and related secondary acts since 2003. In both advocacy venues business interests can be identified as the predominant drivers, mobilizing to protect their economic rights from the application of the Scheme.[5]

The high number of ETS challenges by corporations and governmental actors represents the lion share of climate litigation before the Court.[6] Yet despite the high intensity of ETS litigation, these endeavors have so far fallen below the radar of strategic climate litigation scholarship. Such lack of scholarly attention can be traced back to two features of corporate ETS litigation: (i) The nature of litigants behind ETS litigation, that is, private economic actors pursuing private interests; and (ii) the substance of such ETS litigation, namely challenges contesting the implementation of the Scheme on industry.

Existing EU climate change scholarship, and strategic litigation research more broadly, is characterized by a double bias in its focus: One in favor of litigants pursuing the public interest and narrowed down on high-profile, "holy grail",[7] climate cases. Such bias can lead to blind spots. A first blind spot is notable in our limited understanding of the practice of strategic litigation by corporate actors who pursue private interests, such as the freedom to compete, protection of private property or freedom to conduct business. With growing attention paid to the use of litigation as an advocacy tactic, the question should be raised as to whether the prevailing public interest lens wielded by strategic litigation scholars and the parameters employed to study litigants, interests, and normative agendas in this process, cover the full nuance of practice. A second blind spot relates to ETS litigation in particular, whereby due to the nature of challenges before the Court—only peripherally dealing with climate change *as such*—ETS litigation has generally not been under the spotlight of climate litigation research. Even more so, in occasions where such challenges have been studied, ETS litigation rather falls in the bucket of "routine"

[2]Directive 2003/87, of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and Amending Council Directive 96/61/EC, 2003 O.J. (L 275) 32.

[3]Marjan Peeters, *The EU ETS and the Role of the Courts: Emerging Contours in the Case of Arcelor*, 2 Climate L. 19, 21 (2011); Navraj S. Ghaleigh, *Emissions Trading before the European Court of Justice: Market Making in Luxembourg, in* Legal Aspects of Carbon Trading: Kyoto, Copenhagen and Beyond 368 (David Freestone & Charlotte Streck, eds., 2009).

[4]Sanja Bogojević, *EU Climate Change Litigation, the Role of the European Courts, and the Importance of Legal Culture*, 35 L. & Pol'y 184, 202 (2013) [hereinafter Bogojević, *EU Climate Change*]; Frédéric Simon, Kira Taylor & Valentina Romano, *The Green Brief: EU Parliament Hit by 'Tsunami of Lobbying'*, Euractiv (June 8, 2022), https://www.euractiv.com/section/energy-environment/news/the-green-brief-eu-parliament-hit-by-tsunami-of-lobbying/.

[5]*See* Carbon Market Watch, *Survival Guide to EU Carbon Market Lobby: Debunking Claims from Heavy Industry, Policy Briefing* (June 30, 2021) (describing the lobbying side); Oscar Reyes and Belén Balanyá, *Carbon Welfare: How Big Polluters Plan to Profit from EU Emissions Trading Reform* (Dec. 12, 2016) (describing litigation at the CJEU). *See also* Table 2 in this Article.

[6]Joana Setzer, Harj Narulla, Catherine Higham & Emily Bradeen, Climate Litigation in Europe: A Summary Report for the European Union Forum of Judges for the Environment (Dec. 6, 2022) (providing synthesized information from research conducted in connection with the Grantham Research Institute on Climate Change and the Environment concerning the recent stage of development of climate change in Europe).

[7]Kim Bouwer, *The Unsexy Future of Climate Change Litigation*, 30 J. Env't L. 491 (2018).

climate litigation distinct from other high-profile strategic climate cases. This Article questions whether current scholarship can in fact capture the full spectrum of strategic litigation in the EU and if characterizing corporate litigation before the CJEU on the EU ETS as routine, and non-strategic, is a fully accurate approach to strategic litigation by private economic actors.

What, then, makes corporate litigation strategic? What are the indicators of strategic litigation by corporate litigants before the CJEU? In answering these questions, this Article contributes to current scholarship in three ways. *First*, it engages with the concept of strategic litigation by advancing a normatively open approach that includes private actors irrespective of the normative agenda they pursue, be that progressive or conservative. By utilizing a normatively open stance to strategic litigation, I aim to remedy the aforementioned bias to ascertain how strategic litigation for broader legal, political, economic, or societal effect takes place in EU law when conducted by corporate actors to preserve or advance their private interest.

Second, this Article argues that to identify strategic litigation, it is essential to take an actor-centered methodological approach. This approach entails first gazing into the substance of the interest underpinning litigation to discern whether the litigant's ambition goes beyond the case at hand. For corporate actors, such *strategic* ambition takes the form of a private generalizable interest, which differs from those private interests of a more individual nature. If one were to illustrate this notion with the freedom to conduct business, a private economic interest entails the protection of one's economic competitiveness relative to other actors, where the generalizable component can be found in a common interest for non-interference by the state into businesses' operations. The second lens then looks beyond the substance at procedural choices made by the litigant to discern the *strategic* use of EU law as a tool to further that ambition. Such procedural choices can for instance entail a combined use of various proceedings before the Court by one or more actors, or involving other modes and venues of advocacy, not necessarily limiting a strategic use to what transpires within the judicial arena.

Third, to answer the question of "what makes corporate litigation strategic," this Article applies the proposed conceptual and methodological approaches in a single-case study of the legislative framework underpinning the EU ETS and the iron and steel industry's legal strategies before the CJEU. The iron and steel industry has been included under the scope of the ETS since the very beginning and is positioned as one of key energy-intensive industries continuously steering the ETS through lobbying, while also being one of the top ETS litigants before the CJEU. Through qualitative case law analysis, the Article sheds empirical light on some features and indicators of corporate strategic litigation as it takes place in EU climate policy. Delving into the docket of litigation challenges by one industry, this Article seeks to identify where routine litigation ends, and where a move into the realm of strategic litigation takes place. It examines whether the iron and steel industry has engaged in litigation before the Court of Justice of the EU with the purpose of broader political, societal, or economic effect. Data is collected through desktop research, the main source of evidence for this study being documentation: This includes EU legislation and EU policy documents as well as company and trade association documents, CJEU case law, specialized media sources, and think tank reports on the EU ETS, and finally, academic scholarship, predominantly in law and political sciences. All ETS case law has been merged into an original database by the author.

The Article proceeds by presenting an overview of the conceptual considerations relevant to the study of strategic climate litigation (Section B). I then introduce a conceptual and methodological approach to address the ensuing blind spots, particularly in view of corporate litigation (Section C). Afterward, EU ETS litigation is examined as an element of strategic climate litigation (Section D), and finally, case law analysis of such ETS litigation by the iron and steel industry reveals features and indicators of corporate climate litigation as strategic litigation in EU law (Section E).

B. Strategic Climate Litigation Research and its Biases

I. Strategic Litigation: Solely a Weapon of the Weak?

The European Union offers a multi-level and -venue governance structure in which the CJEU plays a core role. Within this structure, the appeal of strategic litigation in one's pursuit of legal, political, or social change seems to be irrefutable.[8] Despite the increasing number of studies on the use of litigation as an advocacy tactic, academic discussions on strategic litigation in the EU lack agreement on what strategic litigation exactly entails. What counts as strategic litigation, which type of litigant, pursuing which type of interests, and for the advancement of which type of normative agenda? In EU scholarship on strategic litigation, not many scholars have devoted time to the question of its definition.[9] Strategic litigation is increasingly "everywhere, yet nowhere it is defined": Most authors disregard the concept's undetermined contours and turn headfirst into an *in concreto* analysis of legal arguments, effects, processes, or normative considerations.[10]

The indeterminacy in definitional contours, both in defining "strategic" as well as the practice of "litigation," appear to originate from a few features of scholarship covering strategic litigation. Two elements of strategic litigation research in EU law are particularly of note in this contribution: (i) A fragmented substantive focus mimicking a highly diverse practice, and (ii) the embeddedness in legal mobilization scholarship. Having been adopted first by practitioners, the lack of an overarching taxonomy of strategic litigation can be linked back to the term's emergence from highly diverse practice.[11] This diversity in practice is reflected in the bottom-up case-based approach and heterogeneous nature of strategic litigation research. At present, discussion of strategic litigation occurs predominantly in silos,[12] such as but not limited to, human rights[13] and children's rights;[14] climate change;[15] migration;[16] or gender[17] equality. Despite the fact that there

[8]Although American scholarship has a longstanding tradition in interest group litigation as a venue for advocacy, European scholarship over the past two decades has gradually explored how individuals, interest groups, and business interests use litigation as a means to ascertain policy change. *See generally* Susan M. Olson, *Interest-Group Litigation in Federal District Court: Beyond the Political Disadvantage Theory*, 52 J. OF POL. 854–82 (1990); Rorie S. Solberg and Eric N. Waltenburg, *Why Do Interest Groups Engage the Judiciary? Policy Wishes and Structural Needs*, 87 SOC. SCI. Q. 558–72 (2006) (describing US strategic litigation). *See also* Lisa Conant, Andreas Hofmann, Dagmar Soennecken & Lisa Vanhala, *Mobilizing European Law*, 25 J. OF EUR. PUB. POL'Y 1376–89 (2018); Andreas Hofmann & Daniel Naurin, *Explaining Interest Group Litigation in Europe: Evidence from the Comparative Interest Group Survey*, 34 GOVERNANCE: INT'L J. OF POL'Y ADMIN. & INST. 1235–53 (2021) (describing EU strategic litigation).

