EDITORIAL

Transnational Environmental Law on the Threshold of the Trump Era

1. INTRODUCTION

Since its inception Transnational Environmental Law (TEL) has focused on the complex web of interactions across national borders in addressing environmental issues, including but going beyond the traditional domain of international environmental law. The content of TEL has been diverse but has encompassed several pervasive themes: mutual influence between legal systems, multilevel integration, regime fragmentation and overlap, and the erosion of traditional hierarchies, as governance frameworks evolve against a backdrop of uncertainty, contestation and unpredictable change. The last of these factors, unpredictable change, is vividly illustrated by the historical context in which this issue will appear, with that change taking the form of Donald J. Trump’s ascension to the United States (US) presidency.

Although the final shape of Trump’s policy agenda is not yet clear at the time of this writing, all indications suggest a sharply different US role in terms of international environmental law. As a candidate, Trump expressed disbelief in the reality of climate change and pledged to repudiate the Paris Agreement1 and to repeal the Obama Administration’s signature regulation of carbon emissions, the Clean Power Plan.2 Trump’s cabinet nominees have close connections with the fossil fuel industry, and nearly all have a history of denying the reality of climate change.3 Most strikingly, his nominee to head the Environmental Protection Agency (EPA) has also expressed doubts about the reality of climate change and is best known for suing the EPA to halt climate and air pollution regulations.4 Thus, although Trump has proved

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himself to be unpredictable, it seems highly likely that the US will retrench on recent efforts to address climate change, both at the national and international levels. Given the economic and geopolitical importance of the US, not to mention its prominence as a carbon emitter, that course of action could have serious consequences globally. Some of Trump’s actions may founder on domestic legal or political resistance, but the resilience of transnational environmental law in the face of this policy shock will also be an important factor.

This Editorial offers TEL’s customary introduction and key reflections on the scholarly contributions in this issue. The discussions are organized under the themes of ‘implementation, liability, and transnational environmental law’ and ‘new directions for climate change law’ in the sections immediately below. However, given the magnitude of change that the Trump administration is likely to represent for environmental law and policy, both in the US and beyond, it is both appropriate and necessary to go beyond TEL’s usual editorial agenda and contribute directly to the rapidly expanding debate on environmental law in a new, potentially post-neoliberal context. Section 4 of this Editorial therefore discusses prospects for transnational environmental law as we enter a new period of disruption resulting from Trump’s election.

2. IMPLEMENTATION, LIABILITY, AND TRANSNATIONAL ENVIRONMENTAL LAW

All but two of the seven articles in this issue relate to climate change, perhaps a signal of the central importance of this problem in environmental law today. In the first of the two non-climate-related articles, Yonghee Yoon chronicles the reception of the US Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in the Korean legal system and offers some astute observations about legal transplants. As Yoon discusses, CERCLA imposes strict, retroactive liability for clean-up costs on generators, transporters, and disposal sites for hazardous waste. The retroactivity feature has been upheld by the US courts on the theory that the continuing threat of harm from leakage of hazardous waste justifies imposing the clean-up costs on those who created the threat. Although other countries have imposed liability for hazardous waste clean-up, Korean statute law adheres the most closely to the US model. Unlike the US version, however, the Korean version has encountered resistance from the Korean Constitutional Court, which has ruled portions of the statute unconstitutional on the ground of retroactivity problems.

7 For more details on CERCLA, see Salzman & Thompson, n. 2 above, pp. 247–67.
8 The leading case is United States v. Northeastern Pharmaceutical & Chemical Co., Inc., 810 F.2d 726 (8th Cir. 1986).
The legislature has responded with modifications, which, to some extent, track later US amendments to CERCLA in reducing liability for landowners who did not contribute to the creation of the hazard.

Yoon discusses these developments in the context of the more general reality of legal transplants developing a life of their own as they adapt to the different circumstances of their adopted country. As Yoon points out, not only did Korea have a somewhat different constitutional culture from that of the US, but it did not face the same serious problems as the US with ageing chemical disposal sites. Thus, there was less need for retroactivity. As the Trump era in the US takes hold, it will be important for other countries to keep in mind that new US legislation and regulatory initiatives may reflect unique political and legal circumstances which are not necessarily suited for adoption elsewhere.