[9]Michael Ramsden & Kris Gledhill, *Defining Strategic Litigation*, 4 CIV. JUST. Q. 407, 408 (2019); Kris van der Pas, *Conceptualising Strategic Litigation*, 11 OÑATI SOCIO-LEGAL SERIES 116, 116 (2021).

[10]Ramsden and Gledhill, *supra* note 9, at 407–08.

[11]*Id.* at 408.

[12]Although, increasingly, one can note synergies and cross-fertilization across these substantive silos, for instance between human rights and climate, with the "rights-turn" to climate litigation. *E.g.* Ben Batros and Tessa Khan, *Thinking Strategically About Climate Litigation*, *in* LITIGATING THE CLIMATE EMERGENCY: HOW HUMAN RIGHTS, COURTS, AND LEGAL MOBILIZATION CAN BOLSTER CLIMATE ACTION (César Rodríguez-Garavito, ed., 2022).

[13]*See e.g.*, GRÁINNE DE BÚRCA, LEGAL MOBILIZATION FOR HUMAN RIGHTS (2022).

[14]*See e.g.*, Aoife Nolan and Ann Skelton, *'Turning the Rights Lens Inwards': The Case for Child Rights-Consistent Strategic Litigation Practice*, 22 HUM. RTS. L. REV. 1–20 (2022).

[15]*See e.g.*, Navraj S. Ghaleigh, *'Six Honest Serving-Men': Climate Change Litigation as Legal Mobilization and the Utility of Typologies*, 1 CLIMATE L. 31–61 (2010); Lisa Vanhala, *Is Legal Mobilization for the Birds? Legal Opportunity Structures and Environmental Nongovernmental Organizations in the United Kingdom, France, Finland, and Italy* 51 COMPAR. POL. STUD. 380–412 (2018).

[16]*See e.g.*, Kris Van Der Pas, *Legal Mobilization in the Field of Asylum Law: A Revival of Political Opportunity Structures?*, 44 RECHT DER WERKELIJKHEID 14–31 (2023); Virginia Passalacqua, *Altruism, Euro-Expertise and Open EU Legal Opportunity Structure: Empirical Insights on Legal Mobilization Before the CJEU in the Migration Field*, SSRN DATABASE, https://doi.org/10.2139/ssrn.3810155.

[17]*See e.g.,* Lynette J. Chua, *LGBTQ Rights Mobilization and Authoritarianism, in* LEGAL MOBILIZATION FOR HUMAN RIGHTS 12–29 (Gráinne de Búrca ed., 2022); Sophie Jacquot & Tommaso Vitale, *Law as Weapon of the Weak? A Comparative Analysis of Legal Mobilization by Roma and Women's Groups at the European Level*, 21 J. EUR. PUB. POL'Y 587–604 (2014).

undoubtedly is value in acknowledging the heterogeneity of practice through a case-based approach in scholarship, the lack of an overarching terminology across substantive research areas complicates matters particularly where strategic litigation terminology is used interchangeably with pre-existing related and partly overlapping concepts such as public interest litigation, impact litigation, or cause lawyering, as each of these labels come with their own conceptual scope.[18]

Second, although there is no clear nomenclature for strategic litigation, the term's embeddedness in legal mobilization theory does come imbued with a certain conceptual focus. As a field of study, legal mobilization, or law-based advocacy, is primarily constrained to social movements' use of the law as a political tool, in which strategic litigation offers one avenue in which the law is mobilized to assert one's rights.[19] Where a few scholars[20] have indeed undertaken to conceptualize the phenomenon of strategic litigation, even on such occasions, it thus becomes evident that the bulk of litigation under scrutiny is associated with, and defined by, a particular type of litigant, interest, and normative focus: Civil society or individuals pursuing litigation for the public interest with the aim to advance a progressive agenda. By consequence, although there is a rise in the number of studies on litigation as an advocacy tactic, the notion of strategic litigation by private economic interests within such studies has received far less scholarly attention in the EU than its "public" counterpart.[21] In those cases where such actors are covered, scholars either discuss strategic litigation *targeting* corporate actors,[22] or study corporate litigation under the normative umbrella of "lawfare"[23] and as one specific type of strategic litigation, namely SLAPPs.[24]

The risks of terminological indeterminacy however lie in an increased potential for selection bias and ensuing blind spots in the analysis of phenomena. The current state of scholarship on strategic litigation, with its underdefined key concept, arguably brings about an underrepresentation of various elements of a strategic litigation process. An unchallenged bias towards public interest litigation and progressive agendas as the contours of strategic litigation research can be problematic as it leads to potential neglect of certain litigation practices. This bears implications especially for those cases that do in fact represent a large share of impactful litigation in the EU. Corporate litigation in climate policy can be viewed as one of these cases, as will be addressed further.

[18]Ramsden and Gledhill, *supra* note 9, at 408.

[19]*E.g.*, Frances K. Zemans, *Legal Mobilization: The Neglected Role of the Law in the Political System*, 77 AM. POL. SCI. REV. 690–703 (1983); Michael McCann, *Litigation and Legal Mobilization, in* THE OXFORD HANDBOOK OF LAW AND POLITICS 522–40 (Gregory A. Caldeira et al. eds., 2009).

[20]E.g., Van Der Pas, *supra* note 16; Ramsden and Gledhill, *supra* note 9; Emilio Lehoucq & Whitney K. Taylor, *Conceptualizing Legal Mobilization: How Should We Understand the Deployment of Legal Strategies?*, 45 L. & SOC. INQUIRY 166–93 (2020).

[21]For some exceptions to the rule, *see e.g.*, Ruth Dukes & Eleanor Kirk, *Legal Change and Legal Mobilisation: What Does Strategic Litigation Mean for Workers and Trade Unions?,* 33 SOC. & LEGAL STUD. 479, 1-22 (2023); Andreas Hofmann, *The Legal Mobilisation of EU Market Freedoms: Strategic Action or Random Noise?*, 47 W. EUR. POL. 1–26 (2024); Pieter Bouwen and Margaret McCown, *Lobbying versus Litigation: Political and Legal Strategies of Interest Representation in the European Union* 14 J. EUR. PUB. POLICY 422, 426 (2007) (acknowledging litigation as a strategy for interest representation by economic actors, in addition to lobbying).

[22]*See*, *e.g.*, Geetanjali Ganguly, Joana Setzer, and Veerle Heyvaert, *If at First You Don't Succeed: Suing Corporations for Climate Change*, 38 OXFORD J. LEGAL STUD. 841–68 (2018) (describing "strategic private climate litigation" as climate litigation launched against corporations); Joana Setzer, *The Impacts of High-Profile Litigation against Major Fossil Fuel Companies, in* LITIGATING THE CLIMATE EMERGENCY: HOW HUMAN RIGHTS, COURTS, AND LEGAL MOBILIZATION CAN BOLSTER CLIMATE ACTION 206–220 (César Rodríguez-Garavito ed., 2022).

[23]*See, e.g.,* Jeff Handmaker & Sanne Taekema, *O Lungo Drom: Legal Mobilization as Counterpower*, 15 J. OF HUM. RTS. PRAC. 6–23 (2023).

[24]*See generally* Melinda Rucz, *SLAPPed by the GDPR: Protecting Public Interest Journalism in the Face of GDPR-Based Strategic Litigation Against Public Participation,* 14 J. OF MEDIA L. 378–405 (2022).

II. Strategic Climate Litigation: Is There a Place for Routine Litigation?

Similarly to scholarship on "strategic litigation," there have been countless ways of defining and measuring what counts as "climate litigation" since the earliest of recorded cases in Europe dating back to the 1990s.[25] In recent years, as research on the topic has seen a tremendous growth in volume and expanded across disciplinary lines—from an initial monopoly by legal scholars to interdisciplinary attention from, among others, political scientists, socio-legal scholars and social movement research—so did the range of actors and types of issues in the process of climate litigation receiving analytical notice.[26]

Climate litigation can be further divided into routine and strategic litigation.[27] Where strategic climate litigation is characterized by an interest or objective which goes beyond the individual case, routine litigation does not envision broader change beyond the interest of the individual litigant and is defined as exclusively dealing "with the application of new rules in a specific set of circumstances."[28] From around 2015, a "third wave" of climate litigation was characterized by a surge in *strategic* climate litigation, and equally so in scholarship covering these cases.[29] Such scholarship, similarly categorized under a "third wave"[30] of climate litigation research, increasingly engages less intensively and solely with the law itself, yet zooms in on the relation between governance and litigation, the role of climate litigation as "regulation through litigation," and on the actors who mobilize the law.

Despite this recent expansion of research on climate litigation, the bulk of strategic climate litigation scholarship is still characterized by a selection bias towards high-profile and progressive climate cases. The application of a narrower[31] conceptualization of climate litigation—as meaning litigation with climate change as the central issue—and the aforementioned conceptual tendency of strategic litigation scholars more broadly has led to a predominant focus on high-profile "pro-climate" cases[32] undertaken by NGOs and individuals for the public interest. This ignores, as noted by Setzer and Vanhala, "hundreds of routine or 'everyday' cases dealing with, for example, planning applications or allocation of emissions allowances under the EU Emissions Trading System."[33] Although the value of the recent wave of high-profile cases should not be discarded, relatively few studies have looked beyond such "holy grail" cases.[34] This is too narrow a focus which, as Bouwer contends, "can obscure both the instrumental potential, and possible implications, of much less visible forms of litigation about climate change," and neglect cases

[25]*See* Joana Setzer and Lisa Vanhala, *Climate Change Litigation: A Review of Research on Courts and Litigants in Climate Governance*, 10 WIREs Climate Change 1, 9–11 (2019) (reviewing climate change literature); Jacqueline Peel & Hari M. Osofsky, *Climate Change Litigation*, 16 Ann. Rev. L & Soc. Sci. 3 (2020) [hereinafter Peel & Osofsky, *Climate Change*].

[26]Setzer et al., *supra* note 6, at 6.

[27]*Id.* at 11.

[28]*Id.* at 27.

[29]Setzer & Vanhala, *supra* note 25, at 5; Batros & Khan, *supra* note 12, at 103. *See also* Joana Setzer et al., *supra* note 6, at 9 (describing the evolution of climate change litigation as occurring in three overlapping waves: The first between the mid-1980s and mid-2000s, the second starting from the early to mid-2000s–where ETS litigation is traditionally included–and a third wave starting around 2015–where strategic litigation is included).

[30]*See* Setzer & Vanhala, *supra* note 25, at 5–6 (providing a list of the three waves of disciplinary approaches in climate litigation research).

[31]Ghaleigh *supra* note 15 (defining how climate litigation is understood in this Article: "[L]egal challenges which implicate climate change policy and norms"). *See also* Kim Bouwer, *The Unsexy Future of Climate Change Litigation*, 30 J. Env'T L. 483 (2018) (making the case for an expansion of the concept of climate litigation to include unsexy climate litigation).

[32]*See, e.g.*. high-profile strategic climate cases under academic analysis: Rechtbank Den Haag, 24 juni 2015 (Urgenda Fondation/Netherlands, ECLI:NL:RBDHA:2015:7196 (Neth.); Juliana v United States, Case No 6:15-cv-01517-TC, 2016 WL 6661146 (10 November 2016); Neubauer v. Germany, Bundesverfassungsgericht [BVERFG] [Federal Constitutional Court], 1 BvR 2656/18, Mar. 24, 2021, https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/EN/2021/03/rs20210324_1bvr265618en.html; Rb. den Haag, 26 mei 2021, Prg. 2021 mnt HA ZA 19-379 (Milieudefensie/Royal Dutch Shell PLC), https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2021:5339 (Neth.).

[33]Setzer & Vanhala, *supra* note 6, at 3.

[34]Bouwer, *supra* note 31, at 489–491.

which in fact make up the largest share of climate litigation.[35] This tendency in climate litigation research to focus on classic cases of climate litigation obscures the diversity of actors involved in climate litigation, with more than 30% of climate cases in Europe brought on by corporate actors.[36]

C. Overcoming Biases in Strategic Climate Litigation

To enable insights into strategic litigation practice and overcome existing conceptual tendencies in EU scholarship, I propose two guiding elements for this case study. *First*, to address selection bias, a normatively open approach[37] should be applied, laying bare the conceptual essence of what defines strategic litigation. I, therefore, exclude any normative connotation to enable the inclusion of all actors, with public or private interest, using litigation as a tool for broader progressive or conservative purposes.

Second, translating the actor-centered approach into practice, I use a bipartite lens to methodologically identify the practice of strategic litigation: (i) A substantive lens, strategic ambition, and (ii) a procedural lens, strategic use of EU law. This approach differentiates between the strategic ambition of a case, "where it seeks to achieve broader change beyond the direct interests of or remedies sought by the plaintiffs in the case—typically changes to policy, social norms or corporate behavior" and the manner in which a case is litigated, which is strategic "when it is not seen in isolation (with the judgment as the solution, or an end in itself), but rather is seen as one step in a bigger effort to achieve the ultimate goal."[38] In other words, if litigation features as a tool to achieve certain broader economic, societal or regulatory ends, such strategic litigation is consciously designed, in its substance, to go beyond an individual case in interests, objectives or effect, while procedurally, litigation strategies—such as a particular judicial route and/or the combination of litigation tactics—may have been constructed by strategic litigants to ascertain these ends.

It should be made clear that this differentiation between the two lenses does not refer merely to court cases' *substance* versus *admissibility*. Rather, to identify strategic litigation beyond these elements, it is essential to take the actor perspective. A case is strategic based on the interests underpinning it, which in the case of corporations—applying the aforementioned normatively open stance—means a private but generalizable interest going beyond the individual litigant's interest. Second, looking beyond the substance to the procedural choices with EU law made by the litigant, to discern a "strategic" use of the law as a tool. A case is strategically litigated based on one's use of EU law: Choice of legal basis; the judicial routes—such as action for annulment, action for damages, and preliminary reference proceedings—or litigation tactics, for example simultaneous or sequential litigation.

D. EU ETS as (Strategic) Climate Litigation?

The European Union's introduction of the EU Emissions Trading System in 2005 aimed to fulfill its commitment under the Kyoto Protocol to the 1992 United Nations Framework Convention on Climate Change.[39] The EU ETS is designed as a market-based policy approach to resolve

[35] *Id. See also* Setzer & Vanhala, *supra* note 6, at 3.

[36] *Id.* at 30.

[37] *See* Pola Cebulak, Marta Morvillo and Stefan Salomon, *Strategic Litigation in EU Law: Who does it Empower?*, 25(6) GERMAN L.J. 800, 801, 809 (2024) (in this Issue).

[38] Batros & Khan, *supra* note 12.

[39] See preamble (3) of Council Directive 2003/87 of the European Parliament and of the Council of 13 October 2003 Establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, 2003 O.J. (L 275) 32 (stipulating the UNFCC objective as "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system").

environmental problems, on the basis of Art. 192(1) TFEU,[40] and has since evolved into the predominant global carbon trading market.[41] In parallel to the phased[42] and intensive regulatory development, the ETS was subject to equally intense CJEU litigation, adding up to over 120 cases over the course of two decades, as shown in Table 1.[43] Glancing at the Court's case docket, the sheer volume of CJEU litigation arisen in respect of the EU ETS markedly stands out compared to other environmental instruments of EU law, and, in fact, the vast majority of EU climate change litigation has been based on the EU ETS Directive.[44] Despite this reality, EU ETS litigation–in which for this Article I include all litigation that features the EU ETS Directive, its consecutive reforms, and related regulatory acts–has fallen under the radar of strategic climate litigation research. In this sense, I argue, ETS litigation features as an illustration of overlooked strategic climate litigation due to a double bias in scholarship, in favor of public interest causes and "high profile" climate litigation.

Let us first cover a few general features of the ETS case law docket relevant to this Article's analysis. Regarding legal remedies, as shown in Tables 1 and 2, the ETS case law docket includes both direct and indirect actions, lodged by both private and public applicants.[45]

Over the years, the use of procedural routes by litigants targeting the EU ETS Directive has evolved from a clear dominance in direct annulment proceedings to a steadily increasing number of indirect actions in the form of preliminary reference procedures since the adoption of Directive 2009/29/EC—which amended the Scheme among others by instituting a more centralized type of governance for the third trading phase. As shown in Table 2, a clear majority of the applications are lodged by Member States and business actors falling under the Scheme. About four[46] challenges have been initiated by individuals and NGOs to date—although the number is increasing, it is still negligible in comparison.

Turning to substance, across the various trading phases in the ETS, most challenges call into question the successive legal reform waves of the ETS, and their national implementation, for

[40]The choice of art. 192 TFEU on environmental protection as a legal basis instead of art. 114 TFEU indicates the predominance of the environmental objective over the secondary aim of "providing a functioning internal market and avoiding restraints on competition" Michael Rodi, *Legal Aspects of the European Emissions Trading Scheme*, in Emissions Trading for Climate Policy Research 177–98 (Bernd Hansjürgens ed., 2005).

[41]Skjærseth & Wettestad, *Success or Failure*, *supra* note 1, at 276; Bogojević, *Litigating the NAP*, *supra* note 1, at 2.