In the second non-climate-change article, Martin Hedemann-Robinson focuses on the efforts of the European Union (EU) to promote effective inspection and monitoring by Member States. The efficacy of environmental regulation is limited in the absence of effective enforcement, which must begin with inspections and monitoring to determine compliance. In the EU setting, inspection systems have been a delicate issue because they involve the internal administrative operations of Member State governments. Initially, the EU stayed clear of these issues. Although it has now dealt with them in the context of a number of environmental directives, an overall framework is lacking, and key domains such as air and water pollution are not yet covered. The EU has begun to move into this area and committed itself in the Seventh Environmental Action Programme (EAP-7) to addressing the problem. Yet, as Hedemann-Robinson points out, to date much of the coordination has taken place through an informal network of national environmental authorities (IMPEL) rather than at the EU level. Further complicating matters, he explains, the Lisbon Treaty places some barriers on EU action in this area, at least in terms of setting standards for inspection expenditure by Member States.


11 For a discussion of new methods of obtaining compliance, including new technologies for monitoring, see L. Paddock & J. Wentz, Next Generation Environmental Compliance and Enforcement (Environmental Law Institute, 2014).


15 Art. 197(2) TFEU provides: ‘The Union may support the effort of Member States to improve their administrative capacity to implement Union law. Such action may include facilitating the exchange of information and of civil servants as well as supporting training schemes. No Member State shall be obliged to avail itself of such support. The European Parliament and the Council, acting by means of regulations in accordance with the ordinary legislative procedure, shall establish the
The difficulties in fostering inspection programmes are all the more sobering because of the context. The *sui generis* EU is part way between a federalist nation and an international organization. While it may be considered weak in comparison with the powers enjoyed by national governments, it is muscular indeed compared with international organizations. Moreover, its membership, while diverse, is more homogeneous economically than the international community, there being no developing countries involved. Based on the EU experience, it is clear that fostering adequate inspection schemes to enforce international agreements will be a daunting enterprise.

The remaining articles on implementation involve carbon emissions trading systems, with a particular emphasis on emerging economies and developing nations. Like Yonghee Yoon’s article about Korean law discussed above, Anatole Boute’s article deals with the problem of legal transplants.\(^{16}\) As he explains, the EU’s emissions trading system (ETS) has now been operating for several years and is often offered as a model for other countries, particularly emerging and transition economies. One obvious issue is whether sufficient monitoring and enforcement will take place to ensure the integrity of the trading system, given the typical problems of enforcement in developing countries and emerging economies.

Boute points to a more subtle problem which applies specifically to market-based instruments like emissions trading and pollution taxes. Their goal is to put a price on carbon and thereby to force firms to take into account the social cost of carbon in making investment and operating decisions. Pricing carbon should also send a signal to consumers about making more efficient and economical use of energy. However, these effects assume that the energy sector will transmit price signals to firms and consumers. In the EU, this can happen efficiently because the EU has deregulated its electricity markets.

However, in key countries such as China, the electricity sector is highly regulated, limiting the ability of price signals to influence firms. As Boute explains, electricity prices are also tightly controlled in those countries and electricity is subsidized, which mutes or eliminates any price signal to consumers. Thus, the trading system may fail to provide a price signal, operating only to ration carbon among firms. Without adaptive behaviour by firms or consumers, a rationing system will result only in arbitrary limits on generating facilities, which will not incentivize the adoption of clean technology or energy efficiency measures. Boute views energy deregulation in countries such as China as unlikely in the near future and instead discusses some useful workarounds to help trading systems produce their desired results. Specifically, he suggests that consumers also be required to submit allowances to cover their electricity consumption and that tariff guarantees be provided for utility investments that reduce their emissions.

A companion article on carbon trading by Felicity Deane, Evan Hamman and Yilin Pei focuses specifically on China.\textsuperscript{17} Transparency has become a guiding principle for transnational environmental law, if one honoured often only in the breach. It is no secret that transparency has been a particular issue in China. Transparency may be particularly important in an ETS in order to enable the efficient operation of the market as well as to ensure public oversight of its integrity. In addition, international and national climate negotiations have repeatedly addressed the importance of transparency in the context of measuring, monitoring, reporting and verification requirements (MMRV).\textsuperscript{18} The seven pilot projects on carbon trading take different approaches to transparency. Deane, Hamman and Pei view the pilot projects as encouraging in terms of their attempts at transparency, but they are still a long way from ideal. Given the status of the rule of law in China and the degree to which firms are subject to political influence, achieving transparency in a national ETS will not be easy. However, it is dangerous to establish markets without such transparency, since they will lend themselves both to inefficiency and to market manipulation. It is particularly important to identify usable mechanisms for China and other emerging economies to make forward progress now, in order to help in making up for likely shortfalls in US effort. Dealing with issues of inspection, transparency and distorted energy markets will be crucial in this project.

3. NEW DIRECTIONS FOR CLIMATE CHANGE LAW

Continuing the focus on climate change from these articles on emissions trading, three articles analyze possible new directions in climate law. Benoit Mayer’s contribution addresses the problem of climate migration.\textsuperscript{19} Climate change will cause substantial population displacement, in part directly as a result of the increased prevalence of natural disasters such as droughts, and in part indirectly through its effects on armed conflict, for instance. For this reason, many proposals have been mooted for international instruments to address the problem of climate migrants. Mayer provides several reasons to be sceptical of such efforts, including the difficulty of distinguishing climate migrants from other individuals who relocate. More fundamentally, it is unclear whether relocation is something to be encouraged as a form of adaptation to climate change, or regretted because of its disruptive effects on the migrants themselves and on communities. Moreover, efforts by developed countries to foster developing country policies could intrude on highly sensitive decisions about development policy. Instead, Mayer recommends ‘mainstreaming’ the issue of climate migration within broader development strategies.


\textsuperscript{18} The most recent action was in the Paris Agreement, n. 1 above.

International intervention to assist countries in coping with the climate migration issue is certainly appealing, but Mayer raises significant questions about the practicality, or even desirability, of creating special mechanisms to deal with the problem. Possible solutions will have to be crafted with an eye to the problems identified in the article. Judging from the Brexit vote and Trump’s election, immigration measures now are even more politically fraught than before. Thus, the issue of climate migrants is likely to involve exceptionally difficult political issues.

The remaining articles offer innovative proposals outside the familiar debates over carbon dioxide (CO₂) emissions limits. Turning to other climate pollutants, Sabaa Khan evaluates a new approach for dealing with short-lived climate pollutants such as black carbon. These substances do not have the same long-term effects as CO₂ but, by the same token, controlling them will have a more immediate effect on climate than limits on CO₂ emissions. As yet, no systematic efforts have been undertaken to control these substances; they have not been addressed by the United Nations Framework Convention on Climate Change (UNFCCC) or on the level of legal principle by the International Law Commission (ILC). Instead, to the extent there has been action, it has involved particular sectors or individual substances such as hydrofluorocarbons (HFCs). Kahn discusses an intriguing development: the use of soft law mechanisms by the Arctic Council to prompt action by members on short-lived pollutants. In 2015, the Council’s members took an important step by agreeing to establish black carbon inventories and establishing information exchanges on black carbon and methane, with the ultimate goal of agreeing on a collective goal for reducing black carbon. Kahn suggests that, despite its limitations, this approach may have more traction than more traditional hard law efforts.

Efforts to control short-lived pollutants may be especially important if the US drops back from the effort to control CO₂. Hopefully, any interruption in US involvement will be a temporary hindrance only and will not have a permanent impact on global efforts. In the meantime, however, addressing short-lived pollutants could help to bridge the gap in climate efforts. Such a bridge could be especially important for the states and regions that are most vulnerable to climate impacts, such as small island developing states and least-developed countries. It would give them

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additional time in which to adapt and would hopefully allow them to hang on until a more universal international effort can resume.