[42]The EU ETS regulatory framework has been developed and implemented in four phases. Phase I (2005-2007) is known as the "learning by doing" trading phase or "trial period" to prepare for Phase II, while the next "Kyoto Commitment" phase (2008-2012) coincided with the first commitment period under the Kyoto Protocol and focused on achieving the EU's reduction target of 8%. Phase III, following a revision process in 2008, has run for an eight-year period from 2012 to 2020 and is characterized by a considerable turnaround in the ETS governance system. Phase IV runs from 2021 to 2030 and has been instituted following a lengthy legislative process (2015–2018) and revised recently in view of the European Green Deal, adopted in 2023.

[43]See Table 1; Josephine A.W. Van Zeben, *The European Emissions Trading Scheme Case Law*, Rev. Eur. Cmty. & Int'l Env't L. 119, 121–23 (2009); Bogojević, *Litigating the NAP*, *supra* note 1, at 220 (describing ETS as heavily litigated before the Court); Ghaleigh, *supra* note 15, at 49–50 (noting the sheer volume of litigation that has arisen in respect of the ETS Directive as "remarkable"); Navraj Singh Ghaleigh, *Two Stories About E.U. Climate Change Law and Policy,* 14 Theoretical inquiries in Law 44, 67 (2013) (describing ETS as the most heavily litigated instrument of EU environmental law).

[44]Setzer et al., *supra* note 6, at 23; Ghaleigh, *Two Stories about E.U. Climate Change Law and Policy*, *supra* note 43, at 71 (offering an indication of the "exceptional nature of the EU ETS in EU law in respect of frequency of litigation").

[45]Direct actions are those legal proceedings which provide a remedy directly before the Court of Justice of the EU, including the action for annulment under Article 263 TFEU and actions for damages against EU institutions, based on Articles 268 and 340 TFEU, while indirect actions enforce EU law indirectly, via preliminary reference proceedings under Article 267 TFEU, or infringements proceedings initiated by the Commission (258 TFEU) or member state. See Pola Cebulak, Marta Morvillo and Stefan Salomon, *Strategic Litigation in EU Law: Who does it Empower?*, 25(6) German L.J. 800, 808–813 (2024) (describing the various actions and their potential as avenues for strategic litigation).

[46]*See e.g.,* Case T-330/18, Carvalho and Others v. Parl. and Council (Aug. 13, 2018) https://curia.europa.eu/juris/liste.jsf?num=t-330/18&language=en; Case T-19/13, Frank Bold v. Comm'n (June 29, 2015) https://curia.europa.eu/juris/liste.jsf?num=T-19/13&language=EN.

Table 1. CJEU applications under Directive 2003/87/EC according to nature of the proceedings[47]

CJEU applications on EU ETS according to nature of the proceedings	
Proceedings and legal basis	Number
Preliminary reference, art. 267 TFEU	59
Action for annulment, private actors, art. 263(4) TFEU	40
Action for annulment, public actors, art. 263(2) TFEU	18
Action for damages, art. 268 and 340 TFEU	1 (+2)
Action for failure to act, art. 265 TFEU	3
Actions for failure to fulfil an obligation, art. 258 TFEU	2
Grand Total	**123**

Table 2. CJEU applications under Directive 2003/87/EC according to nature of the litigant[48]

CJEU applications on EU ETS according to nature of the litigant	
Litigants by industry	Applications
Energy industry (electricity, heating, oil and gas)	30
Public sector	22
Mineral industry (cement, glass, ceramics, lime)	19
Iron and steel (ferrous metals)	15
Chemicals	13
Aviation	4
Pulp and paper	4
Cross-industry	4
Non-ferrous metals	3
Food industry	3
Individual	2
Public interest (NGO)	2
Tyre industry	1
Timber	1
Grand Total	**123**

instance through challenges to the validity and lawfulness of the ETS scope, or to Commission decisions on National Allocation Plans (NAP) and harmonized allocation rules.

[47]Source: original database by the author, drawn from the CJEU database (curia.euria.eu), having used "Directive 2003/87" in the search entry. One action for annulment also includes an action for damages: Case T-16/04 Arcelor SA v. Eur. Parliament and Council of the EU, ECLI:EU:T:2010:54 (Mar. 2, 2010). One action for failure to act also includes action for damages – 268 TFEU: Case T-623/19 ArcelorMittal Bremen GmbH v European Commission, ECLI:EU:T:2020:173. These two actions for damages are already counted once under 263(4) and 265.

[48]Source: original database by the author, drawn from the CJEU database (curia.euria.eu), having used "Directive 2003/87" in the search entry. The industry groups are determined by cross-referencing company information and the classifications used by the legislator in Annex I of the (original) ETS Directive. All four cross industry applications to the CJEU include iron and steel businesses.

The remaining ETS applications before the Court–such as actions under the Aarhus Convention,[49] VAT fraud[50] or ETS State Aid Guidelines[51]–do call on the ETS, yet do not challenge the legislation at its core.

Through its judgments, the CJEU has been particularly vital in assessing the legality of decisions implementing the EU Emissions Trading Scheme as well as offering guidance on the design and implementation of the Scheme.[52] In fact, scholars have acknowledged the effects of the Court on ETS policy formulation, for instance, the manner in which the legislator, for its revision of the ETS in 2009, has taken into account both the litigation challenges by Member States and industry actors to National Allocation Plans (NAP) in Phases I and II, as well as the judicial reasoning of the Court in these cases.[53]

When classifying ETS litigation as "strategic climate litigation", there are two key observations to be made. *First*, the substantive issues underpinning ETS litigation are generally not perceived as belonging to the classic—narrower—sense of *climate* litigation. Given that the bulk of EU ETS litigation consists of challenges to emission reductions by industry, or by Member States arguably lobbied by industry to defend their private economic rights, ETS litigation has been identified as standing "in contrast to the classic case of climate litigation," which is "typically" driven by nongovernmental organizations, lawyers, or even individuals.[54] As described at the beginning of this section, private actors have challenged key elements of the ETS concerning scope and lawfulness of the Directive, and (mis)use of Commission's regulatory powers, for reason of interference with the principle of equal treatment, property rights, the freedom to conduct business, and market competition. This type of litigation has been considered as only concerning climate change as a peripheral issue.[55] The core stream of ETS litigation in this sense does directly raise issues of fact and law regarding EU's climate change policy, but the matter of climate change is not central to the litigation strategy at hand. In other words, despite the fact that litigation arises as a by-product of the EU's carbon trading scheme under the EU ETS, climate change *as such* is not an issue or main concern in these disputes.[56] According to the same reasoning, ETS-related litigation which calls on the ETS Directive yet does not challenge it—identified above as the

[49]*See* Case C-524/09, Ville de Lyon v. Caisse des dépôts et consignations, ECLI:EU:C: 2010:822 (Dec. 22, 2010).*See also* Case T-476/12, Saint-Gobain Glass Deutschland v Eur. Comm'n (Dec. 11, 2014) https://curia.europa.eu/juris/liste.jsf?language=en&num=T-476/12; Case T-643/13, Rogesa Roheisengesellschaft Saar mbH v. Eur. Comm'n (July 11, 2018) https://curia.europa.eu/juris/liste.jsf?language=en&num=T-643/13.

[50]*See* Case T-317/12, Holcim (Romania) SA v. Eur. Comm'n https://curia.europa.eu/juris/liste.jsf?language=en&num=T-317/12.

[51]Case T-484/10, Gas Natural Fenosa SDG, SA v. Eur. Comm'n (June 20, 2011) https://curia.europa.eu/juris/liste.jsf?language=en&T&num=t-484/10; T-57/11, Castelnou Energía, SL v. Eur. Comm'n (Dec. 3, 2014) https://curia.europa.eu/juris/liste.jsf?num=T-57/11&language=EN; Case T-167/19, Tempus Energy Germany GmbH and T Energy Sweden AB v. Eur. Comm'n (Oct. 6, 2021) https://curia.europa.eu/juris/liste.jsf?num=T-167/19; Case T-726/20, Grupa Azoty S.A. and Others v. Eur. Comm'n (Nov. 29, 2021) https://curia.europa.eu/juris/liste.jsf?num=T-726/20&language=en; Case T-741/20, Advansa Mfg. GmbH and Others v. Eur. Comm'n (Nov. 29, 2021) https://curia.europa.eu/juris/liste.jsf?num=T-741/20&language=en.

[52]Peeters, *supra* note 3, at 20.

[53]*Id.*; Stefan E. Weishaar, *EU Emissions Trading – Its Regulatory Evolution and the Role of the Court, in* Research Handbook on EU Environmental Law 457 (Marjan Peeters & Mariolina Eliantonio, eds., 2020).