In the final article of this issue, Shi-Ling Hsu puts aside the question of emissions caps entirely and turns to the neglected topic of environmental human capital. The energy industry has developed an immense amount of intellectual capital around fossil fuels, at every stage from discovery to energy generation and distribution. Given that this investment, along with the accompanying physical capital, risks obsolescence in the transition to a low-carbon society, it is no wonder that these firms fiercely resist emissions limitations and the advance of renewable energy. Climate science and renewable technologies have not had the advantage of this accumulation of intellectual capital. Hsu makes a strong case for the creation of large prizes as a way of incentivizing technological advances and for the creation of a network of research laboratories modelled on the famous Bell Labs, which discovered the transistor.

Hsu’s proposals have considerable promise. New knowledge is a public good that benefits everyone, notably including developing countries. Yet, for this very reason, basic research is unlikely to be funded by the private sector because it is hard for investors to capture the benefits of the research. Even when the resulting knowledge is protected through intellectual property rights, this may make it more difficult for others to build on the knowledge and more expensive for developing countries to utilize the knowledge. The proposed prizes and research network provide mechanisms that incentivize discovery and invention while avoiding the downsides of using intellectual property law as the key incentive. This need will only become more pressing in the Trump era. The Trump Administration and a Republican Congress are unlikely to sustain current funding for climate science or energy research, which will create a massive shortfall even to maintain the status quo. We need to consider a variety of ways to fill the gap, and Hsu’s call for international action sets an important part of that agenda.

Developing countries should find an effort to increase investment in human capital particularly appealing if a US policy shift interferes with global efforts to limit emissions in the near term. Such investments can assist them with adaptation through better climate predictions and can push down the cost curve for renewables globally. These provide benefits regardless of the progress of global climate negotiations. Increasing the stock of knowledge about renewable technology also assists in cost cutting in many countries simultaneously, something which is difficult to achieve through negotiation. Moreover, it provides a mechanism for developed countries to create benefits for developing countries without the political resistance that would be encountered by direct transfer payments.

26 As Hsu explains, in order to generate an incentive, intellectual property law rewards inventors with exclusive access to their discoveries for a period of time, which inevitably makes it more difficult for others, particularly those lacking the resources for licensing fees, to take advantage of the discoveries.
4. PROSPECTS

2017 marks the first year in which TEL will increase its publication from two to three issues per year. This change comes in response to TEL’s rapid growth and success, but it is now all the more fortuitous because of the growing need for and importance of transnational legal scholarship in the coming years. As the legal sector strives to find ways of adjusting to the disruption introduced by the recent American elections, a thorough understanding of the role and opportunities represented by transnational environmental law will be a vital tool in confronting the challenges ahead, both in the US and beyond.

As yet, the extent to which US policy will shift is not entirely clear, although early indications of the Trump Administration’s intentions are not encouraging. A number of mechanisms available under US law may hinder the Administration’s ability to implement a sharp change in domestic climate policy. US law gives the executive branch considerable authority to make policy, but also interposes procedural barriers and prohibits violation of clear statutory language. Changes to existing administrative regulations may require formal procedures and detailed documentation, which can be challenged in court on the basis of procedural irregularities or lapses in documentation or agency reasoning. Legislative changes may encounter resistance in the Senate, where the Democratic majority can use the filibuster to block many changes, at least assuming that this procedure itself is not changed. Still, there are complications in both the administrative and legislative arenas that make predictions difficult.

In the area of foreign affairs, US law places far fewer constraints on presidential authority. Courts are reluctant to hear cases involving foreign affairs, although there is an exception where the constitutionality of an act of Congress is

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27 See the discussion in Section 1 above.
28 *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984) (courts must uphold reasonable agency interpretations of ambiguous statutes, which may reflect the agency’s policy views as well as conventional legal tools).
29 *Natural Resources Defense Council, Inc. v. Environmental Protection Agency*, 683 F.2d 752 (3d Cir. 1982) (holding that notice-and-comment rule making is required before an agency can indefinitely postpone the effective date of a regulation which has not yet come into effect).
30 *Motor Vehicles Manufacturers Association v. State Farm*, 463 U.S. 29 (1983) (holding that the same judicial review applies to an action rescinding a regulation as to a new regulation, and reversing the agency for lack of adequate rational analysis); *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402 (1971) (requiring an agency to engage in reasoned decision making based on evidence in the rule-making record).
31 B. Adler, ‘If Democrats Want to Win, They Should Filibuster Trump Early and Often: The Last Two Presidencies Showed that Obstruction Works’, *The Washington Post*, 6 Dec, 2016, available at: https://www.washingtonpost.com/posteverything/wp/2016/12/06/if-democrats-want-to-win-they-should-filibuster-trump-early-and-often/?utm_term=.607b444b9d4a. With a few exceptions, the filibuster rule requires a 60% vote in the Senate to end debate on a measure, in effect giving 41 senators the ability to block legislation. Another unknown contingency is whether the Republicans will gain additional Senate seats in the 2018 election, which could conceivably give them enough votes to block filibuster attempts.
32 *United States v. Curtis-Wright Export Corp.*, 299 U.S. 304 (1936) (emphasizes the dominant constitutional role of the President in making foreign policy). E.g., in *Dames & Moore v. Regan*, 452 U.S. 1196 (1981), the Court upheld the President’s power to terminate litigation by private parties against Iran and release liens on Iranian property, as part of negotiations over the release of hostages.
involved.\textsuperscript{33} The only US Supreme Court case that dealt with the constitutionality of a unilateral presidential action repudiating a treaty was inconclusive.\textsuperscript{34} The case involved termination of a treaty with Taiwan in connection with a grant of diplomatic recognition of the People’s Republic of China, which represented a sharp change in diplomatic posture. None of the Justices discussed the merits of the case, with the majority simply joining an opinion that required dismissal of the case without explanation, while the others debated whether the case presented a justiciable question. Thus, it is quite unclear whether Trump could, as a matter of US law, repudiate the UNFCCC or Obama’s ratification of the Paris Agreement,\textsuperscript{35} and it is questionable whether a court would even hear the issue. Regardless of whether such a repudiation violates domestic US law, it may nonetheless violate international law. What weight, if any, that prospect would carry with the Trump Administration remains to be seen.

Thus, there is at least a strong possibility of a drastic shift in the US position within the UNFCCC framework. A change in domestic US climate policy faces complications as a result of administrative law and burdensome legislative procedures, but we could well see a sharp reduction in climate efforts at the national level over time. As the 2016 election illustrated, both Trump himself and the political process can defy forecast, but it is clear that there is a very serious risk in terms of national climate policy.

The polycentric nature of transnational environmental law\textsuperscript{36} may end up being a crucial source of resilience under these trying circumstances. In contrast to the traditional vision of action through binding agreements between nations, transnational environmental law envisions agreements through a wide range of actions and entities, including soft law, non-environmental agreements, actions by sub-national governments, and public/private partnerships. This polycentric system may be more robust to ‘defections’, even by a single major player like the US government, than the traditional international law system.

American state and local governments are likely to play an important role in maintaining action on environmental issues, particularly climate change, during the Trump era. Under US constitutional law, these governments have considerable, though not unlimited, autonomy in pursuing local policies.\textsuperscript{37} A number of states, notably California, have been very active in this domain already.\textsuperscript{38} According to press reports:

\begin{quote}
[M]ayors and governors – many of them in states that supported President-elect Donald J. Trump – say they are equally determined to continue the policies and plans they have
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\begin{footnotes}
35 N. 1 above.
36 For a discussion in the climate context, see H. Osofsky, ‘Polycentrism and Climate Change’, in Farber & Peeters, n. 20 above, pp. 325–36.
37 For discussion of possible limits on state climate change initiatives, see K. Engel, ‘Climate Change Federalism’, in Farber & Peeters, n. 20 above, pp. 337–47. The main potential restrictions stem from federal statutory pre-emption and from a doctrine known as the dormant commerce clause, which protects the free movement of goods.
38 Salzman and Thompson, n. 2 above, pp. 168–71.
\end{footnotes}
already adopted to address climate change and related environmental damage, regardless of what they see from Washington.\textsuperscript{39}

In the effort to cope with the impact of the Trump presidency on the environmental legal regime, transnational law will be put to the test, as will the ability of scholars to devise creative solutions to what may be an ongoing series of disruptions. Perhaps the situation will not be as threatening to the environment as many fear, or perhaps the problems will be short-term. However, we need to be prepared for less optimistic scenarios.

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