[54]Bogojević, *EU Climate Change, supra* note 4, at 188, 202. However, illustrations of studies that did include the EU ETS as an illustration of climate change litigation *see, e.g.,* Ghaleigh *supra* note 15; Setzer et al. *supra* note 6; Sanja Bogojević, *EU Climate Change Litigation: All Quiet on the Luxembourgian Front?, in* Research Handbook on Climate Mitigation Law (Van Calster, Vandenberghe & Reins, eds. 2014) [hereinafter Bogojević, *Luxembourgian Front*]; Peel & Osofsky, *Climate Change*, *supra* note 25 (categorizing climate change litigation).

[55]Peel & Osofsky, *Climate Change*, *supra* note 25 (giving four categories of climate change litigation).

[56]Jacqueline Peel and Hari M. Osofsky, Climate Change Litigation: Regulatory Pathways to Cleaner Energy 7 (2015).

remaining ETS applications—would also not be covered under this narrow conceptualization of climate litigation.

Second, in research on climate litigation, ETS challenges by corporations and governments have for the most part been identified as routine and non-strategic.[57] As described, while the ETS carbon-trading system has created the regulatory concern at issue in these cases, litigants do not seek to directly counter climate change per se but rather strive to prevent the implementation of a regime imposing a burden on the private sector. What seems to be at the heart of most ETS cases is a foundational constitutional law question, one of competence and subsidiarity, not the least concerning the degree of harmonization and ensuing power balance between the EU institutions and Member States, as allocated under the EU ETS.[58] Scholars have noted that "rather than pressing for new climate change–related claims through established legal venues, or using the courtroom with a broader political motive," which would easily lead to a qualification of *strategic* litigation, EU ETS litigation predominantly has raised "questions that stand at the center of EU law, or more precisely, they demand that the regulatory competences between the Commission and the member states in the context of constructing and managing the EU ETS, are drawn."[59] This moreover aligns with ETS litigation's positioning under the "second wave" of climate litigation, as it deals with the implementation of climate change legislation, while strategic climate litigation cases are typically characterized as "third wave" litigation.[60]

Above, I articulated ETS as an underrated field of strategic climate litigation research, particularly referring to two lapses in our current understanding of ETS litigation, namely its lagging recognition within climate litigation research, and its classification as non-strategic. Despite ETS litigation not fitting the current characterization of strategic climate change litigation, broader motives behind industry litigation can certainly be at play. In fact, where strategic ambitions behind pro-climate cases may be more easily discernible from the cases at hand, less can be said about the "strategic" nature of climate litigation characterized by an anti-climate, or an anti-regulatory agenda.[61] In the remainder of the Article, I uncover whether ETS cases are in fact as routine as presumed at face value, or whether further nuance is required regarding strategic litigation by corporate interests in EU law.

E. Hidden in Plain Sight? ETS Litigation by the Iron and Steel Industry

I. Introducing ETS litigation by the Iron and Steel Industry

Business interests in the production and processing of *iron and steel,* ferrous metals, have been regulated by the EU ETS since the adoption of the Directive in 2003. Within the EU ETS Scheme, the iron and steel industry accounts for the greatest share of industrial emissions, 22%,[62] with the five largest industrial emitters under the EU ETS being iron and steel operators.[63] Throughout its

[57]Setzer et al., *supra* note 6, at 24. *But, see* two ETS challenges recognized for their "strategic" nature: Case T-330/18, Carvalho and Others v. Parl. and Council (Aug. 13, 2018) https://curia.europa.eu/juris/liste.jsf?num=t-330/18&language=en; Case C-366/10, Air Transport Association of America and Others v Secretary of State for Energy and Climate Change (Dec. 20, 2011) https://curia.europa.eu/juris/liste.jsf?language=nl&num=C-366/10. On the former, see Pola Cebulak, Marta Morvillo and Stefan Salomon, *Strategic Litigation in EU Law: Who does it Empower?*, note 38, at 190 (recognizing the public interest case as strategic); on the latter, see Emilia Korkea-aho, *'Mr Smith Goes To Brussels': Third Country Lobbying and the Making of EU Law and Policy*, 18 CAMB. YEARB. EUR. LEG. STUD. 45 (2016) 65 (analyzing the case from a "lobbying through courts" perspective).

[58]Bogojević, *Luxembourgian Front*, *supra* note 54, at 9–10.

[59]Bogojević, *EU Climate Change, supra* note 4, at 188.

[60]Setzer et al., *supra* note 6, at 9.

[61]*Id.* at 7.

[62]EUR. PARL. POL'Y DEPT. FOR ECON., SCIE. & QUALITY OF LIFE POLICIES, ENERGY-INTENSIVE INDUSTRIES, CHALLENGES AND OPPORTUNITIES IN ENERGY TRANSITION, at 13, EUR. PARL. DOC. PE 652.717 (2020).

[63]Agnese Ruggiero, *Decarbonizing Steel – Options for reforming the EU's Emissions Trading System*, CARBON MARKET WATCH (Mar. 31, 2022) https://carbonmarketwatch.org/publications/decarbonising-steel/ (mentioning that although the iron

development, the ETS Directive has in particular been faced with strong opposition from energy-intensive industries, who form a significant stakeholder group of business interests in the EU advocacy bubble surrounding the EU ETS.[64] Among these, the steel sector has even been identified as "the most active of all industries lobbying on emissions trading," with Eurofer,[65] trade association representing the iron and steel industry, and the multi-national corporation and largest steel producer in Europe, ArcelorMittal, taking the crown.[66] Compared to other industries in the case law docket, iron and steel can be considered among the top three litigant industries, see Table 2.

Since 2004, there have been nineteen applications lodged before the CJEU under Directive 2003/87 by private economic actors from the iron and steel industry, including cross-industry actions.[67] These applicants predominantly concern operators of greenhouse gas-emitting installations and steel plants from large multinational companies: ArcelorMittal, Hüttenwerke Krupp Mannesmann, ROGESA, Salzgitter Group, ThyssenKrupp Steel, voestalpine, Tata Steel, United States Steel Corporation, DK Recycling & Roheisen, Vítkovice Steel, and SSAB. Eight of these businesses are considered amongst the top ten most polluting steel plants in the EU in 2022.[68] In 2010, NGO Sandbag identified five of these operators as companies profiting most from the ETS.[69] Six applications were lodged by one repeat player: ArcelorMittal, who initiated proceedings in Luxembourg,[70] France,[71] and Germany.[72] In *Hüttenwerke Krupp Mannesmann*

and steel industry constitutes an indispensable strategic sector for the EU market, industrial activities by these operators are responsible for a significant share of the CO2 emissions: 5% of the EU's total CO2 emissions, and 7% at global scale).

[64]*Survival Guide to EU Carbon Market Lobby: Debunking Claims from Heavy Industry*, Carbon Market Watch (June 30, 2021). For an account of lobbying of energy-intensive industries during the development of Directive 2003/87/EC *see* Marcel Braun, *The Evolution of Emissions Trading in the European Union – The Role of Policy Networks, Knowledge and Policy Entrepreneurs*, 34 Acct., Organizations and Soc'y 469–87 (2009); Birger Skjærseth & Wettestad, *Success or Failure*, *supra* note 1, at 275–90. *See also* Jon Birger Skjærseth and Jørgen Wettestad, *Fixing the EU Emissions Trading System? Understanding the Post-2012 Changes*, 10 Glob. Env't Pol. 101–23 (2010) (describing an account of lobbying of energy industries during the development of directive 2009/29/EC) [hereinafter Skjærseth & Wettestad *Fixing the EU*]; Oscar Reyes & Belén Balanyá, *Carbon Welfare - How Big Polluters Plan to Profit from EU Emissions Trading Reform*, Corporate Europe Observatory (Dec. 2016) https://corporateeurope.org/sites/default/files/attachments/the_carbon_welfare_report.pdf (describing how-energy intensive industries have undertaken "full spectrum lobbying" to spread their concerns, exert influence on ETS policy and, ultimately, "extract more free subsidies from the ETS" through EU trade associations, echoed by national federations, and followed-through by local companies).

[65]Eurofer, or European Confederation of Iron and Steel Industries, is a trade association at sector level representing national steel federations and steel companies such as Arcelor Mittal, Corus/Tata Steel and ThyssenKrupp on issues concerning the development of the European steel industry.

[66]Reyes & Balanyá, *supra* note 64; *Industry Lobbying on Emissions Trading Scheme Hits the Jackpot: The Cases of Arcelor Mittal and Lafarge*, Corporate Europe Observatory (May 21, 2010) https://corporateeurope.org/en/climate-and-energy/2010/05/industry-hits-carbon-leakage-jackpot.

[67]*See* Table 3. To reach this total number of applications by the iron and steel industry, I include cross-industry applications where iron/steel actors took part in and do not count appeals.

[68]Ruggiero, *supra* note 63 (according to their position in the ranking: (1) Voestalpine Stahl GmbH; (2) ThyssenKrupp Steel Europe AG; (3) Tata Steel IJmuiden B.V.; (5) ArcelorMittal ESPAÑA, S.A.; (6) Hüttenwerke Krupp Mannesmann GmbH; (7) ROGESA Roheisengesellschaft Saar mbH; (8) ArcelorMittal Belgium; (9) Salzgitter Flachstahl GmbH.

[69]*See Carbon Fat Cats 2011*, Sandbag Climate Campaign (blog) (Sept. 7, 2023) https://sandbag.be/project/carbon-fat-cats-2011/ (showing which of the largest steel and iron industry companies were profiting off of ETS: 1) ArcelorMittal; (3) Tata Steel; (4) ThussenKrupp; (5) Riva Group; (9) Salzgitter).

[70]Case T-16/04, Arcelor SA v. Eur. Parl. and Council (Mar. 2, 2010) https://curia.europa.eu/juris/liste.jsf?language=en&num=T-16/04; Case C-321/15, ArcelorMittal Rodange et Schifflange SA v. État du Grand-duché de Luxembourg (Mar. 8, 2017) https://curia.europa.eu/juris/liste.jsf?num=C-321/15.

[71]Case C-127/07, Société Arcelor Atlantique et Lorraine and Others v. Premier ministre, Ministre de l'Écologie et du Développement durable and Ministre de l'Économie, des Finances et de l'Industrie (Dec. 16, 2008) https://curia.europa.eu/juris/liste.jsf?language=en&num=C-127/07; Case C-80/16, ArcelorMittal Atlantique et Lorraine SASU v. inistre de l'Écologie, du Développement durable et de l'Énergie (July 26, 2017) https://curia.europa.eu/juris/liste.jsf?language=en&num=C-80/16.

[72]Case T-544/18, ArcelorMittal Bremen v. Comm'n, ECLI:EU:T:2019:541 (July 5, 2019); Case T-623/19, ArcelorMittal Bremen v. Comm'n, ECLI:EU:T:2021:211 (Apr. 21, 2021).

Table 3. CJEU applications by Iron and Steel under Directive 2003/87/EC according to nature of the proceedings.

CJEU applications by Iron and Steel under Directive 2003/87/EC	
Court proceedings	Number
Action for annulment – 263 TFEU	**7**
T-489/04 - US Steel Košice v Commission	
T-16/04 - Arcelor v Parliament and Council	
T-27/07 - US Steel Košice v Commission	
T-379/11 - Hüttenwerke Krupp Mannesmann and Others v Commission	
T-381/11 - Eurofer v Commission	
T-630/13 - DK Recycling und Roheisen v Commission	
T-643/13 - Rogesa v Commission	
Action for Failure to act – 265 TFEU	**2**
T-544/18 - ArcelorMittal Bremen v Commission	
T-623/19 - ArcelorMittal Bremen v Commission	
Preliminary Reference – 267 TFEU	**10**
C-127/07 - Arcelor Atlantique and Lorraine and Others	
C-392/14 - Lucchini in Amministrazione Straordinaria	
C-393/14 - Dalmine	
C-506/14 - Yara Suomi and Others	
C-295/14 - DOW Benelux	
C-180/15 - Borealis and Others	
C-321/15 - ArcelorMittal Rodange and Schifflange	
C-369/15 - Siderúrgica Sevillana	
C-80/16 - ArcelorMittal Atlantique and Lorraine	
C-524/20 - Vitkovice Steel	
Grand Total	**19**

and Others v Commission,[73] a coordinated effort was launched by five key steel industry players.[74] About four ETS cases are cross-industry applications,[75] all of which include iron and steel players. *Eurofer v. Commission* is one of the only three cases in which a trade association is the applicant in ETS court proceedings.[76] Compared to the full scale of ETS litigation, approximately the same variety in proceedings is discernible. None of the actions for annulment have been successful—and six out of seven for reasons of inadmissibility.

[73]Case T-379/11, Hüttenwerke Krupp Mannesmann and Others v. Comm'n, ECLI:EU:T:2012:272 (June 4, 2021).

[74]*Id.* (identifying the five key steel industry players who launched the action: Hüttenwerke Krupp Mannesmann GmbH (Germany); Rogesa - Roheisengesellschaft Saar mbH (Germany); Salzgitter Flachstaht Gmbh (Germany); ThyssenKrupp Steel Europe AG (Germany); voestalpine Stahl GmbH (Austria)).

[75]Cross-industry means that the actors that have lodged a case are from several industries. Focus is on the applications lodged before the Court, which means that this differs from joined cases.

[76]Case T-381/11, Eurofer v. Comm'n, ECLI:EU:T:2012:273 (June 4, 2012).

In what follows, lessons will be drawn from a selection of seven cases by the iron and steel industry which hold strategic attributes of note to this Article's objective. As will be explained below, these cases have been identified through a normatively open analytical lens: Those strategies where the strategic ambition goes beyond the case at hand, based on analysis of the substance and procedural choices made by the litigants.

II. Uncovering Private Generalizable Interest

By applying the conceptual framework to these cases, a first lesson can be drawn regarding the substantive ambition underpinning private interest litigation: How does strategic litigation by corporate actors to preserve their private interests take place in EU law? What interests and agenda do they pursue as they seek to trigger broader changes beyond one individual case, and (how) are these generalizable? In this context, the following legal strategies are particularly noteworthy as they provide insight into the deregulation agenda pursued by private economic actors in ETS litigation and in doing so clarify notion of private generalizable interest underpinning strategic litigation.

1. Boundary-testing Litigation

One of the earliest ETS challenges before the CJEU provides a first insight into the nature of iron and steel corporations' private interest. The legal strategy, challenging the scope of the ETS Directive, consists of a combination of two different legal remedies before the CJEU, one direct action requesting partial annulment of the ETS Directive and claiming compensation for damages lodged in a 2004 case, *Arcelor SA v Parliament and Council,*[77] and another, a 2005 preliminary ruling procedure challenging the validity through national courts: *Arcelor Atlantique and Others*.[78] Both actions, recognized as "foundational" against the ETS system,[79] were initiated by one individual actor and its subsidiaries, and challenged the lawfulness of the EU ETS, contesting its scope and coverage of activities as it pertains to the whole iron and steel industry.

Even though Arcelor initiated the legal proceedings individually,[80]—that is to say not in coordination with other companies, nor represented by a trade association—its legal argumentation and strategic behavior as a litigant suggest a strategic ambition transcending the interest of the individual applicant. In *Arcelor SA v. Parliament and Council,* for instance, the applicant submitted that the EU legislator breached the principle of equal treatment and undistorted competition, and infringed Arcelor's property rights, its freedom of establishment, and its right to pursue an economic activity "by failing to take account of the technical and economic impossibility for steel producers to reduce CO_2 emissions."[81] Although the argument is framed towards the particular position of the individual applicant to meet the CJEU's strict requirement for standing, direct and individual concern, Arcelor refers to the general economic position of steel producers affected by the Directive and indicates that the interests at stake are the legal and economic positions of *all* pig iron and steel producers. In its argumentation, *Arcelor* moves beyond the individual to a sense of "shared" interest as it strives to deregulate the industry. In doing so, the corporate litigant identified itself representative of, and belonging to, a "closed category of companies" operating installations for the production of pig iron and steel in a "unique lock-in situation" particularly affected by the contested Directive.[82] Although the applicant's

[77]Case T-16/04, Arcelor SA v. Parl. and Council (Mar. 2, 2010) https://curia.europa.eu/juris/liste.jsf?language=en&num=T-16/04.

[78]Case C-127/07, Société Arcelor Atlantique et Lorraine and Others v. Premier ministre and Others, ECLI:EU:C:2008:728 (Dec. 16, 2008).

[79]Peeters, *supra* note 3, at 20.

[80]*Arcelor Atlantique*, Case C-127/07 (identifying all eight applicants as *Arcelor* subsidiaries).

[81]*Arcelor SA v Parliament and Council,* Case T-16/04, at para. 75.

[82]*Id.* ¶¶ 73–76.

motivation as stipulated in these cases may be to end an alleged infringement of its fundamental rights, the strategic goal, and effect, of the actions rather constitutes change beyond the individual case, aiming at de-regulation of the iron and steel industry in view of the EU ETS framework on the basis of private interests such as the rights to private property, freedom of establishment, and right to pursue an economic activity.

In challenging the validity of the ETS Directive, Arcelor sought as an outcome the voiding of the implementation of the Directive as it applies to the entirety of the steel sector, with a clear potential for negative environmental consequences. Ghaleigh identified such litigation as "boundary-testing," a type of litigation which aims to limit the impact of climate change policy on businesses, as Arcelor sought to argue that the line-drawing exercise entered into by the European legislator—steel to be within the ambit of the scheme, but not aluminum or plastics—is invalid, not on its own terms but in accordance with the long-established principles of "equal treatment."[83] The same generalizable boundary-testing behavior, contesting the boundaries of ETS policy implementation on businesses, is notable in other case law illustrations as will be noted below.

2. Representative Interest

Another element of the substantive interest underpinning these cases is discernible from two actions for annulment of Commission Decision 2011/278 on free allocation of emission allowances, challenging the Commission's allegedly incorrect benchmark values. These actions, lodged on the same day with almost identical pleas in law, consist of one application by the European Confederation of Iron and Steel Industries, *Eurofer v. Commission*[84], and the other application, *Hüttenwerke Krupp Mannesmann and Others v. Commission,*[85] jointly submitted by five[86] multi-national steel companies. As for the pleas in law, in both cases the applicants submit the: (i) Illegality of the product benchmark for hot metal, in breach of 10a ETS Directive; (ii) infringement of the obligation under the second paragraph of Article 296 TFEU to sufficiently state reasons for its decision; (iii) principle of proportionality as regards the determination of the product benchmark for hot metal; and (iv) principle of equality. In line with previous direct actions before the Court, both cases were found to be inadmissible by the General Court for lack of standing.

Both cases are illustrations of "generalizable" private interest in the sense that the applicants represent a multiplicity of actors with one shared interest or motivation. This multiplicity can be found in varying degrees in *Hüttenwerke Krupp Mannesmann and Others,* where the applicants jointly initiated proceedings,[87] and in *Eurofer,* in the applicant's capacity as trade association "representing the interests of the European steel-manufacturing industry."[88] This illustration therefore differs from the previous *Arcelor* cases in its clear presence of multiple interests. The shared interest at stake is to acquire a more advantageous legal position under the EU ETS in the form of an increase in free allowances, and more concretely a revised carbon benchmark for the iron and steel industry. Interestingly, this type of straightforward generalized private interest through litigation by trade associations is uncommon in ETS litigation, as *Eurofer v. Commission* is only one of three cases in which a trade association has been an applicant over the past two decades.

[83] *See* Ghaleigh, *supra* note 15, at 53.

[84] Case T-381/11, Eurofer v Commission, ECLI:EU:T:2011:483 (June 3, 2012).

[85] Case T-379/11, Hüttenwerke Krupp Mannesmann and Others v. Comm'n, ECLI:EU:T:2012:272 (June 4, 2012).

[86] *Id.* (identifying the applicants: Hüttenwerke Krupp Mannesmann GmbH (Duisberg, Germany); Rogesa - Roheisengesellschaft Saar mbH (Dillingen, Germany); Salzgitter Flachstaht Gmbh (Salzgitter, Germany); ThyssenKrupp Steel Europe AG (Duisberg); and voestalpine Stahl GmbH (Linz, Austria)).

[87] *Id.*¶ 1

[88] *Eurofer*, Case T-381/11, at ¶ 1.

III. Procedural Context Matters

Another noteworthy lesson concerns the added value of the procedural lens to discern strategic litigation. What can we discern from a closer look into procedural decisions made by litigants, the routes and tactics deployed in ETS litigation? Which procedural decisions indicate strategic behavior?

1. Coordinated Litigation

The two cases *Eurofer* and *Hüttenwerke Krupp Mannesmann and Others* offer indications that both of these applications were brought to life in a coordinated manner by litigants from the iron and steel industry, given the (i) same-day application by the trade association Eurofer and five of its individual members; (ii) same legal counsel representing both cases; (iii) the *verbatim* pleas in law, except for one, and (iv) arguments submitted in Court. Such coordination tactics can be identified as "simultaneous litigation"[89] in which several litigants bring multiple suits simultaneously: In this case, two direct actions, one under the umbrella of a trade association, and another at individual firm-level by five Eurofer members.

Another illustration of coordinated litigation bringing multiple cases is *DOW Benelux BV and Others,* a cross-industry national action by twenty-five applicants of energy-intensive industries in the Netherlands, joined afterwards by the Court under *Borealis Polyolefine GmbH and Others,*[90] all challenging the validity of the uniform cross-sectoral correction factor determined by Commission Decision 2013/448. In an attempt to overcome the strict standing requirements for direct actions before the Court, industry actors have found—some mixed[91]—success in the use of indirect actions via national courts through the preliminary reference procedure.[92] *Borealis Polyolefine GmbH and Others* is the first of a string of consecutive challenges to national implementation measures of Decision 2011/278/EU and Decision 2013/448/EU in different Member States, all giving rise to similar preliminary questions.

These kinds of strategies naturally come with a degree of coordinated efforts and similar interests, for instance in the context of an association of common interests, and are, more often than not, nested in lobbying activities.[93] The coordinated nature of such litigation in other words presumes a set of similar private interests, as McCown explains: "[Simultaneous challenges are] typically not all brought by different branches of the same firm, but rather by sets of similar interests. These sets of interests are likely to be brought into contact with each other through associations."[94] Such use of multiple simultaneous or sequential references has the effect of signaling the saliency of an issue to the Court as well as expanding the applicability of legal change through the Court's system of precedents in each national court.[95]

[89]Margaret McCown, *Interest Groups and the European Court of Justice*, *in* LOBBYING THE EUROPEAN UNION: INSTITUTIONS, ACTORS, AND ISSUES 98 (Coen & Richardson eds., 2006).

[90]Case C-389/14, DOW Benelux BV and Others v. Staatssecretaris van Infrastructuur en Milieu, 2015 E.C.R. (comprising the joined cases of C-389/14, C-391/14, and C-393/14). *See also* C-191/14, Borealis Polyolefine GmbH and OMV Refining & Marketing GmbH v. Bundesminister für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft, 2015 E.C.R. (comprising the joined cases of C-191/14 and C-192/14).

[91]The judgment provided a mixed result for the private parties undertaking the appeals. Although the Court did conclude to a wrongful allocation of free allowances, it did not necessarily agree with the operators, who argued for an entitlement to an increase in free allowances.

[92]Bogojević, *supra* note 4.

[93]McCown, *supra* note 89, at 97–98.

[94]*Id.* at 97.

[95]*Id.*

2. Futile Litigation

A clear limiting factor to private actor's litigation success is the Court's longstanding position on standing requirements. Given the notoriously restrictive standing requirements for "non-privileged applicants" under article 263(4) TFEU[96] in contrast to the liberal status of "privileged" applicants under article 263(2) TFEU, industry annulment actions have all been found inadmissible. This does not come as a surprise, as issues of standing affect success chances of climate litigation by NGOs and individuals as well—although, it appears, more significantly to their disadvantage.[97]

Consequentially, one could presume that EU ETS litigation has in fact been driven by Member States and the Commission. However, despite the consistency of the Court's inadmissibility rulings, industry actions on the basis of art. 263(4) TFEU have persisted throughout the past two decades. Most notably, this trend in ETS litigation concerns the "futile" challenges by operators covered by the ETS contesting Commission decisions that approve or reject National Allocation Plans, of which there have been numerous throughout Phases I and II of the ETS.[98] In the first decade of the ETS, most actions for annulment—both private party litigation and those initiated by Member States—challenged the Commission's implementing decisions rejecting a particular NAP. The Court's role in this case being to assess the compatibility of the Commission's reasoning with EU law.[99] Such NAP litigation can at first glance easily be discarded as "non-strategic" and routine, given that the issue at the heart of these challenges is the scope of the Commission's review powers under art. 9 (3) of the Directive. Litigants generally claim that the Commission acted *ultra vires* in its decision reviewing NAPs. Although annulment challenges by private litigants have been consistently unsuccessful and found inadmissible by the Court due to a lack of legal standing—holding that the decision is not of direct nor individual concern to the applicant within the meaning of 263 (4) TFEU—industry challenges persisted throughout the lifespan of the ETS.

In this context, the *U.S. Steel Košice* cases[100] by U.S. Steel Košice, steel producer in Slovakia, are representative of other "futile" application by private litigants.[101] At first glance, the strategic ambition and legal strategy behind the *U.S. Steel Košice* cases is quite clearly one of individual, not generalizable, and routine nature: Indirectly contesting the allocation of the company's own allowances granted to it under the Slovak NAP.[102] However, when looking beyond the case at hand, taking into account the entire ETS case law docket and the wealth of persistent direct actions

[96]Case C-25/62, Plaumann & Co. v. Commission of the European Economic Community, ECLI:EU:C:1963:17 (July 15, 1963). *See also* Mario Pagano, Overcoming Plaumann: Environmental NGOs and Access to Justice Before the CJEU (Dec. 5, 2022) (PhD thesis, European University Institute) (on file with European University Institute); Geert van Calster, Access to Justice Against European Community Institutions – Using Environmental Litigation as a Focal Point, Address to Conference on Environmental Rights in Europe after the UN/ECE Aarhus Convention (Aug. 30, 2003); Geert van Calster, *Advocate General's Opinion in Grupa Azoty Again Lays Bare a Serious Gap in EU Judicial Protection, yet Does Nothing to Plug the Hole*, EU L. Analysis Blog Spot (May 31, 2023) https://eulawanalysis.blogspot.com/2023/05/advocate-generals-opinion-in-grupa.html.

[97]Setzer et al., *supra* note 6, at 25.

[98]Van Zeben, *supra* note 43, at 123-125.

[99]Bogojević, *EU Climate Litigation*, *supra* note 4, at 194.

[100]Case T-489/04, U.S. Steel Košice v. Commission of the European Communities (Oct. 1, 2007) https://curia.europa.eu/juris/liste.jsf?language=en&num=t-489/04 (challenging the Commission Decision regarding the first trading phase of the Slovak NAP and the Commission Decision regarding the second Slovak NAP); T-27/07 – U.S. Steel Košice s.r.o. v. Commission of the European Communities (Oct. 1, 2007) https://curia.europa.eu/juris/liste.jsf?num=T-27/07&language=en (describing how both applications were dismissed by the General Court for want of locus standi – a finding confirmed by the Court of Justice in the applicant's appeal).

[101]*See, e.g.*, Case T-344/09, EnBW Energie Baden-Württemberg v. Commission (May 22, 2012) https://curia.europa.eu/juris/liste.jsf?num=T-344/08&language=EN (concerning the German NAP – a case that has been identified as casting a long shadow over EU ETS Case law). *See also* Ghaleigh, *Emissions Trading*, *supra* note 3, at 380.

[102]One could argue that the effect of a successful action would be that other operators benefit from an increase in allowances, yet such logic does not amount to the safe conclusion of a "shared" generalizable interest, given that such an effect could also be a decrease in allowances for other operators, a result U.S. Steel Košice might not even be opposed to.

lodged by industry actors, the strategic nature should not be so easily discarded. While there are "several possible explanations for this phenomenon [...], none of which are completely satisfactory,"[103] two purposes behind persistent NAP litigation are nevertheless relevant to ascertain strategic litigation, that is, the use of futile litigation (i) as test cases, and (ii) as an advocacy tool in the political arena.

First, private actors may initiate challenges before the Court to "test the judicial waters" with regard to certain pleas of law. These applications in this case serve as *test cases*[104] in which, regardless of whether the ruling of the CJEU is a "win," a test case provides useful information on the feasibility of the pursuit of a certain issue. One reason for this persistence in lodging direct actions could be that the Court, in response to some of the questions raised in the applications, has further developed its authoritative case law, even in cases partly characterized by lack of standing.[105] For instance, in *Arcelor v Parliament and Council,* the CJEU, although it dismissed the action for annulment on the basis of inadmissibility for lack of individual concern, appears to have not shied away from using the opportunity to develop jurisprudence concerning the design of the EU ETS in its reply to the, admissible yet unfounded, action for damages, particularly with regard to the principle of equal treatment, the legal status of allowances, and the need for price regulation.

Second, another plausible reason is that industry action evidently persists particularly in those cases where the ambition may be political in nature, and litigation thus is wielded as a political (lobbying) tool. Private actors can initiate challenges before the CJEU to indirectly target Member States, in which these actors signal, or lobby,[106] their concerns. Operators under the ETS use this type of litigation as a platform to make themselves heard, for Member States to consequentially act upon and take action to protect the national industry's economic interests, either through litigation or by changing the national implementation of the ETS Directive. The stream of seemingly futile applications by private actors can in this view ultimately be identified as "a form of indirect lobbying by interest groups through the judicial system, especially in light of relatively low costs of action," in which case an application before the Court is "used as leverage in negotiations with the Member States."[107]

As we have seen in several other illustrations, in this Article identified as "boundary-testing litigation," these applications represent a form of litigation by private actors—possibly coordinated with more successful Member State actions on the same NAPs—"in order to publicize the cause (of major emitters and the allegedly unjustified costs of the EU ETS on their businesses) and pressurize adversaries and rouse allies."[108] Interestingly, the Slovak Government initiated its application contesting the Commission Decision regarding its NAP on the very same day as the *U.S. Steel Košice II* challenge.[109] Following case law analysis of all NAP litigation, it appears that more private sector litigation regarding NAPs has been applied in tandem with admissible Member State litigation on the same issues. Similarly to NAP challenges lodged by private actors, Member State applications call into question the interplay of authority between the Commission and Member States and have been found admissible and successful, tipping "the balance of competence" in favor of Member States when determining NAPs.[110]

In these cases, national authorities seem to emerge as a third facilitating player, and regardless of standing limitations, private actor applications may nonetheless indirectly serve to influence EU legislation. It should be noted in this context that substantial judgments from the Court regarding

[103]Van Zeben, *supra* note 43, at 126.
[104]McCrown, *supra* note 89.
[105]Van Zeben, *supra* note 43, at 123.
[106]Bogojević, *EU Climate Litigation*, *supra* note 4, at 202.
[107]Van Zeben, *supra* note 43, at 126.
[108]Ghaleigh, *supra* note 15, at 56 (Corporate EU ETS litigation as "boundary-testing" litigation).
[109]Case T-32/07, Slovak Republic v. Comm'n (May 18, 2008) https://curia.europa.eu/juris/document/document.jsf?docid=67555&doclang=EN (application withdrawn on February 7, 2008).
[110]Bogojević, *Litigating the NAP*, *supra* note 1, at 225.

market-based instruments—*de facto* the case for Member State litigation on ETS—potentially have far-reaching consequences for the market and numerous third parties as legal uncertainty can affect all third parties active in a certain market: "[W]ithin an ETS, litigation that touches upon the regulatory fabric of the market potentially affects all parties subject to the scheme."[111] This begs the question whether Member States are in fact acting out of such industry pressure, a concern which has been uttered by watchdogs.[112]

F. Conclusion

The current state of EU law scholarship on strategic litigation, with an underdefined key concept, brings about an underrepresentation of the strategic litigation process. Within this strategic litigation process, the Article zooms in on what makes corporate litigation strategic, particularly in the context of climate change law. EU ETS litigation by business actors in this view offers a prime illustration of neglected strategic climate litigation before the Court of Justice of the EU. To address this question, this Article has identified biases and blind spots in current scholarly research on strategic climate litigation as to the actors behind litigation, and the interests and agendas pursued. It then offers a novel conceptual, methodological, and empirical frame to tackle these shortcomings.

The conceptual contours we draw for strategic litigation shape our lens to capture practice. To truly understand the nature of these challenges and their influence on EU law, a broader conceptual frame of analysis is called for. The Article therefore sets out a case for the advancement of a normatively open approach to better capture corporate strategic litigation, devoid of any normative flavor as to the interests pursued by litigants who use the law as a tool for broader impact.

The proposed approach then rests on a combination of two methodological lenses to translate a normatively open stance to practice. To gauge the use of litigation by corporate actors as a broader advocacy tactic, the CJEU docket has been analyzed by discerning the substantive layer of strategic litigation—an ambition indicative of a broader purpose, an interest or objective beyond one case—as well as the procedural layer of strategic litigation, consisting of the procedural routes and advocacy tactics made by these litigants, indicative of a broader plan.

Finally, through an empirical analysis of legal challenges on the EU ETS by private economic actors before the Court of Justice of the EU, the Article has shown that indeed, when we take a normatively open approach, strategic cases by corporate interests arise which we otherwise might not see. The case study has offered results which indicate that strategic litigation by corporate actors has indeed been deployed in the EU ETS to limit the effect of climate change policy on these businesses and their economic rights. Despite the fact that ETS litigation does not fit into the current frame of strategic climate change litigation, broader strategic motives behind industry litigation can certainly be at play.

Offering insights from seven cases by the iron and steel industry with strategic indicators, the Article has shed light on the notion of a private generalizable interests underpinning these cases, representative or not, and the boundary-testing agenda contesting climate policy's application on businesses' operations. It has showcased a variety of legal strategies indicative of strategic litigation, from coordinated litigation challenges to the use of futile, and seemingly routine, litigation as test cases before the Court, or rather the use of litigation as a political tool beyond the judicial arena.

[111]Josephine Van Zeben, *Implementation Challenges for Emission Trading Schemes: The Role of Litigation, in* RESEARCH HANDBOOK ON EMISSIONS TRADING 21 (Stefan E. Weishaar, ed. 2016); See also Giuseppe Dari-Mattiacci & Josephine A. W. Van Zeben, *Legal and Market Uncertainty in Market-Based Instruments: The Case of the EU ETS*, 19 NYU ENV'T L. J. 1 (2016).

[112]Reyes & Balanyá, *supra* note 5, at 20.

Acknowledgements. The author thanks Special Issue editors Pola Cebulak, Marta Morvillo and Stefan Salomon; and Geert Van Calster and Christina Eckes for their comments on earlier drafts, as well as participants of the Workshop on Strategic Litigation in EU Law, 20-21 March 2024 in Amsterdam, for inspiring discussions on the practice of strategic litigation in the EU.

Competing Interests. The author has no conflicts of interest to declare.

Funding Statement. This research was funded by the European Union's Horizon Europe research and innovation program under Marie Sklodowska-Curie Doctoral Program (MSCA-DN) – Grant Agreement no 101073292, with additional support from the Fund for Scientific Research – Flanders (FWO Vlaanderen) under project G051223N.

Cite this article: Fleerackers S (2024). Hidden in Plain Sight? Corporate Strategic Litigation in the EU Emissions Trading System. *German Law Journal* **25**, 873–892. https://doi.org/10.1017/glj.2024.65